

Registration form

**Termite Control CEU Training Course \$150.00
48 HOUR RUSH ORDER PROCESSING FEE ADDITIONAL \$50.00**

Start and finish dates: _____

You will have 90 days from this date in order to complete this course

Print Name _____

I have read and understood the disclaimer notice found on pages 2 & 6. Signature is required.

Signature _____

Address: _____

City _____ **State** _____ **Zip** _____

Phone:
Home (_____) _____ **Work** (_____) _____

Fax (_____) _____ **Email** _____

**License or
Operator ID #** _____ **Exp. Date** _____

Class/Grade _____

Please circle/check which certification you are applying the course CEU's.

Commercial Applicator____ Residential Applicator____ Industrial Applicator____

Pesticide Handler____ Agricultural Applicator____ Adviser____ Other _____

Your certificate will be mailed to you in about two weeks.

**Technical Learning College PO Box 3060, Chino Valley, AZ 86323
Toll Free (866) 557-1746 Fax (928) 272-0747 E-Mail info@tlch2o.com**

If you've paid on the Internet, please write your Customer# _____

Please invoice me, my PO# _____

Please pay with your credit card on our website under Bookstore or Buy Now. Or call us and provide your credit card information.

We will stop mailing the certificate of completion so we need either your fax number or e-mail address. We will e-mail the certificate to you, if no e-mail address; we will fax it to you.

Important Information about this Course (Disclaimer Notice)

This CEU course has been prepared to educate pesticide applicators and operators in general safety awareness of dealing with the often-complex and various pesticide treatment sprays, devices, methods, and applications. This course (manual) will cover general laws, regulations, required procedures and accepted policies relating to the use of pesticides and herbicides. It should be noted, however, that the regulation of pesticides and hazardous materials is an ongoing process and subject to change over time. For this reason, a list of resources is provided to assist in obtaining the most up-to-date information on various subjects. This manual is not a guidance document for applicators or operators who are involved with pesticides. It is not designed to meet the requirements of the United States Environmental Protection Agency or your local State environmental protection agency or health department. This course manual will provide general pesticide safety awareness and should not be used as a basis for pesticide treatment method/device guidance. This document is not a detailed pesticide informational manual or a source or remedy for poison control.

Technical Learning College or Technical Learning Consultants, Inc. makes no warranty, guarantee or representation as to the absolute correctness or appropriateness of the information in this manual and assumes no responsibility in connection with the implementation of this information. It cannot be assumed that this manual contains all measures and concepts required for specific conditions or circumstances. This document should be used for educational purposes only and is not considered a legal document. Pesticides are poisonous. Always read and carefully follow all precautions and safety recommendations given on the container label. Store all chemicals in the original labeled containers in a locked cabinet or shed, away from food or feeds, and out of the reach of children, unauthorized persons, pets, and livestock.

Confine chemicals to the property or plants being treated. Avoid drift onto neighboring properties, especially gardens containing fruits and/or vegetables ready to be picked. Dispose of empty containers carefully. Follow label instructions for disposal. Never reuse containers. Make sure empty containers are not accessible to children or animals. Never dispose of containers where they may contaminate water supplies or natural waterways. Do not pour down sink or toilet. Consult your county agricultural commissioner for correct ways of disposing of excess pesticides. You should never burn pesticide containers.

Individuals who are responsible for pesticide storage, mixing and application should obtain and comply with the most recent federal, state, and local regulations relevant to these sites and are urged to consult with the EPA and other appropriate federal, state and local agencies.

USE PESTICIDES WISELY: ALWAYS READ THE ENTIRE PESTICIDE LABEL CAREFULLY, FOLLOW ALL MIXING AND APPLICATION INSTRUCTIONS AND WEAR ALL RECOMMENDED PERSONAL PROTECTIVE GEAR AND CLOTHING. CONTACT YOUR STATE DEPARTMENT OF AGRICULTURE FOR ANY ADDITIONAL PESTICIDE USE REQUIREMENTS, RESTRICTIONS OR RECOMMENDATIONS.

NOTICE: MENTION OF PESTICIDE PRODUCTS IN THIS COURSE DOES NOT CONSTITUTE ENDORSEMENT OF ANY MATERIAL OR HERB OR HERBAL SUPPLEMENT. ALWAYS FOLLOW THE PRODUCT'S LABEL INSTRUCTIONS.

NOTICE

I understand that it is my responsibility to ensure that this CEU course is either approved or accepted in my State for CEU credit. I understand State laws and rules change on a frequent basis and I believe this course is currently accepted in my State for CEU or contact hour credit, if it is not, I will not hold Technical Learning College responsible. I fully understand that this type of study program deals with dangerous, changing conditions and various laws and that I will not hold Technical Learning College, Technical Learning Consultants, Inc. (TLC) liable in any fashion for any errors, omissions, advice, suggestions or neglect contained in this CEU education training course or for any violation or injury, death, neglect, damage or loss of your license or certification caused in any fashion by this CEU education training or course material suggestion or error or my lack of submitting paperwork. It is my responsibility to call or contact TLC if I need help or assistance and double-check to ensure my registration page and assignment has been received and graded. It is my responsibility to ensure all information is correct and to abide with all rules and regulations.

Rush Grading Service

If you need this assignment graded and the results mailed to you within a 48-hour period, prepare to pay an additional rush service handling fee of \$50.00. This fee may not cover postage costs. If you need this service, simply write RUSH on the top of your Registration Form. We will place you in the front of the grading and processing line.

DISCLAIMER NOTICE

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You can obtain a printed version of the course manual from TLC for an additional \$69.95 plus shipping charges.

AFFIDAVIT OF EXAM COMPLETION

I affirm that I personally completed the entire text of the course. I also affirm that I completed the exam without assistance from any outside source. I understand that it is my responsibility to file or maintain my certificate of completion as required by the state or by the designation organization.

Grading Information

In order to maintain the integrity of our courses we do not distribute test scores, percentages or questions missed. Our exams are based upon pass/fail criteria with the benchmark for successful completion set at 70%. Once you pass the exam, your record will reflect a successful completion and a certificate will be issued to you.

For security purposes, please fax or e-mail a copy of your driver's license and always call us to confirm we've received your assignment and to confirm your identity.

Do not solely depend on TLC's Approval list for it may be outdated.

Some States and many employers require the final exam to be proctored.

<http://www.abctlc.com/downloads/PDF/PROCTORFORM.pdf>

A second certificate of completion for a second State Agency \$50 processing fee.

All downloads are electronically tracked and monitored for security purposes.

No refunds.

Termite Control CEU Training Course Answer Key

Name _____ Phone _____

You are solely responsible in ensuring this course is accepted by your State for credit. Did you check with your State agency to ensure this course is accepted for credit?

Method of Course acceptance confirmation. Please fill this section

Website ___ Telephone Call ___ Email ___ Spoke to _____

Did you receive the approval number, if applicable? _____

What is the course approval number, if applicable? _____

You are responsible to ensure that TLC receives the Assignment and Registration Key. Please call us to ensure that we received it.

Please circle or bold or X the best answer Circle or underline test version
#1 #2 #3 #4 #5

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| 18. A B C D E | 43. A B C D E | 68. A B C D E |
| 19. A B C D E | 44. A B C D E | 69. A B C D E |
| 20. A B C D E | 45. A B C D E | 70. A B C D E |
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Please e-mail or fax this survey along with your final exam

**TERMITE CONTROL CEU COURSE
PROFESSIONAL DEVELOPMENT COURSE
CUSTOMER SERVICE RESPONSE CARD**

NAME: _____

E-MAIL _____ PHONE _____

PLEASE COMPLETE THIS FORM BY CIRCLING THE NUMBER OF THE APPROPRIATE ANSWER IN THE AREA BELOW.

1. Please rate the difficulty of your course.
Very Easy 0 1 2 3 4 5 Very Difficult
2. Please rate the difficulty of the testing process.
Very Easy 0 1 2 3 4 5 Very Difficult
3. Please rate the subject matter on the exam to your actual field or work.
Very Similar 0 1 2 3 4 5 Very Different
4. How did you hear about this Course? _____
5. What would you do to improve the Course?

How about the price of the course?

Poor ____ Fair ____ Average ____ Good ____ Great ____

How was your customer service?

Poor ____ Fair ____ Average ____ Good ____ Great ____

Any other concerns or comments.

ASSIGNMENT INSTRUCTIONS

1. We will require all students to fax or e-mail a copy of their driver's license with the registration form.
2. You will need to pick one of the following four assignments to complete. This selection process is based upon your last name.
3. If your last name begins with an A to G, you will pick assignment number 1, if your last name begins with the letter H to P, you are to complete assignment number 2 and if your last name begins with the letter Q-R, you will pick assignment number 3, and if your last name begins with the letter S-Z, you will pick assignment number 4.

Assignment # 1 for all pest applicators whose last name begins with A-G you will find your assignment on pages 9-32.

Assignment #2 for all pest applicators whose last name begins with the letter H-P, your assignment is found on pages 33-62.

Assignment #3 for all pest applicators whose last name begins with the letter Q-R, your assignment is found on pages 63-92.

Assignment #4 for all pest applicators whose last name begins with the letter S-Z, your assignment is found on pages 93-122.

Please fax or e-mail the registration form, answer Key and a copy of your driver's license. Always call us to ensure we've received the materials.

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For security purposes, please fax or e-mail a copy of your driver's license and always call us to confirm we've received your assignment and to confirm your identity.

Thank you...

Termite Control CEU Training Awareness Assignment #1

Last Names A-G

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services (928) 468-0665.

Write your answers on the Answer Key found in the front of this assignment.

1. We will require all students to fax or e-mail a copy of their driver's license with the registration form.
2. You will need to pick one of the following four assignments to complete. This selection process is based upon your last name.
3. If your last name begins with an A to G, you will pick assignment number 1, if your last name begins with the letter H to P, you are to complete assignment number 2 and if your last name begins with the letter Q-R, you will pick assignment number 3, and if your last name begins with the letter S-Z, you will pick assignment number 4.

Answer key in front.

Identify the following pictures.

1. This is _____?

- A. Soldier
- B. Worker
- C. Swarmer
- D. Queen
- E. Nymph

2. This is _____?

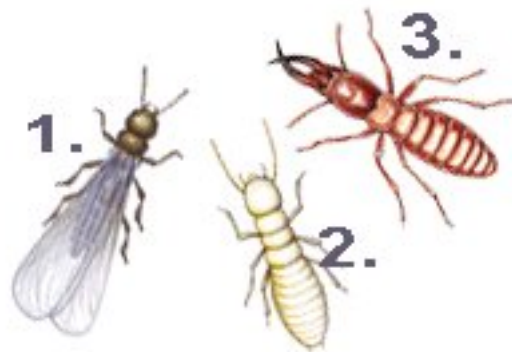
- A. Soldier
- B. Worker
- C. Swarmer
- D. Queen
- E. Nymph

3. This is _____?

- A. Soldier
- B. Worker
- C. Swarmer
- D. Queen
- E. Nymph

4. This is _____?

- A. Soldier
- B. Worker
- C. Swarmer
- D. Queen
- E. Nymph



5. These are _____?

- A. Soldiers
- B. Workers
- C. Swarmer
- D. Queens
- E. Nymphs



6. These are?

- A. Mud Holes
- B. Frass
- C. Alates
- D. Fungus
- E. Nuptial

7. These are?

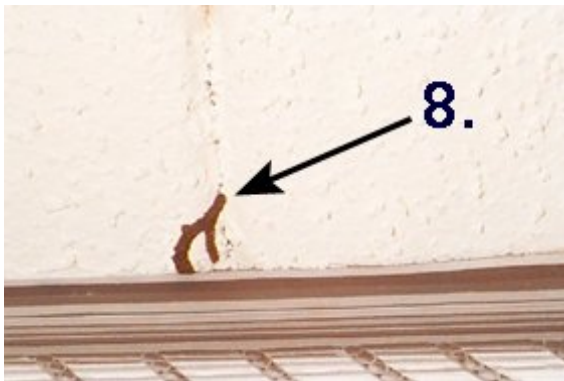
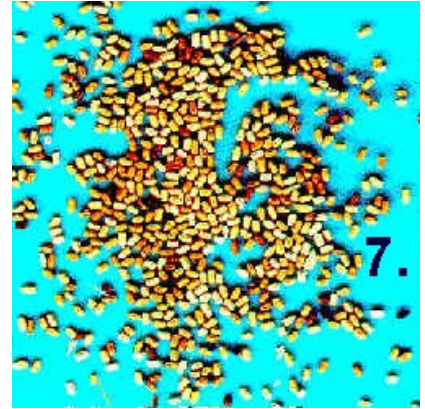
- A. Mud Holes
- B. Frass
- C. Alates
- D. Fungus
- E. Nuptial

8. This is ?

- A. Mud Tubes
- B. Frass
- C. Alates
- D. Fungus
- E. Nuptial

9. This is ?

- A. Mud Tubes
- B. Frass
- C. Alates
- D. Fungus
- E. Nuptial



Identify the pesticide trade name with the common name.

10. Equity

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

11. Demon TC

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin

12. Ficam

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

13. Dursban TC

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

14. Dragnet FT

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

15. Prevail FT

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

16. Pyrfon 6

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

17. Torpedo

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

18. There are about 2,500 termite species in the world. North America has 41 termite species, most in the southeast USA. Arizona is the only state without termites.
A. True
B. False
19. Florida's eastern subterranean termite colonies have about 25,000 members, but can have 1 million or more. A colony eats about 1 cubic yard of wood a year.
A. True
B. False
20. Australian termite colonies can have two hundred termites. The queen can lay 2,000 eggs per day and live as long as 5 years.
A. True
B. False
21. Termite damage to residential and commercial buildings in the U.S. costs more than \$1 billion annually. Subterranean termites, the most destructive of all termite species, account for 95% of the damage.
A. True
B. False
22. Two subterranean termite species, *Reticulitermes flavipes* (Kollar) and *R. tibialis* Banks, are commonly found in United States. Control of these termites costs more than \$1 million each year.
A. True
B. False
23. Subterranean termites feed mainly on soil and live trees that contain cellulose.
A. True
B. False
24. Termites have enzymes (microorganisms) in their intestine which provide protozoa to digest wood.
A. True
B. False
25. Although termites are hard-bodied insects, their smooth-toothed jaws work like shears and can bite off extremely small fragments of wood.
A. True
B. False
26. These termites do not attack live trees, except for the Formosan termite.
A. True
B. False
27. Termites often infest buildings and cause damage to lumber, wood panels, flooring, sheetrock, wallpaper, plastics, paper products, and fabric made of plant fibers.
A. True
B. False
28. Termites attack flooring, carpeting, art work, books, clothing, and furniture. The most serious damage involves the loss of structural strength.
A. True
B. False
29. Subterranean termites are ground-dwelling social insects living in colonies. The two species found in United States have similar habitats. These termites have the ability to adjust the depth of their colony (nest) in soil depending on temperature and moisture requirements.
A. True
B. False

30. The termite colony may be 4-5 feet deep in the ground.
A. True
B. False
31. The Soldiers serve as protection against extreme temperatures and provides a moisture reservoir.
A. True
B. False
32. Termites reach wood or cellulose materials above ground by constructing and traveling through earthen (mud) tubes. The mature colony consists of three castes: reproductives (king and queen), larvae, and nymphs. It takes about 2 to 3 years for a colony to reach its maximum size and it may consist of 60,000 to 200,000 workers.
A. True
B. False
33. In spring and fall, the winged males and females emerge from their parent colonies to form new ones. This activity is called "frassing".
A. True
B. False
34. These winged reproductives are yellow or white and have two pair of different size semitransparent wings extending well beyond the body.
A. True
B. False
35. The swarmers are excellent flyers and, when aided by wind, fly only long distances. But many of them are devoured by birds, spiders, ants, and other predators.
A. True
B. False
36. Survivors return to the ground and shed their wings. The wingless males and females pair off (male following female in tandem) until they find a source of wood and moisture in the soil. They dig soil near wood, enter the chamber and seal the opening. After mating, the queen begins laying eggs.
A. True
B. False
37. The royal queen is known to survive up to 5 years.
A. True
B. False
38. The fertilized female usually deposits 6 to 20 eggs during the first six months following the swarming flight and she may lay more than 60,000 eggs in her lifetime. Eggs are yellowish white and hatch after an incubation period of 50 to 60 days.
A. True
B. False
39. The first broods of newly hatched nymphs (young termites) generally develop into Soldiers.
A. True
B. False
40. Full grown workers are soft-bodied, wingless, blind, and creamy white. In early stages, they are fed predigested food by the Soldiers.
A. True
B. False

41. Once workers are able to digest wood, they begin providing food for the entire colony. At this time, the king and queen start feeding on wood.
A. True
B. False
42. The workers undertake all the labor in the colony such as obtaining food, feeding other caste members and immatures, excavating wood for chambers, and constructing tunnels.
A. True
B. False
43. Workers mature within a year and live from 3 to 5 years.
A. True
B. False
44. Workers are creamy white, soft-bodied, wingless, and blind. The head of the worker is enormously elongated, brownish, hard, and equipped with two strong jaws.
A. True
B. False
45. Workers must be fed by Soldiers as they are incapable of feeding themselves. They are less numerous than workers and their sole function is to defend the colony against invaders such as ants.
A. True
B. False
46. Soldiers mature within two years and live up to 8 years.
A. True
B. False
47. Flying ants and swarming termites are often easy to distinguish when these insects are seen around residential and commercial buildings.
A. True
B. False
48. The female assumes a "calling" position with her abdomen elevated at a right angle to the rest of her body. She releases a chemical messenger (pheromone) which attracts nearby males.
A. True
B. False
49. Once a male encounters a calling female, she moves off. He follows close behind and they search for a suitable site for the establishment of a nest. As soon as the pair has located a suitable site, they excavate with their jaws a small chamber large enough for the two of them and then seal the entrance. Mating usually occurs within a few hours to weeks after the pair becomes established.
A. True
B. False
50. A single female termite can start a new colony.
A. True
B. False
51. Establishment of a colony is dependent upon the survival of both sexes in the nest site and has mated. The pair continues to live together for about one week, and they usually mate periodically but see other termites. The first eggs are laid within one to several months after mating, depending on the nutrition available to the female.
A. True
B. False

52. When the first eggs hatch, the new nymphs are cared for by the young pair. After two molts, the nymphs assume their role as workers and begin to feed and care for the original pair.

- A. True
- B. False

53. Development of the colony is very fast for several years. Eggs are deposited continuously. After the first group of eggs has been laid, there is a period of several days before another group is laid. This process continues for several years.

- A. True
- B. False

54. As the young queen matures, she lays a greater number of eggs, and her abdomen becomes enlarged from developing eggs. Eventually, a point is reached where the colony size stabilizes. That is, the queen has reached maximum egg production, and the loss of older individuals by death or swarming is approximately the same as the number of new individuals produced each year.

- A. True
- B. False

55. As the colony becomes even older a greater number of swarmers are produced each year. It requires a minimum of 3 to 4 years--and as much as 8 to 10 years--for a colony of our native subterranean termites to become large enough and strong enough to start dispersal flights.

- A. True
- B. False

56. When swarming occurs in a relatively new structure, it is because it was built over or near a strong colony that was not severely damaged during the construction process.

- A. True
- B. False

57. These protozoan inside termites engulf the wood particles as they pass through the intestine and break down the cellulose into simpler compounds that the termite can absorb. This relationship is not beneficial to both species, since the protozoans cause harm to the termites.

- A. True
- B. False

58. Fungi does not play a role in termite nutrition. Certain wood decay fungi are highly poisonous to termites. Partially decayed wood is not more easily digested by termites, and the fungus may make this process more difficult.

- A. True
- B. False

59. Wood-destroying fungi exhaust the nutritive value of wood for termites, and extensive decay in wood is of no benefit to foraging termites.

- A. True
- B. False

60. Conversely, when termites attack wood, they usually bring fungus spores on their bodies. When liquid water reaches the damaged wood, it is more easily trapped.

- A. True
- B. False

61. Moisture is not vital to the survival of termites. Subterranean termites obtain most of their moisture from wood. They maintain contact with wood in order to survive.

- A. True
- B. False

62. The type of wood has a great effect on the ability of subterranean termites to flourish. They generally prefer pine to oak. They can and do survive in many other types of wood, however.
A. True
B. False
63. Termites have very high tolerance to dry conditions, or extremes of hot and cold. They often must forage far, sometimes above ground, from their initial workings to find food.
A. True
B. False
64. Termites move underground through tunnels. Whenever the termites leave the confines of the soil or the wood in which they are feeding, they construct shelter tubes in which to move from the soil to the wood or the above-ground nest.
A. True
B. False
65. When subterranean termites invade the wood of a structure that is separated from the soil by intervening concrete, masonry or other impervious material, they construct shelter tubes over the surface to the wood.
A. True
B. False
66. Periodically, they return to the moist galleries. Shelter tubes conduct moist air from the soil to the wood. Shelter tubes also provide some protection from air movement and prevent excess water loss. The primary function of shelter tubes probably is to conduct moist air to the termite Queen.
A. True
B. False
67. Once termites have established contact with wood above ground and feeding progresses some distance from the initial shelter tunnel, they often will drop shelter tubes straight down from the wood. Evidence of tube building will be found directly below a suspended tube.
A. True
B. False
68. Under certain conditions a fourth type of tube is constructed. Called swarming tubes or swarming "castles" they are constructed as flight platforms for swarmers and they have many turret-like projects and flattened horizontal branches that vaguely resemble castle towers. They usually are constructed on the ground to a height 4 to 8 inches (10-20 cm), but sometimes are found projecting from heavily infested wood above ground.
A. True
B. False
69. When swarmers are leaving the colony via these tubes, or directly through a hole in wood or soil, the openings are heavily guarded by the king and queen.
A. True
B. False
70. The amount of damage that an infestation of subterranean termites might inflict on a structure depends on many factors. The number and size of the attacking colonies and the quality of the environmental conditions (including the wood) are the most important.
A. True
B. False

71. Damage usually starts at the mudsill in houses built over a crawl space and with the sole plates of those houses built on concrete slabs. Given enough time, subterranean termites will extend the damage into the wooden floor members, the interior trim and furnishings, and into the walls to the roof timbers.

- A. True
- B. False

72. Severe damage by subterranean termites is not likely to occur in the first 3 or 4 months after construction. If treatment is undertaken with the first evidence of infestation, very little serious structural damage is ever likely to occur. Houses should be carefully inspected at least once a decade in all regions. This will allow detection before damage is a problem.

- A. True
- B. False

73. Should evidence of termites be found, there is no cause for extreme alarm or undue haste. Treatment within 2 years is recommended.

- A. True
- B. False

74. Termites primarily communicate via touch. Each colony develops its own characteristic touch and are offend seen touching themselves.

- A. True
- B. False

75. Any intruder is instantly recognized and an alarm sound is released that triggers the soldiers to attack the intruder. If a worker finds a new source of food, it recruits others to that food source by using their fingers.

- A. True
- B. False

76. The proportion of castes in the colony is also regulated chemically. Nymphs can develop into workers, soldiers, or reproductive adults, depending on colony needs.

- A. True
- B. False

77. Sound is another means of termite communication. Soldiers and workers can bang a primitive drum that the Queen has made. The vibrations are perceived by other termites in the colony and serve to mobilize the colony to defend itself.

- A. True
- B. False

78. Mutual exchange of foods enhances recognition of colony members.

- A. True
- B. False

79. It is not important for homeowners to recognize the signs of a subterranean termite infestation. That is the responsibility of the pesticide applicator.

- A. True
- B. False

80. Subterranean termites may be detected by the sudden emergence of winged termites (alates or swarmers), or by the presence of mud tubes and wood damage.

- A. True
- B. False

81. Termites actually feed on almost anything that contains cellulose, the main component of wood, including wood paneling, paper products, cardboard boxes, art canvases, the paper covering of sheetrock, carpeting, etc. While foraging and feeding, they may tunnel through non-cellulosic materials, such as plastic and foamboard.

- A. True
- B. False

82. According to some research, a colony containing 60,000 workers could consume the equivalent of one foot of a 2" x 4" piece of lumber in slightly over 2 years.

- A. True
- B. False

83. From a practical perspective, serious termite damage usually takes about 3-8 weeks.

- A. True
- B. False

84. Winged termites are attracted to light, and their shed wings in window sills, cobwebs, or on other surfaces often may be the only evidence that a swarm occurred indoors.

- A. True
- B. False

85. The presence of winged termites or their shed wings inside a home should be a warning of a termite infestation.

- A. True
- B. False

86. Termite swarmers have crooked antennae; a thin waist; and two pair of long, equal-length wings that do not break off easily.

- A. True
- B. False

87. Winged termites can be differentiated from winged ants, which have elbowed antennae, a constricted waist, and two pair of unequal-length wings (forewings are larger than hind wings) that are not easily detached.

- A. True
- B. False

88. Ants also generally are softer-bodied than termites.

- A. True
- B. False

89. Other signs of ant presence include mud tubes and mud protruding from cracks between boards and beams.

- A. True
- B. False

90. Subterranean termites transport soil and water above ground to construct earthen runways (shelter tubes) that allow them to tunnel across exposed areas to reach wood.

- A. True
- B. False

91. Shelter tubes protect them from the drying effects of air and from natural enemies, such as ants. These tubes usually are about 1/4 to 1 inch wide, and termites use them as passageways between the soil and wood.

- A. True
- B. False

92. To determine if an infestation is active, shelter tubes should never be broken or scraped away and then monitored to determine whether the termites repair them or construct new ones. Houses should be inspected bi-annually for mud tubes.

- A. True
- B. False

93. Termite damage to the wood's surface often is not evident because termites excavate galleries within materials as they feed. Wood attacked by subterranean termites generally has a honeycombed appearance because termites feed along the grain on the softer spring growth wood. Their excavations in wood often are packed with soil, and fecal spotting is evident.

- A. True
- B. False

94. When inspecting for termites, it is useful to probe wood with a knife or flat blade screwdriver to detect areas that have been hollowed. Severely damaged wood may have a solid sound when it is tapped.

- A. True
- B. False

95. Subterranean termites reduce wood to a powdery mass, and they create wood particles or pellets, just as do many other wood-boring insects.

- A. True
- B. False

96. The mass emergence of winged termites in the spring is often the first sign of an infestation. In the majority of cases, they emerge in homes near sources of heat - furnaces and water heaters. The appearance of winged termites means that the infestation has been around for at least 3 or 4 years. Therefore it is likely some damage has already been done, so it is important to find where the termites have been feeding, how much damage has been done, and how much repair is needed.

- A. True
- B. False

97. A qualified professional termite control service should be hired to apply an appropriate termiticide to protect the building from further damage. Other means of detecting infestations include knocking on walls, floors, sub-floor wood, joists, etc. and listening for the tapping of soldiers, and looking for shelter tubes on the outside of the building and under the sub-floor.

- A. True
- B. False

98. Because subterranean termites have a constant demand for water, one should closely examine areas near moist soil, such as below dripping outside faucets, leaking underground sprinkler pipes and nozzles, and below downspouts.

- A. True
- B. False

99. Where damage or termites are suspected, prod with a sharp narrow implement to check the soundness of the supporting wood structure. The detection of termite infestations is best left to professionals who have the experience to do it thoroughly and accurately. Termites can enter a building from one or more points so it is important to locate all points of entry for control purposes.

- A. True
- B. False

100. Preventive practices are a critical aspect of termite management. Prevention of subterranean termite infestation of wooden structures centers upon disrupting their ability to locate moisture, food (wood), and shelter.

- A. True
- B. False

101. Avoid moisture accumulation near the foundation, which provides water needed for termite survival. Divert water away from the foundation with properly functioning downspouts, gutters, and splash blocks. Soil needs to be graded or sloped away from the foundation in order for surface water to drain away from the building.

- A. True
- B. False

102. Conventional soil treatments rely on creating a chemical barrier in the soil that is toxic to termites contacting it. Many also have repellent characteristics and termites avoid treated soil. To achieve termite control for long periods of time, such termiticides must be applied as a continuous barrier in the soil next to and under the foundation.

- A. True
- B. False

103. If there are untreated gaps in the soil, termites may circumvent the chemical treatment. Hence, such treatments during preconstruction can provide for more uniform coverage. Once a home is constructed, the chemical has to be injected through drill holes and trenching around the foundation, which can result in less accurate coverage.

- A. True
- B. False

104. Effective termite control does not require specialized equipment and often 10 or more gallons of prepared termiticide solution per house, depending on size, basement, etc.

- A. True
- B. False

105. Termiticides that act by creating a chemical barrier in the soil include bifenthrin (Talstar®), cypermethrin (Demon®, Prevail®), and permethrin (Dragnet®, Prelude®). Chlorpyrifos (Dursban®) can be used only during preconstruction and only until December 31, 2009.

- A. True
- B. False

106. In reference to "spot treatments only" using chemical barrier termiticides only in areas of the house where termites are seen, most pest management firms will refuse such treatments or will not guarantee such treatments. The reason is that termites have a very high probability of finding other untreated points of entry into the structure.

- A. True
- B. False

107. Localized spot treatments are considered safe except in re-treatment situations.

- A. True
- B. False

108. The most recent termiticides to be marketed are non-repellent to termites, but show delayed toxicity as termites forage through treated soil, which they do not avoid. As termites penetrate the "**treated zone**," they contact the active ingredient, which causes delayed mortality and also possibly allows the termites to be overcome by lethal microbes.

- A. True
- B. False

109. (From the above question) The toxicant is thought to be passed to nest mates through grooming activities and social food exchange (trophallaxis). Control usually is achieved within 3 months.

- A. True
- B. False

110. As with soil barrier termiticides, specialized application equipment and large volumes of chemical solution are needed. Non-repellent termiticides include fipronil (Termidor®), imidacloprid (Premise®), and chlorfenapyr (Phantom®).

- A. True
- B. False

111. Bait technology uses wood or a cellulose matrix favored by protozoa that is impregnated with a slow-acting non-toxic chemical.

- A. True
- B. False

112. Termite workers feed upon the bait and transfer it by grooming or trophallaxis to other colony members, eventually reducing or eliminating the entire colony.

- A. True
- B. False

113. Termites are site-specific, but rather, they forage among a single food sites, which results in the bait being encountered by many colony members. The toxicant necessarily is fast acting because termites tend to avoid sites where sick and dead termites accumulate.

- A. True
- B. False

114. Typically, in-ground stations are inserted in the soil next to the structure and near known or suspected sites of termite activity.

- A. True
- B. False

115. In-ground stations often initially contain untreated wood that serves as a monitoring device.

- A. True
- B. False

116. The monitoring wood is replaced with the toxicant once termites have been detected feeding on it. In addition, aboveground stations may be installed inside or on the structure in the vicinity of damaged wood and shelter tubes.

- A. True
- B. False

117. Aboveground stations do not contain bait. It is very important that these systems are properly installed and diligently serviced. Annual inspections of a baiting system usually are necessary, except during inclement winter weather. Successful termite baiting necessitates proper monitoring and maintenance of the stations.

- A. True
- B. False

118. Baits work much as fast as soil termiticides, and the homeowner should be aware of the possibility of a lengthy baiting billing process.

- A. True
- B. False

119. Several months or more may elapse before the termites locate stations, then termites must feed on sufficient amounts of the toxicant.

- A. True
- B. False

120. An often-cited advantage of termite baits is that they are "environmentally-friendly" because they use very small quantities of chemical and decrease the potential for environmental contamination.

- A. True
- B. False

121. Bait application causes quite a bit of disruptive noise and disturbance compared to soil treatments.

- A. True
- B. False

122. Baits cannot be used in structures with wells or cisterns, sub-slab heating ducts, and other features that may include a soil treatment.

- A. True
- B. False

123. Baits cannot be used in sensitive environments.

- A. True
- B. False

124. Bait products that are available for licensed pest management professionals include the Sentricon® Termite Colony Elimination System (hexaflumuron [Recruit® II bait] or noviflumuron [Recruit® III bait]), FirstLine® Termite Defense System (sulfluramid), Exterra® Termite Interception and Baiting System (diflubenzuron [Labyrinth® bait]), Subterfuge® Termite Bait (hydramethylnon), and Outpost® Termite Bait Response (diflubenzuron).

- A. True
- B. False

125. Spectracide Terminate® (sulfluramid) and Termirid® 613 (borate) can be purchased by homeowners. However, Terminate® is not recommended as sole protection against termites, and an active infestation should be treated by a professional.

- A. True
- B. False

126. Termirid® can be used to bait subterranean termite populations.

- A. True
- B. False

127. Borates (disodium octaborate tetrahydrate [Tim-bor®, Bora-Care®, Jecta®], Impel®) and pressure-treatments (creosote, chromated copper arsenate [CCA]) protect wood against termites and wood-decay fungi.

- A. True
- B. False

128. Even creosote-treated railroad ties and telephone poles, and CCA-treated wood, over time, can be subject to termite attack. Termites can build mud tubes over treated surfaces.

- A. True
- B. False

129. Termites can gain entry through cut and cracked ends or areas (creosote-treated railroad ties and telephone poles, and CCA-treated wood) where the chemical has not sufficiently penetrated.

- A. True
- B. False

130. Wood treatments are primarily used to supplement other termite control measures, because termites are able to attack untreated wood in other areas of the structure. It is advisable to use pressure-treated wood in situations where wood is in direct contact with soil or exposed to rainfall.

- A. True
- B. False

131. Borates are not soluble in water, so borate-treated wood does not need to be protected from constant rewetting.

- A. True
- B. False

132. Borates may be applied to wood by homeowners. As of 1 January 2007, CCA-treated wood will no longer be available for use in most residential settings because of concerns regarding its arsenic content.

- A. True
- B. False

133. Physical barriers are particularly appropriate during the preconstruction phase to provide protection of the structure from subterranean termites.

- A. True
- B. False

134. One such physical barrier is stainless-steel wire mesh (TermiMesh®) that is fitted around pipes, posts, or foundations. The newest physical barrier, Impasse® Termite System, contains a liquid termiticide (lambda-cyhalothrin) locked in between two layers of heavy plastic that is installed before the concrete slab is poured. It is supplemented with Impasse® Termite Blocker, which uses special fittings around plumbing and electrical pipes and conduits.

- A. True
- B. False

135. Certain species of parasitic round worms (nematodes) will infest and kill termites and other soil insects. They have been promoted and marketed by a few companies.

- A. True
- B. False

136. Limited success with nematode treatments may be attributed to the ability of termites to recognize and wall-off infected individuals, hence limiting the spread of nematodes throughout the colony.

- A. True
- B. False

137. Soil moisture and soil type do not limit the nematode's ability to move in the soil and locate termites.

- A. True
- B. False

138. A fungus *Metarhizium anisopliae* (Bio-Blast®) is a biological termiticide that requires special application and handling techniques. It is not labeled for aboveground application to termite infestations in structures, but is labeled for application to the soil.

- A. True
- B. False

139. Spray effectiveness is enhanced when applied to many foraging termites because infected termites can pass the fungus to nest mates.

- A. True
- B. False

140. It is difficult to infect a large enough number of termites for the infection to spread throughout the colony. Furthermore, it provides no long-lasting residual activity, and the fungal spores die with the dead termites. Insufficient research has been conducted to indicate whether this is an effective method for controlling termites.

- A. True
- B. False

141. The western subterranean termite, *Reticulitermes hesperus*, is native to most forest areas where it performs the important task of breaking down the large quantities of dead and fallen trees and other sources of cellulose that continuously accumulate in the forests.

- A. True
- B. False

142. The western subterranean termite is not a social insect, living alone and will gather once a year in groups of a few thousand to sometimes millions of individuals.

- A. True
- B. False

143. Large colonies will subdivide if food sources are abundant. Winged adults do not appear until the colony is 1 or 2 years old, then limited emergences will occur each year.

- A. True
- B. False

144. The Formosan subterranean termite, *Coptotermes formosanus* (Shiraki), was first described as a species in 1909 from specimens collected on the Asian island of Formosa.

- A. True
- B. False

145. The Formosan subterranean termite has been found in Japan, Sri Lanka, Phillipines, Guam, Hawaii, South Africa and the continental United States. Although officially reported in Hawaii in 1913, newspaper reports indicate that the termite was on the island as early as 1869.

- A. True
- B. False

146. The first report of the Formosan termite in the continental U.S. was from a San Francisco shipyard in 1975.

- A. True
- B. False

147. These differ from the native subterranean termites, Formosan termites initiate new colonies by sending out Soldiers from established colonies.

- A. True
- B. False

148. The Formosan swarms occur from May to June in Florida and Louisiana and from May to July in South Carolina.

- A. True
- B. False

149. Formosan termite swarms occur from dusk to midnight and the alates are attracted to sounds. After a long flight (usually not more than 200-500 yards) the alates lose their wings, pair off, and seek small crevices in moist wood to begin the new colony.

- A. True
- B. False

150. It takes 7 years for a mature Formosan termite colony to develop from a queen, which lay approximately 200 eggs/day.
A. True
B. False
151. Formosan termite colonies can have a population of 1 million foraging workers, soldiers, a primary king, and several secondary reproductives.
A. True
B. False
152. The foraging territory of a mature Formosan termite colony can occupy several hundred square feet.
A. True
B. False
153. The Formosan termite is not known to attack living plants but will attack structural lumber.
A. True
B. False
154. This termite is often described as not-aggressive in both its feeding habits and foraging tenacity.
A. True
B. False
155. They can eat through concrete but rather attack non-cellulose materials like plastic, asphalt, and thin sheets of soft metal.
A. True
B. False
156. Laboratory studies indicate that the individual Formosan termite eats slightly less wood than the native subterranean termites the larger colony populations found with this termite can cause severe structural damage to unprotected homes in 7 years.
A. True
B. False
157. The Formosan subterranean termite usually enters structures from colonies maintaining contact with ground to provide the necessary moisture requirements.
A. True
B. False
158. The Formosan termite, more than the native subterranean species, is able to initiate colonies, which have no ground contact (aerial colonies).
A. True
B. False
159. The damage caused by the Formosan termite is similar in many respects to the damage done by native ants.
A. True
B. False
160. Termite feeding will follow the grain in a piece of structural lumber but the Formosan termite is more likely to feed on both the summer and spring wood leaving a larger hollow space in the damaged lumber.
A. True
B. False

161. Formosan termites usually fill their feeding galleries with soil and excrement whereas the galleries of the Native subterranean termite are cleaner, practically soil free and covered with whitish spots.

- A. True
- B. False

162. In severe infestations, Formosan termites will fill hollow spaces, or even wall voids, with a combination of termite's excrement, macerated wood, saliva and soil.

- A. True
- B. False

163. This material called carton can be used by the Formosan termite to form nest-like structures and is unique to the Formosan termites.

- A. True
- B. False

164. Carton nests are constructed away from the feeding site and a single colony may have several of these auxiliary nests – each containing secondary reproductives.

- A. True
- B. False

165. Three castes forms of subterranean termites are often found at the site of an infestation; alates, soldiers and workers. Only the king and queen can be used for identification.

- A. True
- B. False

166. Workers of the Formosan termite have an oval shape head compared to the oblong shape of the native subterranean soldiers.

- A. True
- B. False

167. The Formosan workers have a well developed fontanelle which forms a tube-like structure located on the front margin of the head just above the mandibles.

- A. True
- B. False

168. When disturbed the workers emit a milky white fluid from this opening whereas native termite workers do not eject any noticeable substance.

- A. True
- B. False

169. The proportion of soldiers to workers in native subterranean termite colonies is approximately 1-2 to 100 (1-2%) in contrast to the Formosan termite colony which contains 40-50 soldiers to every 100 workers (40-50%).

- A. True
- B. False

170. Subterranean termites most commonly live in the soil where they can avoid temperature extremes and obtain the moisture essential to their existence.

- A. True
- B. False

171. Subterranean termites construct numerous scattered nursery areas where reproductives are found together with piles of eggs and young termites.

- A. True
- B. False

172. These nursery areas can be in buried stumps, logs, dead roots or pieces of lumber left in the backfill after building construction.

- A. True
- B. False

173. Nursery areas can also be found in the wood of structures. These areas can be as far down as 3 to 6 m below ground level.

- A. True
- B. False

174. Because subterranean termites can get moisture from the soil, they can attack any dry wood or other source of cellulose within foraging distance of the colony.

- A. True
- B. False

175. Subterranean termites will not attack untreated fence posts and attached boards, utility poles, but will attack any other food sources such as cardboard, paper, fiberboard in, on, or close to the ground.

- A. True
- B. False

176. _____ by rodding and/or trenching procedures. A shallow trench should not be wider than 6 inches.

- A. Inject insecticide or Inject the insecticide
- B. Establish vertical barriers
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

177. _____ about 1 to 1 1/2 feet apart. Apply insecticide at the rate of 4 gallons per 10 linear feet per foot of depth.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

178. Do not treat soil in crawl space area with a _____.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

Hollow Masonry Units of the Foundation Walls

179. Treat through _____ to provide a continuous chemical barrier at the top of the footing.

- A. Masonry voids
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

180. When treatment is necessary, access holes must be drilled through _____ below the sill plate, as close as possible to the footing.

- A. Mortar joints
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

181. Apply insecticide at the rate of 2 gallons per 10 linear feet. Plug _____ with mortar or any other special compound.

- A. Masonry voids
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

Bath Traps

182. Soil may require insecticide treatment if it is exposed beneath and around plumbing/waste pipe entrances through a _____.

- A. Masonry voids
- B. Other debris
- C. Concrete slab
- D. Such situations
- E. None of the Above

183. Remove any wood or excavated soil and treat the soil by rodding or flooding with an insecticide solution.

- A. Masonry voids
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

184. Treatment Near Ponds, Wells, Cisterns, and Faulty Foundation Walls, Around Pipes or Utility Lines
Insecticide applications through rodding is discouraged in excavated soil.

- A. Masonry voids
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

185. The suggested procedure is to make a trench and remove the excavated soil sheeting or similar material.

- A. Masonry voids
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

186. Treat the _____ with insecticide at the rate of 4 gallons per 10 linear feet per foot of depth. Mix the soil with insecticide and replace it in the trench.

- A. Masonry voids
- B. Excavated soil
- C. All holes
- D. Such situations
- E. None of the Above

187. Cover the _____ with a thin layer of untreated soil. In the case of wells, ponds, and cisterns, if a rodding technique is necessary, the distance between the treated area and the water source should be 50 feet or more.

- A. Masonry voids
- B. Treated soil
- C. All holes
- D. None of the Above

Wood Treatment

188. In addition to soil treatment, it may be necessary to treat infested wood with insecticide spray or injection. Applications are made to inaccessible areas by drilling and then _____.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Injecting the insecticide solution
- E. None of the Above

189. _____ must be limited to wood in attics, crawl spaces and unfinished basements or similar unoccupied areas.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Graded or sloped away
- E. None of the Above

Treatment of Secondary Subterranean Termite Colony

190. Apply insecticide to infested wood and void spaces with a _____.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Graded or sloped away
- E. None of the Above

Prevention

191. Preventive practices are a _____.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Critical aspect of termite management
- D. Graded or sloped away
- E. None of the Above

192. _____ of subterranean termite infestation of wooden structures centers upon disrupting their ability to locate moisture, food (wood), and shelter.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Graded or sloped away
- E. None of the Above

193. Avoid moisture accumulation near the foundation, which provides water _____.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Needed for termite survival
- D. Graded or sloped away
- E. None of the Above

194. Divert water _____ with properly functioning downspouts, gutters, and splash blocks.
A. Crack and crevice injector
B. Broadcast spray
C. Prevention
D. Away from the foundation
E. None of the Above

195. Soil needs to be _____ away from the foundation in order for surface water to drain away from the building.
A. Crack and crevice injector
B. Broadcast spray
C. Prevention
D. Graded or sloped away
E. None of the Above

Soil Barrier Termiticides

196. _____ rely on creating a chemical barrier in the soil that is toxic to termites when they come into contact with it.
A. Effective termite control
B. Repellent characteristics
C. Conventional soil treatments
D. Such treatments during preconstruction
E. None of the Above

197. Many also have _____ which causes the termites to avoid treated soil. To achieve termite control for long periods of time, such termiticides must be applied as a continuous barrier in the soil next to and under the foundation. If there are untreated gaps in the soil, termites may circumvent the chemical treatment.
A. Effective termite control
B. Repellent characteristics
C. Conventional soil treatments
D. Such treatments during preconstruction
E. None of the Above

198. Such treatments during preconstruction can provide for more _____. Once a home is constructed, the chemical has to be injected through drill holes and trenching around the foundation, which can result in less accurate coverage.
A. Effective termite control
B. Repellent characteristics
C. Uniform coverage
D. Such treatments during preconstruction
E. None of the Above

199. In reference to "spot treatments only" (using _____ only in areas of the house where termites are seen), most pest management firms will refuse such treatments or will not guarantee them.
A. Effective termite control
B. Repellent characteristics
C. Chemical barrier termiticides
D. Such treatments during preconstruction
E. None of the Above

200. _____ usually requires specialized equipment and often 150 or more gallons of prepared termiticide solution per house, depending on size, basement, etc.

- A. Effective termite control
- B. Repellent characteristics
- C. Conventional soil treatments
- D. Such treatments during preconstruction
- E. None of the Above

You are finished...

When finished, please e-mail the answers and registration form to info@tlch2o.com or fax to (928) 468-0675. If you paid on the Internet, please write your customer number on your registration form.

Please fax or e-mail the registration form, answer Key and a copy of your driver's license. Always call us to ensure we've received the materials.

Termite Control CEU Training Awareness Assignment #2 For Last Names H-P

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services (928) 468-0665.

Write your answers on the Answer Key found in the front of this assignment.

1. We will require all students to fax or e-mail a copy of their driver's license with the registration form.
2. You will need to pick one of the following four assignments to complete. This selection process is based upon your last name.
3. If your last name begins with an A to G, you will pick assignment number 1, if your last name begins with the letter H to P, you are to complete assignment number 2 and if your last name begins with the letter Q-R, you will pick assignment number 3, and if your last name begins with the letter S-Z, you will pick assignment number 4.

Multiple Choice Section, Termite Terms.

Termite Introduction

1. There are about _____ termite species in the world. North America has 41 termite species, most in the southeast USA.
 - A. 2,500
 - B. 250,000
 - C. 2,000
 - D. 95%
 - E. None of the Above
2. Alaska is the only state without termites. Florida's eastern subterranean termite colonies have about _____ members, but can have 1 million or more.
 - A. 2,500
 - B. 250,000
 - C. 2,000
 - D. 95%
 - E. None of the Above
3. A colony eats about 1 cubic foot of wood a year. Australian colonies can have two million termites. The queen can lay _____ eggs per day and live as long as 50 years.
 - A. 2,500
 - B. 250,000
 - C. 2,000
 - D. 95%
 - E. None of the Above
4. Termite damage to residential and commercial buildings in the U.S. costs more than _____ annually.
 - A. 2,500
 - B. 250,000
 - C. 2,000
 - D. 95%
 - E. None of the Above

5. Subterranean termites, the most destructive of all termite species, account for _____ of the damage.

- A. 2,500
- B. 250,000
- C. 2,000
- D. 95%
- E. None of the Above

6. Two subterranean termite species, _____ and *R. tibialis*, are commonly found in United States.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

Feeding Habits

7. _____ feed mainly on wood and wood products containing cellulose.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

8. Termites have _____ (microorganisms) in their intestine which provide enzymes to digest cellulose.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

9. This relationship is beneficial to both species, since the _____ cause no harm and are provided with food and a protected environment by the termites.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

10. Although termites are _____, their hard, saw-toothed jaws work like shears and can bite off extremely small fragments of wood.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

11. These termites do not attack live trees, except for the _____.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

12. Termites often infest buildings and cause damage to lumber, wood panels, flooring, sheetrock, wallpaper, plastics, paper products, and _____.

- A. Concrete
- B. Similar habitats
- C. Attack ants
- D. Steel
- E. None of the Above

13. Termites attack flooring, carpeting, art work, books, clothing, and furniture. The most serious damage involves the loss of _____.

- A. The queen
- B. Similar habitats
- C. Life
- D. Electricity
- E. None of the Above

Biology

14. _____ are ground-dwelling social insects living in colonies.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

15. The two species found in United States have _____.

- A. Same DNA
- B. Similar habitats
- C. Similar attack methods
- D. Ground-dwelling colonies
- E. None of the Above

16. These termites have the ability to _____ of their colony (nest) in soil depending on temperature and moisture requirements.

- A. Adjust the depth
- B. Reach its maximum size
- C. Measure the moisture reservoir
- D. Live above ground
- E. None of the Above

17. The colony may be 18-20 feet _____.

- A. Deep in the ground
- B. In height
- C. Long
- D. Above ground
- E. None of the Above

18. The ground serves as a protection against extreme temperatures and _____.

- A. Rain storms
- B. Ant attacks
- C. Provides a moisture reservoir
- D. Animals
- E. None of the Above

19. Termites reach wood or cellulose materials _____ by constructing and traveling through earthen (mud) tubes.

- A. Adjusting the depth
- B. To reach its maximum size
- C. Providing a moisture reservoir
- D. Above ground
- E. None of the Above

20. The mature colony consists of three castes: a) reproductives (king and queen), b) soldiers, and c) workers. It takes about 4 to 5 years for a _____ and it may consist of 60,000 to 200,000 workers.

- A. Colony to reach adjust the depth
- B. Colony to reach its maximum size
- C. Colony to reach the moisture reservoir
- D. Queen to mate
- E. None of the Above

21. Caste: A group of insects with a(n) _____ and function within a colony of social insects.

- A. Specific morphology
- B. Ranking order
- C. Swarming order
- D. Reproductive order
- E. None of the Above

Reproduction

22. In spring and fall, the winged males and females emerge from their parent colonies to form new ones. This activity is called _____.

- A. Aletizism
- B. Molting
- C. Swarming
- D. Reproductive cycle
- E. None of the Above

23. These winged _____ are dark brown to brownish black and have two pair of nearly equal size semitransparent wings extending well beyond the body.

- A. Larvae
- B. Survivors
- C. Swarms
- D. Reproductives
- E. None of the Above

24. The _____ are weak flyers and, unless aided by wind, fly only short distances. Many of them are devoured by birds, spiders, ants, and other predators.

- A. Workers
- B. Survivors
- C. Swarms
- D. Reproductives
- E. None of the Above

25. _____ return to the ground and shed their wings.

- A. Workers
- B. Survivors
- C. Swarms
- D. Reproductives
- E. None of the Above

26. The wingless _____ pair off (male following female in tandem) until they find a source of wood and moisture in the soil. They dig soil near wood, enter the chamber and seal the opening.

- A. Royal queen (Queen) Or Fertilized female
- B. Males and females
- C. Workers
- D. Drones
- E. None of the Above

27. After mating, the _____ begins laying eggs.

- A. Queen
- B. Drones
- C. Workers
- D. Nymphs
- E. None of the Above

28. The _____ is known to survive up to 25 years.

- A. Royal queen (Queen)
- B. Males and females
- C. Drones
- D. Workers
- E. None of the Above

Eggs

29. The _____ usually deposits 6 to 20 eggs during the first six months following the swarming flight and she may lay more than 60,000 eggs in her lifetime.

- A. Fertilized female
- B. Males and females
- C. Drone
- D. Workers
- E. None of the Above

30. _____ are yellowish white and hatch after an incubation period of 50 to 60 days.

- A. Royal queen (Queen) Or Fertilized female
- B. Males and females
- C. Eggs
- D. Nymphs
- E. None of the Above

Workers

31. The first broods of newly hatched _____ (young termites) generally develop into workers. Full grown workers are soft-bodied, wingless, blind, and creamy white. In early stages, they are fed predigested food by the king and queen.

- A. Royal queen (Queen) Or Fertilized female
- B. Males and females
- C. Molts
- D. Nymphs
- E. None of the Above

32. Once workers are able to digest wood, they begin providing food for the entire colony. At this time, the king and _____ cease feeding on wood.

- A. Queen
- B. Males and females
- C. Workers
- D. Nymphs
- E. None of the Above

33. The workers undertake all the labor in the colony such as obtaining food, feeding other _____ and immatures, excavating wood for chambers, and constructing tunnels.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

34. _____ mature within a year and live from 3 to 5 years.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Nymphs
- E. None of the Above

Soldiers

35. _____ are creamy white, soft-bodied, wingless, and blind.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

36. The head of the _____ is enormously elongated, brownish, hard, and equipped with two strong jaws.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldier
- E. None of the Above

37. Soldiers must be fed by _____ as they are incapable of feeding themselves.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

38. They are less numerous than _____ and their sole function is to defend the colony against invaders such as ants.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

39. _____ mature within a year and live up to 5 years.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

40. Flying ants and _____ are often difficult to distinguish when these insects are seen around residential and commercial buildings.

- A. Royal queen (Queen) Or Fertilized female
- B. Swarming termites
- C. Workers
- D. Soldiers
- E. None of the Above

41. The main enemy of termites is Ants and the _____ can defend a small number of Ants.

- A. Royal queen (Queen) Or Fertilized female
- B. Swarming termites
- C. Workers
- D. Soldiers
- E. None of the Above

Reproduction

42. The female assumes a " _____ " position with her abdomen elevated at a right angle to the rest of her body. Sounds familiar?

- A. Mating
- B. Calling
- C. Suitable site
- D. Molting
- E. None of the Above

43. She releases a chemical messenger (pheromone) which attracts nearby males. Once a male encounters a _____ female, she moves off. Sounds familiar?

- A. Mating
- B. Calling
- C. Suitable site
- D. Molt
- E. None of the Above

44. He follows close behind and they search for a _____ for the establishment of a nest.

- A. Mating site
- B. Calling site
- C. Suitable site
- D. Molting site
- E. None of the Above

45. As soon as the pair has located a _____, they excavate (with their jaws) a small chamber large enough for the two of them and then seal the entrance.

- A. Mating site
- B. Calling site
- C. Suitable site
- D. Molting site
- E. None of the Above

46. _____ usually occurs within a few hours to weeks after the pair becomes established.

- A. Mating
- B. Calling
- C. Transference
- D. Molting
- E. None of the Above

47. The single female cannot start a new colony. Establishment of a colony is dependent upon the survival of both sexes in the nest site and that she has successfully _____.

- A. Mated
- B. Called
- C. Paired
- D. Molted
- E. None of the Above

48. The pair continues to _____, and they usually mate periodically.

- A. Mate
- B. Build
- C. Live together for life
- D. Molt
- E. None of the Above

49. The first eggs are laid within one to several weeks after _____, depending on the nutrition available to the female.

- A. Mating
- B. Tunneling
- C. Building nursery
- D. Molting
- E. None of the Above

50. When the first eggs hatch, the new nymphs are _____ by the young pair.

- A. Trained
- B. Fed
- C. Cared for
- D. Abandoned
- E. None of the Above

51. After two _____, the nymphs assume their role as workers and begin to feed and care for the original pair.

- A. Years
- B. Months
- C. Births
- D. Molts
- E. None of the Above

Development of the Colony

52. Development of the colony is very slow for several years. Eggs are not deposited continuously. After the first group of eggs has been laid, _____ before another group is laid.

- A. There is a period of several months
- B. The loss of older individuals happens
- C. A greater number of eggs is laid
- D. Even older a greater number
- E. None of the Above

53. This process continues for several years. As the young queen matures, she _____, and her abdomen becomes enlarged from developing eggs.

- A. Molts
- B. Mates twice a day
- C. Lays a greater number of eggs
- D. Adjusts her empire
- E. None of the Above

54. A point is reached where the colony size stabilizes. That is, the queen has reached maximum egg production, and _____ by death or swarming is approximately the same as the number of new individuals produced each year.

- A. There is a die off
- B. The loss of older individuals
- C. Many leave either
- D. Some return or mate
- E. None of the Above

55. As the colony becomes _____ of swarmers are produced each year.

- A. Larger
- B. More aggressive
- C. More fluid
- D. Even older a greater number
- E. None of the Above

56. It requires a minimum of 3 to 4 years--and as much as 8 to 10 years--for a colony of our native subterranean termites to become _____ to start dispersal flights.

- A. Good enough
- B. A threat
- C. Large enough and strong enough
- D. Trained
- E. None of the Above

Swarming

57. When _____ occurs in a relatively new structure, it is because it was built over or near a strong colony that was not severely damaged during the construction process.

- A. Cellulose
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

58. Termites derive food from wood and other _____ materials.

- A. Cellulosic
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

59. In nature, termites feed exclusively on wood, primarily digesting out the _____ and passing most of the remaining components as waste. In man-invaded environments, termites attack many additional products and commodities.

- A. Cellulose
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

60. Termites still depend primarily on _____ for their nutrition, but will damage many materials they encounter.

- A. Cellulose
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

61. Damaged materials may include plastics, rubber, asphalt, metal, mortar and others. Wood products like paper are favorite foods of termites because they are nearly pure _____.

- A. Cellulose
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

62. _____ are actively consumed by termites as well.

- A. Cellulose or Cellulosic
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

Fungi

63. Fungi also play a role in termite nutrition. Certain _____ fungi are highly attractive to termites.

- A. Brown
- B. Green
- C. Yellow
- D. Mushroom type
- E. None of the Above

64. Partially decayed wood is more easily digested by termites, and the fungus may provide a needed source of _____.

- A. Cellulose or Cellulosic
- B. Wood
- C. Fiber
- D. Minerals
- E. None of the Above

65. Ultimately, wood-destroying _____ exhaust the nutritive value of wood for termites, and extensive decay in wood is of no benefit to foraging termites.

- A. Insects
- B. Pests
- C. Fungi
- D. Ants
- E. None of the Above

66. When termites attack wood, they usually bring _____ spores on their bodies. When water or other liquid reaches the damaged wood, it is more easily trapped.

- A. Plant
- B. Ants
- C. Fungus
- D. Abundant
- E. None of the Above

Moisture

67. _____ is vital to the survival of termites. Subterranean termites obtain most of their moisture from the soil.

- A. Clay base
- B. Moisture
- C. Dry condition
- D. Wood
- E. None of the Above

68. Subterranean termites maintain contact with the _____ in order to survive. The type of soil has a great effect on the ability of subterranean termites to flourish.

- A. Clay base
- B. Soil
- C. Dry conditions
- D. Wood
- E. None of the Above

69. Termites generally prefer sandy soil over a(n) _____. They can and do survive in many other types of soil, however.

- A. Clay base
- B. Moisture
- C. Dry conditions
- D. Wood
- E. None of the Above

Tolerances

70. Termites have very little tolerance to _____, or extremes of hot and cold. But they often must forage far, sometimes above ground, from their initial workings to find food.

- A. Clay base
- B. Moisture
- C. Dry conditions
- D. Wood
- E. None of the Above

71. They move underground through tunnels. Whenever the termites leave the confines of the soil or the wood in which they are feeding, they construct shelter tubes in which to move from the soil to the _____ or the above-ground nest.

- A. Clay base
- B. Moisture
- C. Dry conditions
- D. Wood
- E. None of the Above

Subterranean Termites

72. When subterranean termites invade the wood of a structure that is separated from the soil by intervening concrete, masonry or other impervious material, they construct _____ over the surface to the wood.

- A. Shelter tubes
- B. Castles
- C. Tunnels
- D. Mudsill
- E. None of the Above

73. Contrary to published reports, _____ do not necessarily conduct moist air from the soil to the wood. Shelter tubes also provide some protection from air movement and prevent excess water loss.

- A. Shelter tubes
- B. Castles
- C. Tunnels
- D. Mudsill
- E. None of the Above

74. The primary function of _____ probably is protection from natural enemies.

- A. Shelter tubes
- B. Castles
- C. Heavily infested wood
- D. Mudsill
- E. None of the Above

75. Once termites have established contact with wood above ground and feeding progresses some distance from the initial shelter tunnel, they often will drop shelter tubes straight down from the wood. Evidence of _____ building will be found directly below a suspended tube.

- A. Tube
- B. Castles
- C. Above ground
- D. Mudsill
- E. None of the Above

Castles

76. Under certain conditions a fourth type of tube is constructed. Called swarming tubes or swarming " _____ " they are constructed as flight platforms for swarmers and they have many turret-like projects and flattened horizontal branches that vaguely resemble castle towers.

- A. Shelter tubes or Tubes
- B. Castles
- C. Above ground
- D. Mudsill
- E. None of the Above

77. They usually are constructed on the ground to a height of 4 to 8 inches (10-20 cm), but sometimes are found projecting from _____.

- A. Shelter tubes or Tubes
- B. Castles
- C. Heavily infested wood above ground
- D. None of the Above

78. When swarmers are leaving the colony via these tubes, or directly through a _____ or soil, the openings are heavily guarded by soldiers and workers.

- A. Shelter tubes or Tubes
- B. Castles
- C. Hole in wood
- D. None of the Above

79. The amount of damage that a(n) _____ of subterranean termites might inflict on a structure depends on many factors. The number and size of the attacking colonies and the quality of the environmental conditions (including the wood) are the most important.

- A. Shelter tubes or Tubes
- B. Castles
- C. Infestation
- D. Mudsill
- E. None of the Above

80. Damage usually starts at the mudsill in houses built over a crawl space and with the _____ of those houses built on concrete slabs.

- A. Shelter tubes or Tubes
- B. Castles
- C. Sole plates
- D. Mudsill
- E. None of the Above

81. Given enough time, subterranean termites will extend the damage into the wooden floor members, the interior trim and furnishings, and into the walls up to the _____.

- A. Shelter tubes or Tubes
- B. Castles
- C. Roof timbers
- D. Mudsill
- E. None of the Above

Severe Damage

82. _____ by subterranean termites is not likely to occur in the first 8 or 10 years after construction.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. Severe damage
- E. None of the Above

83. If treatment is undertaken with the first evidence of infestation, very little serious _____ is ever likely to occur.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. Severe damage
- E. None of the Above

84. Houses should be carefully inspected at least once a year in all regions. This will allow detection before _____.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. Severe damage
- E. None of the Above

85. Should _____ be found, there is no cause for extreme alarm or undue haste. Treatment within 6 months is recommended.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. None of the Above

Communication in the Colony

86. Termites primarily communicate via chemicals called _____. Each colony develops its own characteristic odor.

- A. Communication
- B. Vibrations
- C. Pheromones
- D. Recognition
- E. None of the Above

87. Any intruder is instantly recognized and a(n) _____ is released that triggers the soldiers to attack the intruder.

- A. Communication
- B. Vibrations
- C. Alarm pheromone
- D. Recognition
- E. None of the Above

88. If a worker finds a new source of food, it recruits others to that food source by _____.
The proportion of castes in the colony is also regulated chemically.

- A. Laying a chemical trail
- B. Vibrations
- C. Alarm pheromones
- D. Recognition
- E. None of the Above

89. Nymphs can develop into workers, soldiers, or reproductive adults, _____.

- A. Communication workers
- B. Vibration makers
- C. Alarm pheromone producers
- D. Recognition soldiers
- E. None of the Above

90. Sound is another means of _____.

- A. Communication
- B. Vibrations
- C. Alarm pheromone
- D. Recognition
- E. None of the Above

91. Soldiers and workers can _____ against tunnel walls.

- A. Hear communication
- B. Hear vibrations
- C. Smell alarm pheromones
- D. Recognize
- E. None of the Above

92. _____ are perceived by other termites in the colony and serve to mobilize the colony to defend itself.

- A. Communication
- B. Vibrations
- C. Alarm pheromones
- D. Recognition
- E. None of the Above

93. _____ of foods enhances recognition of colony members.

- A. Communication
- B. Vibrations
- C. Alarm pheromone
- D. Mutual exchange
- E. None of the Above

Detection of Termites

94. It is important for homeowners to _____ of a subterranean termite infestation.

- A. Notice foraging and feeding
- B. Recognize the signs
- C. Identify
- D. Recognize the sounds
- E. None of the Above

95. Subterranean termites may be detected by the _____ of winged termites (alates or swarmers), or by the presence of mud tubes and wood damage.
- Foraging and feeding
 - Sudden emergence
 - Color
 - Size
 - None of the Above
96. We tend to think of termites as feeding/injuring wood only. Termites _____ on almost anything that contains cellulose (the main component of wood), including wood paneling, paper products, cardboard boxes, art canvases, the paper covering of sheetrock, carpeting, etc.
- Foraging and feeding
 - Actually feed
 - Crawl
 - Nest
 - None of the Above
97. While _____, they may tunnel through non-cellulosic materials, such as plastic and foamboard.
- Nesting
 - Molting
 - Communicating
 - Foraging and feeding
 - None of the Above
98. According to some research, a colony containing 60,000 workers could _____ of one foot of a 2" x 4" piece of lumber in slightly over 5 months.
- Eat twice the equivalent
 - Consume the equivalent
 - Carry
 - Forage
 - None of the Above
99. In areas with cold winter temperatures, termite activity (and feeding) _____, but does not necessarily stop.
- Increases
 - Usually declines
 - Slows to a stop
 - Remains the same
 - None of the Above
100. From a _____, serious termite damage usually takes about 3-8 years.
- Sign
 - Practical perspective
 - Hollow sound
 - Foraging perspective
 - None of the Above
101. Look for these signs of termite feeding: Wood that sounds " _____ " when it is tapped with the handle of a screwdriver.
- Recognize the signs
 - Consume the equivalent
 - "Hollow"
 - Foraging and feeding
 - None of the Above

102. Look for these signs of termite feeding: Soft wood that is _____ with a knife or screwdriver.

- A. Recognizable
- B. Easily probed
- C. Sounds "hollow"
- D. Has evidence
- E. None of the Above

103. Look for these signs of termite feeding: A thin gritty gray-brown film on the _____.

- A. Top
- B. Surface of damaged material
- C. Floor
- D. Nest
- E. None of the Above

Winged Termites

104. Large numbers of _____ swarming from wood or the soil often are the first obvious sign of a nearby termite colony.

- A. Mating pairs
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

105. _____ occurs in mature colonies that typically contain at least several thousand termites.

- A. Swarming
- B. Emergences
- C. Winged termites
- D. Mating
- E. None of the Above

106. A " _____ " is a group of adult male and female reproductives that leave their colony in an attempt to pair and initiate new colonies.

- A. Swarm
- B. Nest
- C. Alate emergence
- D. Winged termite colony
- E. None of the Above

107. _____ is stimulated when temperature and moisture conditions are favorable, usually on warm days following rainfall.

- A. Swarming
- B. Ants infestations
- C. Alate emergence
- D. Winged termites flying
- E. None of the Above

108. Swarming typically occurs during daytime in the spring (March, April, and May), but _____ can occur indoors during other months.

- A. Swarms
- B. Alate emergence
- C. Winged termites
- D. Ants
- E. None of the Above

109. Swarming occurs during a brief period (typically less than an hour), and _____ quickly shed their wings.

- A. Workers
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

110. _____ are attracted to light, and their shed wings in window sills, cobwebs, or on other surfaces often may be the only evidence that a swarm occurred indoors.

- A. Queens
- B. Alates
- C. Winged termites
- D. Ants
- E. None of the Above

111. The presence of _____ or their shed wings inside a home should be a warning of a termite infestation.

- A. A swarm
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

112. Termite _____ have straight, bead-like antennae; a thick waist; and two pair of long, equal-length wings that break off easily.

- A. Swarmers
- B. Soliders
- C. Alates
- D. Workers
- E. None of the Above

113. _____ can be differentiated from winged ants, which have elbowed antennae, a constricted waist, and two pair of unequal-length wings (forewings are larger than hind wings) that are not easily detached.

- A. Swarming termites
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

114. Ants also generally are harder-bodied than _____.

- A. You think
- B. Bees
- C. Alates
- D. Termites
- E. None of the Above

Mud Tubes

115. Other signs of termite presence include mud tubes and mud _____ between boards and beams.

- A. Nests
- B. Inspected
- C. Protruding from cracks
- D. Construct earthen runways
- E. None of the Above

116. Subterranean termites _____ above ground to construct earthen runways (shelter tubes) that allow them to tunnel across exposed areas to reach wood.

- A. Always
- B. Never go
- C. Walk
- D. Transport soil and water
- E. None of the Above

117. Shelter tubes protect them from the drying effects of air and from natural enemies, such as ants. These tubes usually are about 1/4 to 1 inch wide, and termites _____ between the soil and wood.

- A. Include mud tubes
- B. Use them as passageways
- C. Broken or scraped away
- D. Construct earthen runways
- E. None of the Above

118. To determine if an infestation is active, shelter tubes should be _____ and then monitored to determine whether the termites repair them or construct new ones.

- A. Sprayed
- B. Inspected annually
- C. Broken or scraped away
- D. Noticed
- E. None of the Above

119. Houses should be inspected annually for _____.

- A. Mud tubes
- B. Nests
- C. Alates
- D. Constructed earthen runways
- E. None of the Above

Wood Damage

120. Termite damage to the wood's surface often is not evident because termites _____ within materials as they feed.

- A. Are very small
- B. Hide
- C. Excavate galleries
- D. None of the Above

121. Wood attacked by subterranean termites generally has a honeycombed appearance because termites _____ on the softer spring growth wood.

- A. Probe wood
- B. Carry soil
- C. Excavate galleries
- D. Feed along the grain
- E. None of the Above

122. Their excavations in wood often are _____, and fecal spotting is evident.

- A. Hollow
- B. Packed with soil
- C. Excavated galleries
- D. Along the grain
- E. None of the Above

123. When inspecting for termites, it is useful to _____ with a knife or flat blade screwdriver to detect areas that have been hollowed.

- A. Probe wood
- B. Diagram
- C. Stab the queen
- D. Cut the door
- E. None of the Above

124. Severely damaged wood may have a hollow sound _____.

- A. Like your friend
- B. When it is tapped
- C. In the galleries
- D. Along the grain
- E. None of the Above

125. Subterranean termites do not _____ to a powdery mass, and they do not create wood particles or pellets, as do many other wood-boring insects.

- A. Reproduce
- B. Reduce wood
- C. Excavate galleries
- D. Feed along the grain
- E. None of the Above

Mass Emergence

126. The _____ of winged termites in the spring is often the first sign of an infestation.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detecting infestations
- E. None of the Above

127. In the majority of cases, they _____ in homes near sources of heat - furnaces or water heaters.

- A. Appear
- B. Emerge
- C. Damage wood
- D. Infest
- E. None of the Above

128. The _____ of winged termites means that the infestation has been around for at least 3 or 4 years.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Infestations
- E. None of the Above

129. Therefore it is likely some damage has already been done, so it is important to find where the termites have been feeding, how much _____ has been done, and how much repair is needed.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Work
- E. None of the Above

130. Other means of _____ include knocking on walls, floors, sub-floor wood, joists, etc. and listening for the tapping of soldiers, and looking for shelter tubes on the outside of the building and under the sub-floor.

- A. Termite appearance
- B. Mass emergence
- C. Figuring damage
- D. Detecting infestations
- E. None of the Above

131. Because subterranean termites have a constant _____ for water, one should closely examine areas near moist soil, such as below dripping outside faucets, leaking underground sprinkler pipes and nozzles, and below downspouts.

- A. Appearance
- B. Mass emergence
- C. Demand
- D. Dripping
- E. None of the Above

132. Where _____ or termites are suspected, prod with a sharp narrow implement to check the soundness of the supporting wood structure.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detecting infestations
- E. None of the Above

133. The _____ of termite infestations is best left to professionals who have the experience to do it thoroughly and accurately.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detection
- E. None of the Above

134. Termites can enter a building from one or more points so _____ to locate all points of entry for control purposes.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. None of the Above

135. Outdoors, termites can be _____ by driving wooden stakes into the ground at varying distances from buildings and other wooden structures.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detected
- E. None of the Above

136. Examine the stakes every 3 months for termites or signs of their feeding _____.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Infestations
- E. None of the Above

Evidence of Termite Infestations

137. _____ by subterranean termites can be readily penetrated with a screwdriver, ice pick, or knife.

- A. Shelter tubes Or Mud tube
- B. Foundation walls
- C. Wood damaged
- D. Mud particles with fecal materials
- E. None of the Above

138. The wood easily breaks apart, revealing mud tubes attached to _____ or tunnels in an irregular pattern.

- A. Shelter tubes
- B. Infestation in the building
- C. Wood galleries
- D. Foundation walls
- E. None of the Above

139. The tunnels may contain broken _____. In the case of an active colony, white termites may be found in infested wood.

- A. Shelter tubes
- B. Foundation walls
- C. Vases
- D. Mud particles with fecal materials
- E. None of the Above

140. The presence of winged males, females, or their shed wings, particularly when the adults fly inside the building, _____ in the building.

- A. Mud tubes
- B. Infestation in the building
- C. Dumping fecal material
- D. And inside foundation walls
- E. None of the Above

141. Another indication is the presence of _____ extending from the ground to woodwork or on foundation walls.

- A. Shelter tubes Or Mud tube
- B. Infestation in the building
- C. Mud particles with fecal materials
- D. Nesting materials
- E. None of the Above

142. Workers travel periodically via _____ to their colony to obtain moisture and perform feeding duties.

- A. Shelter tubes Or Mud tube
- B. Foundation walls
- C. Tunnels
- D. Mud particles
- E. None of the Above

143. Workers build mud or shelter tubes from soil and wood particles, and coat them with a(n) _____ that they secrete.

- A. Shelter tubes Or Mud tube
- B. Infestation in the building
- C. Mud particles with fecal materials
- D. Foundation walls
- E. None of the Above

144. Each _____ is about the diameter of a lead pencil.

- A. Mud tube
- B. Infestation
- C. Mud particles
- D. Nursery
- E. None of the Above

Useful Information If Treatment is Necessary

145. If termite activity is _____ and an insecticide treatment is necessary, it is important to outline the plan of the building, indicating sites of termite activity and treatment procedures.

- A. Requiring additional treatment
- B. Generally established
- C. Suspected or found
- D. Continuous insecticide barrier
- E. None of the Above

146. Building owners/managers are encouraged to seek two or more inspections and cost estimates. Ask for information on _____, repair of woodwork, warranties, copies of the insecticide label, and other pertinent information.

- A. Requiring additional treatment
- B. Chemical treatment procedures
- C. Termite activity and treatment procedures
- D. Continuous insecticide barrier
- E. None of the Above

Control Objectives

147. The goal is to establish a(n) _____ between the termite colony (usually in the ground) and the wood in a building.

- A. Additional treatment
- B. Generally established
- C. Termite activity and treatment procedures
- D. Continuous insecticide barrier
- E. None of the Above

148. Sometimes a secondary termite colony may exist above ground (in roof or other areas with a constant moisture supply) which _____.

- A. Requires additional treatment
- B. Are generally established
- C. Termite activity and treatment procedures
- D. None of the Above

General Treatment Guidelines

149. Insecticide barriers _____ during: Pre-construction (during construction).

- A. Requires additional treatment
- B. Are generally established
- C. Require termite activity and treatment procedures
- D. Include a Continuous insecticide barrier
- E. None of the Above

150. Insecticide barriers are generally established during: Post-construction (existing building). In an existing building, termite treatments may involve any of the following: a) _____, and b) use of an insecticide for treating the soil, foundation, and wood.

- A. Mechanical alterations
- B. Contact treated
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

151. In most cases, an untrained homeowner or building manager should not attempt a _____.

- A. Mechanical alterations
- B. Contact treatment
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

152. _____ should be performed by professional pest control operators (PCOs), that is right!

- A. Mechanical alterations
- B. Contact treatment
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

153. _____ requires special tools such as hammer drills, sub-slab injectors, rodding devices, high pressure pumps, a power supply, protective equipment.

- A. Mechanical alterations
- B. Contact treatments
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

Caution

154. Do not apply insecticides when soil is frozen or water-soaked (saturated). Frozen or saturated soil will not permit _____ for even distribution of insecticide.

- A. Mechanical alterations
- B. Adequate absorption
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

155. Do not permit humans and pets to _____ surfaces until dry.

- A. Walk on
- B. Contact treated
- C. Distribute of insecticide
- D. Adsorption
- E. None of the Above

156. Before _____ for termite control, always read, understand and follow all label directions.

- A. Applying mechanical alterations
- B. Using insecticides
- C. Distribution of insecticide
- D. Applying termite treatment(s)
- E. None of the Above

157. Keep all _____, out of reach of children and do not contaminate food, feed and water.
- A. Mechanical alterations
 - B. Pesticides in original containers
 - C. Distribution of insecticide
 - D. Termite treatment(s)
 - E. None of the Above

Pre-Construction Treatment

158. Horizontal Barriers: In general, treat the footing trench with _____ before pouring cement footings.

- A. Diluted insecticide
- B. Establishing a chemical barrier
- C. Insecticide
- D. Penetrating spray
- E. None of the Above

159. After grading is completed, _____ to areas before pouring slab floors, slab-supported porches, patios, carports, and entrance platforms at the rate of 1 gallon per 10 square feet.

- A. Apply diluted insecticide
- B. Establish a chemical barrier
- C. Apply insecticides
- D. Penetrating spray
- E. None of the Above

160. Vertical Barriers: _____ in areas such as around the bases of foundations, plumbing, utility entrances, and backfilled soil against foundation walls.

- A. Apply diluted insecticide
- B. Apply insecticides
- C. Penetrating spray
- D. Establish a chemical barrier
- E. None of the Above

161. Treat crawl space areas either by _____.

- A. Applying diluted insecticide
- B. Applying insecticides
- C. Rodding or trenching procedures
- D. Establishing a chemical barrier
- E. None of the Above

162. To _____ in soil, apply insecticide at the rate of 4 gallons per 10 linear feet per foot of depth. After treatment, cover the crawl space area with a layer of untreated soil or polyethylene sheeting.

- A. Apply diluted insecticide
- B. Apply insecticides
- C. Rod or trench
- D. Produce a vertical barrier
- E. None of the Above

Post-Construction Treatment

163. Do not _____ until locations of radiant heat pipes, water pipes, sewer lines, and electrical conduits are identified.

- A. Apply diluted insecticide
- B. Apply insecticides
- C. Rod or trench
- D. Establish a chemical barrier
- E. None of the Above

164. Buildings requiring treatment generally fall into three categories: a) building on slab construction, b) building with crawl space, and c) building with a basement. There is a common belief that termites _____ slab foundations.

- A. Will not eat
- B. Will not crawl on to
- C. Cannot destroy
- D. Cannot penetrate
- E. None of the Above

165. Termites _____ solid concrete but they can enter through cracks as small as 1/64 of an inch.

- A. Will not eat
- B. Will not crawl on to
- C. Cannot destroy
- D. Cannot penetrate
- E. None of the Above

Building on Slab

166. _____ in a building on a slab is especially difficult and hazardous. In this type of construction, heat ducts (pipes) are buried in the concrete and serious damage can occur when they are accidentally drilled for holes to inject insecticide solutions.

- A. Injecting insecticide
- B. Drilling
- C. Controlling termite infestation
- D. Broadcast insecticide spraying
- E. None of the Above

167. Treat the exterior of the foundation by _____ about 6 inches wide along the outside of the foundation.

- A. Inject insecticide or Injecting the insecticide
- B. Drill the floor slab or Drilling
- C. Digging a narrow and shallow trench
- D. None of the Above

168. _____ to the trench and soil at the rate of 4 gallons per 10 linear feet.

- A. Inject insecticide or Injecting the insecticide
- B. Drill the floor slab or Drilling
- C. Applying the diluted insecticide
- D. Broadcast insecticide spraying
- E. None of the Above

169. _____ with a thin layer of untreated soil. For an inside barrier, drill slab and space holes about 1 foot apart and 6 inches from the wall.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Cover treated soil in the trench
- D. Broadcast insecticide spray
- E. None of the Above

170. Using a subslab injector, inject insecticide through holes at the rate of 4 gallons per 10 linear feet. After application, _____ with mortar or any other special compound.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Plug all holes
- D. None of the Above

Applications

171. Building With a Basement and Crawl Space

Basement: For an interior vertical barrier, _____ and space holes about one foot apart.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

172. _____ may be required along the foundation walls, along one side of partition walls, along both sides of load-bearing wall, around sewer pipes, floor drains, conduits, and any crack in the basement floor.

- A. Inject insecticide or Inject the insecticide
- B. Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

173. Using a sub-slab injector, _____ at the rate of 4 gallons per 10 linear feet. For an insecticide barrier around the exterior of foundation walls, apply an insecticide by rodding and/or trenching.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

174. The rod holes should be spaced 1 to 1 1/2 feet apart to _____ barrier. If a trench is necessary, it should not be wider than 6 inches.

- A. Inject insecticide or Inject the insecticide
- B. Provide a continuous chemical
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

175. _____ using rodding technique at the rate of 4 gallons per 10 linear feet. Cover the trench with untreated soil.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

Crawl Spaces

176. _____ by rodding and/or trenching procedures. A shallow trench should not be wider than 6 inches.

- A. Inject insecticide or Inject the insecticide
- B. Establish vertical barriers
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

177. _____ about 1 to 1 1/2 feet apart. Apply insecticide at the rate of 4 gallons per 10 linear feet per foot of depth.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

178. Do not treat soil in crawl space area with a(n) _____.

- A. Insecticide
- B. Fungicide
- C. Pesticide
- D. Broadcast insecticide spray
- E. None of the Above

Hollow Masonry Units of the Foundation Walls

179. Treat through _____ to provide a continuous chemical barrier at the top of the footing.

- A. Masonry voids
- B. Debris
- C. All holes
- D. Such situations
- E. None of the Above

180. When treatment is necessary, access holes must be drilled through _____ below the sill plate, as close as possible to the footing.

- A. Mortar joints
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

181. Apply insecticide at the rate of 2 gallons per 10 linear feet. Plug _____ with mortar or any other special compound.

- A. Masonry voids
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

Bath Traps

182. Soil may require insecticide treatment if it is exposed beneath and around plumbing/waste pipe entrances through a _____.

- A. Masonry voids
- B. Other debris
- C. Concrete slab
- D. Such situations
- E. None of the Above

183. Remove _____ or excavated soil and treat the soil by rodding or flooding with an insecticide solution.

- A. Masonry voids
- B. Other debris
- C. Any wood
- D. Such situations
- E. None of the Above

184. Treatment Near Ponds, Wells, Cisterns, and Faulty _____, Around Pipes or Utility Lines Insecticide applications through rodding is discouraged in excavated soil.

- A. Masonry voids
- B. Other debris
- C. All holes
- D. Foundation walls
- E. None of the Above

185. The suggested procedure is to make a trench and remove the excavated _____ or similar material.

- A. Soil sheeting
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

186. Treat the _____ with insecticide at the rate of 4 gallons per 10 linear feet per foot of depth. Mix the soil with insecticide and replace it in the trench.

- A. Masonry voids
- B. Excavated soil
- C. All holes
- D. Such situations
- E. None of the Above

187. Cover the _____ with a thin layer of untreated soil. In the case of wells, ponds, and cisterns, if a rodding technique is necessary, the distance between the treated area and the water source should be 50 feet or more.

- A. Masonry voids
- B. Treated soil
- C. All holes
- D. None of the Above

188. Wood Treatment In addition to soil treatment, it may be necessary to treat infested wood with insecticide spray or injection. Applications are made to inaccessible areas by drilling and then _____.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Injecting the insecticide solution
- E. None of the Above

189. _____ must be limited to wood in attics, crawl spaces and unfinished basements or similar unoccupied areas.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Graded or sloped away
- E. None of the Above

190. Treatment of Secondary Subterranean Termite Colony Apply insecticide to infested wood and void spaces with a _____.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Graded or sloped away
- E. None of the Above

Prevention

191. Preventive practices are a(n) _____.

- A. Form of crack and crevice injector
- B. Form of broadcast spraying
- C. Critical aspect of termite management
- D. Graded or sloped away
- E. None of the Above

192. _____ of subterranean termite infestation of wooden structures centers upon disrupting their ability to locate moisture, food (wood), and shelter.

- A. Crack and crevice injecting
- B. Broadcast spraying
- C. Prevention
- D. Grading or sloping away
- E. None of the Above

193. Avoid moisture accumulation near the foundation, which provides water _____.

- A. And this is a bad sign
- B. For Nursery
- C. Needed for termite survival
- D. And needs to be sloped away
- E. None of the Above

194. Divert water _____ with properly functioning downspouts, gutters, and splash blocks.

- A. To sewer
- B. After broadcast spraying
- C. Quickly
- D. Away from the foundation
- E. None of the Above

195. Soil needs to be _____ away from the foundation in order for surface water to drain away from the building.

- A. Sprayed
- B. Drained
- C. Prevented
- D. Graded or sloped away
- E. None of the Above

Soil Barrier Termiticides

196. _____ rely on creating a chemical barrier in the soil that is toxic to termites when they come into contact with it.

- A. Effective termite control
- B. Repellent characteristics
- C. Conventional soil treatments
- D. Such treatments during preconstruction
- E. None of the Above

197. Many also have _____ which causes the termites to avoid treated soil. To achieve termite control for long periods of time, such termiticides must be applied as a continuous barrier in the soil next to and under the foundation. If there are untreated gaps in the soil, termites may circumvent the chemical treatment.

- A. Effective termite control
- B. Repellent characteristics
- C. Conventional soil treatments
- D. Such treatments during preconstruction
- E. None of the Above

198. Such treatments during preconstruction can provide for more _____. Once a home is constructed, the chemical has to be injected through drill holes and trenching around the foundation, which can result in less accurate coverage.

- A. Effective termite control
- B. Repellent characteristics
- C. Uniform coverage
- D. Such treatments during preconstruction
- E. None of the Above

199. In reference to "spot treatments only" (using _____ only in areas of the house where termites are seen), most pest management firms will refuse such treatments or will not guarantee them.

- A. Effective termite control
- B. Repellent characteristics
- C. Chemical barrier termiticides
- D. Such treatments during preconstruction
- E. None of the Above

200. _____ usually requires specialized equipment and often 150 or more gallons of prepared termiticide solution per house, depending on size, basement, etc.

- A. Effective termite control
- B. Repellent characteristics
- C. Conventional soil treatments
- D. Such treatments during preconstruction
- E. None of the Above

You are finished...

When finished, please e-mail the answers and registration form to info@tlch2o.com or fax to (928) 468-0675. If you paid on the Internet, please write your customer number on your registration form.

Please fax or e-mail the registration form, answer Key and a copy of your driver's license. Always call us to ensure we've received the materials.

Termite Control CEU Training Awareness Assignment #3

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services (928) 468-0665.

Write your answers on the Answer Key found in the front of this assignment.

1. We will require all students to fax or e-mail a copy of their driver's license with the registration form.
2. You will need to pick one of the following four assignments to complete. This selection process is based upon your last name.
3. If your last name begins with an A to G, you will pick assignment number 1, if your last name begins with the letter H to P, you are to complete assignment number 2 and if your last name begins with the letter Q-R, you will pick assignment number 3, and if your last name begins with the letter S-Z, you will pick assignment number 4.

Multiple Choice Section, Termite Terms.

Termite Introduction

1. There are about _____ termite species in the world. North America has 41 termite species, most in the southeast USA.
A. 2,500
B. 250,000
C. 2,000
D. 95%
E. None of the Above
2. Alaska is the only state without termites. Florida's eastern subterranean termite colonies have about _____ members, but can have 1 million or more.
A. 2,500
B. 250,000
C. 2,000
D. 95%
E. None of the Above
3. A colony eats about 1 cubic foot of wood a year. Australian colonies can have two million termites. The queen can lay _____ eggs per day and live as long as 50 years.
A. 2,500
B. 250,000
C. 2,000
D. 95%
E. None of the Above
4. Termite damage to residential and commercial buildings in the U.S. costs more than _____ annually.
A. 2,500
B. 250,000
C. 2,000
D. 95%
E. None of the Above

5. Subterranean termites, the most destructive of all termite species, account for _____ of the damage.

- A. 2,500
- B. 250,000
- C. 2,000
- D. 95%
- E. None of the Above

6. Two subterranean termite species, _____ and *R. tibialis*, are commonly found in United States.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

Feeding Habits

7. _____ feed mainly on wood and wood products containing cellulose.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

8. Termites have _____ (microorganisms) in their intestine which provide enzymes to digest cellulose.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

9. This relationship is beneficial to both species, since the _____ cause no harm and are provided with food and a protected environment by the termites.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

10. Although termites are _____, their hard, saw-toothed jaws work like shears and can bite off extremely small fragments of wood.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

11. These termites do not attack live trees, except for the _____.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

12. Termites often infest buildings and cause damage to lumber, wood panels, flooring, sheetrock, wallpaper, plastics, paper products, and _____.

- A. Concrete
- B. Similar habitats
- C. Attack ants
- D. Steel
- E. None of the Above

13. Termites attack flooring, carpeting, art work, books, clothing, and furniture. The most serious damage involves the loss of _____.

- A. The queen
- B. Similar habitats
- C. Life
- D. Electricity
- E. None of the Above

Biology

14. _____ are ground-dwelling social insects living in colonies.

- A. Formosan termite
- B. Subterranean termite
- C. Soft-bodied insects
- D. Protozoa(ns)
- E. None of the Above

15. The two species found in United States have _____.

- A. Same DNA
- B. Similar habitats
- C. Similar attack methods
- D. Ground-dwelling colonies
- E. None of the Above

16. These termites have the ability to _____ of their colony (nest) in soil depending on temperature and moisture requirements.

- A. Adjust the depth
- B. Reach its maximum size
- C. Measure the moisture reservoir
- D. Live above ground
- E. None of the Above

17. The colony may be 18-20 feet _____.

- A. Deep in the ground
- B. In height
- C. Long
- D. Above ground
- E. None of the Above

18. The ground serves as a protection against extreme temperatures and _____.

- A. Rain storms
- B. Ant attacks
- C. Provides a moisture reservoir
- D. Animals
- E. None of the Above

19. Termites reach wood or cellulose materials _____ by constructing and traveling through earthen (mud) tubes.

- A. Adjusting the depth
- B. To reach its maximum size
- C. Providing a moisture reservoir
- D. Above ground
- E. None of the Above

20. The mature colony consists of three castes: a) reproductives (king and queen), b) soldiers, and c) workers. It takes about 4 to 5 years for a _____ and it may consist of 60,000 to 200,000 workers.

- A. Colony to reach adjust the depth
- B. Colony to reach its maximum size
- C. Colony to reach the moisture reservoir
- D. Queen to mate
- E. None of the Above

21. Caste: A group of insects with a(n) _____ and function within a colony of social insects.

- A. Specific morphology
- B. Ranking order
- C. Swarming order
- D. Reproductive order
- E. None of the Above

Reproduction

22. In spring and fall, the winged males and females emerge from their parent colonies to form new ones. This activity is called _____.

- A. Aletizism
- B. Molting
- C. Swarming
- D. Reproductive cycle
- E. None of the Above

23. These winged _____ are dark brown to brownish black and have two pair of nearly equal size semitransparent wings extending well beyond the body.

- A. Larvae
- B. Survivors
- C. Swarms
- D. Reproductives
- E. None of the Above

24. The _____ are weak flyers and, unless aided by wind, fly only short distances. Many of them are devoured by birds, spiders, ants, and other predators.

- A. Workers
- B. Survivors
- C. Swarms
- D. Reproductives
- E. None of the Above

25. _____ return to the ground and shed their wings.

- A. Workers
- B. Survivors
- C. Swarms
- D. Reproductives
- E. None of the Above

26. The wingless _____ pair off (male following female in tandem) until they find a source of wood and moisture in the soil. They dig soil near wood, enter the chamber and seal the opening.

- A. Royal queen (Queen) Or Fertilized female
- B. Males and females
- C. Workers
- D. Drones
- E. None of the Above

27. After mating, the _____ begins laying eggs.

- A. Queen
- B. Drones
- C. Workers
- D. Nymphs
- E. None of the Above

28. The _____ is known to survive up to 25 years.

- A. Royal queen (Queen)
- B. Males and females
- C. Drones
- D. Workers
- E. None of the Above

Eggs

29. The _____ usually deposits 6 to 20 eggs during the first six months following the swarming flight and she may lay more than 60,000 eggs in her lifetime.

- A. Fertilized female
- B. Males and females
- C. Drone
- D. Workers
- E. None of the Above

30. _____ are yellowish white and hatch after an incubation period of 50 to 60 days.

- A. Royal queen (Queen) Or Fertilized female
- B. Males and females
- C. Eggs
- D. Nymphs
- E. None of the Above

Workers

31. The first broods of newly hatched _____ (young termites) generally develop into workers. Full grown workers are soft-bodied, wingless, blind, and creamy white. In early stages, they are fed predigested food by the king and queen.

- A. Royal queen (Queen) Or Fertilized female
- B. Males and females
- C. Molts
- D. Nymphs
- E. None of the Above

32. Once workers are able to digest wood, they begin providing food for the entire colony. At this time, the king and _____ cease feeding on wood.

- A. Queen
- B. Males and females
- C. Workers
- D. Nymphs
- E. None of the Above

33. The workers undertake all the labor in the colony such as obtaining food, feeding other _____ and immatures, excavating wood for chambers, and constructing tunnels.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

34. _____ mature within a year and live from 3 to 5 years.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Nymphs
- E. None of the Above

Soldiers

35. _____ are creamy white, soft-bodied, wingless, and blind.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

36. The head of the _____ is enormously elongated, brownish, hard, and equipped with two strong jaws.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldier
- E. None of the Above

37. Soldiers must be fed by _____ as they are incapable of feeding themselves.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

38. They are less numerous than _____ and their sole function is to defend the colony against invaders such as ants.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

39. _____ mature within a year and live up to 5 years.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

40. Flying ants and _____ are often difficult to distinguish when these insects are seen around residential and commercial buildings.

- A. Royal queen (Queen) Or Fertilized female
- B. Swarming termites
- C. Workers
- D. Soldiers
- E. None of the Above

41. The main enemy of termites is Ants and the _____ can defend a small number of Ants.

- A. Royal queen (Queen) Or Fertilized female
- B. Swarming termites
- C. Workers
- D. Soldiers
- E. None of the Above

Reproduction

42. The female assumes a " _____ " position with her abdomen elevated at a right angle to the rest of her body. Sounds familiar?

- A. Mating
- B. Calling
- C. Suitable site
- D. Molting
- E. None of the Above

43. She releases a chemical messenger (pheromone) which attracts nearby males. Once a male encounters a _____ female, she moves off. Sounds familiar?

- A. Mating
- B. Calling
- C. Suitable site
- D. Molt
- E. None of the Above

44. He follows close behind and they search for a _____ for the establishment of a nest.

- A. Mating site
- B. Calling site
- C. Suitable site
- D. Molting site
- E. None of the Above

45. As soon as the pair has located a _____, they excavate (with their jaws) a small chamber large enough for the two of them and then seal the entrance.

- A. Mating site
- B. Calling site
- C. Suitable site
- D. Molting site
- E. None of the Above

46. _____ usually occurs within a few hours to weeks after the pair becomes established.

- A. Mating
- B. Calling
- C. Transference
- D. Molting
- E. None of the Above

47. The single female cannot start a new colony. Establishment of a colony is dependent upon the survival of both sexes in the nest site and that she has successfully _____.

- A. Mated
- B. Called
- C. Paired
- D. Molted
- E. None of the Above

48. The pair continues to _____, and they usually mate periodically.

- A. Mate
- B. Build
- C. Live together for life
- D. Molt
- E. None of the Above

49. The first eggs are laid within one to several weeks after _____, depending on the nutrition available to the female.

- A. Mating
- B. Tunneling
- C. Building nursery
- D. Molting
- E. None of the Above

50. When the first eggs hatch, the new nymphs are _____ by the young pair.

- A. Trained
- B. Fed
- C. Cared for
- D. Abandoned
- E. None of the Above

51. After two _____, the nymphs assume their role as workers and begin to feed and care for the original pair.

- A. Years
- B. Months
- C. Births
- D. Molts
- E. None of the Above

Development of the Colony

52. Development of the colony is very slow for several years. Eggs are not deposited continuously. After the first group of eggs has been laid, _____ before another group is laid.

- A. There is a period of several months
- B. The loss of older individuals happens
- C. A greater number of eggs is laid
- D. Even older a greater number
- E. None of the Above

53. This process continues for several years. As the young queen matures, she _____, and her abdomen becomes enlarged from developing eggs.

- A. Molts
- B. Mates twice a day
- C. Lays a greater number of eggs
- D. Adjusts her empire
- E. None of the Above

54. A point is reached where the colony size stabilizes. That is, the queen has reached maximum egg production, and _____ by death or swarming is approximately the same as the number of new individuals produced each year.

- A. There is a die off
- B. The loss of older individuals
- C. Many leave either
- D. Some return or mate
- E. None of the Above

55. As the colony becomes _____ of swarmers are produced each year.

- A. Larger
- B. More aggressive
- C. More fluid
- D. Even older a greater number
- E. None of the Above

56. It requires a minimum of 3 to 4 years--and as much as 8 to 10 years--for a colony of our native subterranean termites to become _____ to start dispersal flights.

- A. Good enough
- B. A threat
- C. Large enough and strong enough
- D. Trained
- E. None of the Above

Swarming

57. When _____ occurs in a relatively new structure, it is because it was built over or near a strong colony that was not severely damaged during the construction process.

- A. Cellulose
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

58. Termites derive food from wood and other _____ materials.

- A. Cellulosic
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

59. In nature, termites feed exclusively on wood, primarily digesting out the _____ and passing most of the remaining components as waste. In man-invaded environments, termites attack many additional products and commodities.

- A. Cellulose
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

60. Termites still depend primarily on _____ for their nutrition, but will damage many materials they encounter.

- A. Cellulose
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

61. Damaged materials may include plastics, rubber, asphalt, metal, mortar and others. Wood products like paper are favorite foods of termites because they are nearly pure _____.

- A. Cellulose
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

62. _____ are actively consumed by termites as well.

- A. Cellulose or Cellulosic
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

Fungi

63. Fungi also play a role in termite nutrition. Certain _____ fungi are highly attractive to termites.

- A. Brown
- B. Green
- C. Yellow
- D. Mushroom type
- E. None of the Above

64. Partially decayed wood is more easily digested by termites, and the fungus may provide a needed source of _____.

- A. Cellulose or Cellulosic
- B. Wood
- C. Fiber
- D. Minerals
- E. None of the Above

65. Ultimately, wood-destroying _____ exhaust the nutritive value of wood for termites, and extensive decay in wood is of no benefit to foraging termites.

- A. Insects
- B. Pests
- C. Fungi
- D. Ants
- E. None of the Above

66. When termites attack wood, they usually bring _____ spores on their bodies. When water or other liquid reaches the damaged wood, it is more easily trapped.

- A. Plant
- B. Ants
- C. Fungus
- D. Abundant
- E. None of the Above

Moisture

67. _____ is vital to the survival of termites. Subterranean termites obtain most of their moisture from the soil.

- A. Clay base
- B. Moisture
- C. Dry condition
- D. Wood
- E. None of the Above

68. Subterranean termites maintain contact with the _____ in order to survive. The type of soil has a great effect on the ability of subterranean termites to flourish.

- A. Clay base
- B. Soil
- C. Dry conditions
- D. Wood
- E. None of the Above

69. Termites generally prefer sandy soil over a(n) _____. They can and do survive in many other types of soil, however.

- A. Clay base
- B. Moisture
- C. Dry conditions
- D. Wood
- E. None of the Above

Tolerances

70. Termites have very little tolerance to _____, or extremes of hot and cold. But they often must forage far, sometimes above ground, from their initial workings to find food.

- A. Clay base
- B. Moisture
- C. Dry conditions
- D. Wood
- E. None of the Above

71. They move underground through tunnels. Whenever the termites leave the confines of the soil or the wood in which they are feeding, they construct shelter tubes in which to move from the soil to the _____ or the above-ground nest.

- A. Clay base
- B. Moisture
- C. Dry conditions
- D. Wood
- E. None of the Above

Subterranean Termites

72. When subterranean termites invade the wood of a structure that is separated from the soil by intervening concrete, masonry or other impervious material, they construct _____ over the surface to the wood.

- A. Shelter tubes
- B. Castles
- C. Tunnels
- D. Mudsill
- E. None of the Above

73. Contrary to published reports, _____ do not necessarily conduct moist air from the soil to the wood. Shelter tubes also provide some protection from air movement and prevent excess water loss.

- A. Shelter tubes
- B. Castles
- C. Tunnels
- D. Mudsill
- E. None of the Above

74. The primary function of _____ probably is protection from natural enemies.

- A. Shelter tubes
- B. Castles
- C. Heavily infested wood
- D. Mudsill
- E. None of the Above

75. Once termites have established contact with wood above ground and feeding progresses some distance from the initial shelter tunnel, they often will drop shelter tubes straight down from the wood. Evidence of _____ building will be found directly below a suspended tube.

- A. Tube
- B. Castles
- C. Above ground
- D. Mudsill
- E. None of the Above

Castles

76. Under certain conditions a fourth type of tube is constructed. Called swarming tubes or swarming " _____ " they are constructed as flight platforms for swarmers and they have many turret-like projects and flattened horizontal branches that vaguely resemble castle towers.

- A. Shelter tubes or Tubes
- B. Castles
- C. Above ground
- D. Mudsill
- E. None of the Above

77. They usually are constructed on the ground to a height of 4 to 8 inches (10-20 cm), but sometimes are found projecting from _____.

- A. Shelter tubes or Tubes
- B. Castles
- C. Heavily infested wood above ground
- D. None of the Above

78. When swarmers are leaving the colony via these tubes, or directly through a _____ or soil, the openings are heavily guarded by soldiers and workers.

- A. Shelter tubes or Tubes
- B. Castles
- C. Hole in wood
- D. None of the Above

79. The amount of damage that a(n) _____ of subterranean termites might inflict on a structure depends on many factors. The number and size of the attacking colonies and the quality of the environmental conditions (including the wood) are the most important.

- A. Shelter tubes or Tubes
- B. Castles
- C. Infestation
- D. Mudsill
- E. None of the Above

80. Damage usually starts at the mudsill in houses built over a crawl space and with the _____ of those houses built on concrete slabs.

- A. Shelter tubes or Tubes
- B. Castles
- C. Sole plates
- D. Mudsill
- E. None of the Above

81. Given enough time, subterranean termites will extend the damage into the wooden floor members, the interior trim and furnishings, and into the walls up to the _____.

- A. Shelter tubes or Tubes
- B. Castles
- C. Roof timbers
- D. Mudsill
- E. None of the Above

Severe Damage

82. _____ by subterranean termites is not likely to occur in the first 8 or 10 years after construction.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. Severe damage
- E. None of the Above

83. If treatment is undertaken with the first evidence of infestation, very little serious _____ is ever likely to occur.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. Severe damage
- E. None of the Above

84. Houses should be carefully inspected at least once a year in all regions. This will allow detection before _____.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. Severe damage
- E. None of the Above

85. Should _____ be found, there is no cause for extreme alarm or undue haste. Treatment within 6 months is recommended.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. None of the Above

Communication in the Colony

86. Termites primarily communicate via chemicals called _____. Each colony develops its own characteristic odor.

- A. Communication
- B. Vibrations
- C. Pheromones
- D. Recognition
- E. None of the Above

87. Any intruder is instantly recognized and a(n) _____ is released that triggers the soldiers to attack the intruder.

- A. Communication
- B. Vibrations
- C. Alarm pheromone
- D. Recognition
- E. None of the Above

88. If a worker finds a new source of food, it recruits others to that food source by _____. The proportion of castes in the colony is also regulated chemically.

- A. Laying a chemical trail
- B. Vibrations
- C. Alarm pheromones
- D. Recognition
- E. None of the Above

89. Nymphs can develop into workers, soldiers, or reproductive adults, _____.

- A. Communication workers
- B. Vibration makers
- C. Alarm pheromone producers
- D. Recognition soldiers
- E. None of the Above

90. Sound is another means of _____.

- A. Communication
- B. Vibrations
- C. Alarm pheromone
- D. Recognition
- E. None of the Above

91. Soldiers and workers can _____ against tunnel walls.

- A. Hear communication
- B. Hear vibrations
- C. Smell alarm pheromones
- D. Recognize
- E. None of the Above

92. _____ are perceived by other termites in the colony and serve to mobilize the colony to defend itself.

- A. Communication
- B. Vibrations
- C. Alarm pheromones
- D. Recognition
- E. None of the Above

93. _____ of foods enhances recognition of colony members.

- A. Communication
- B. Vibrations
- C. Alarm pheromone
- D. Mutual exchange
- E. None of the Above

Detection of Termites

94. It is important for homeowners to _____ of a subterranean termite infestation.
- A. Notice foraging and feeding
 - B. Recognize the signs
 - C. Identify
 - D. Recognize the sounds
 - E. None of the Above
95. Subterranean termites may be detected by the _____ of winged termites (alates or swarmers), or by the presence of mud tubes and wood damage.
- A. Foraging and feeding
 - B. Sudden emergence
 - C. Color
 - D. Size
 - E. None of the Above
96. We tend to think of termites as feeding/injuring wood only. Termites _____ on almost anything that contains cellulose (the main component of wood), including wood paneling, paper products, cardboard boxes, art canvases, the paper covering of sheetrock, carpeting, etc.
- A. Foraging and feeding
 - B. Actually feed
 - C. Crawl
 - D. Nest
 - E. None of the Above
97. According to some research, a colony containing 60,000 workers could _____ of one foot of a 2" x 4" piece of lumber in slightly over 5 months.
- A. Eat twice the equivalent
 - B. Consume the equivalent
 - C. Carry
 - D. Forage
 - E. None of the Above
98. In areas with cold winter temperatures, termite activity (and feeding) _____, but does not necessarily stop.
- A. Increases
 - B. Usually declines
 - C. Slows to a stop
 - D. Remains the same
 - E. None of the Above
99. From a _____, serious termite damage usually takes about 3-8 years.
- A. Sign
 - B. Practical perspective
 - C. Hollow sound
 - D. Foraging perspective
 - E. None of the Above
100. Look for these signs of termite feeding: Wood that sounds " _____ " when it is tapped with the handle of a screwdriver.
- A. Recognize the signs
 - B. Consume the equivalent
 - C. "Hollow"
 - D. Foraging and feeding
 - E. None of the Above

101. Look for these signs of termite feeding: Soft wood that is _____ with a knife or screwdriver.

- A. Recognizable
- B. Easily probed
- C. Sounds "hollow"
- D. Has evidence
- E. None of the Above

102. Look for these signs of termite feeding: A thin gritty gray-brown film on the _____.

- A. Top
- B. Surface of damaged material
- C. Floor
- D. Nest
- E. None of the Above

Winged Termites

103. Large numbers of _____ swarming from wood or the soil often are the first obvious sign of a nearby termite colony.

- A. Mating pairs
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

104. _____ occurs in mature colonies that typically contain at least several thousand termites.

- A. Swarming
- B. Emergences
- C. Winged termites
- D. Mating
- E. None of the Above

105. A " _____ " is a group of adult male and female reproductives that leave their colony in an attempt to pair and initiate new colonies.

- A. Swarm
- B. Nest
- C. Alate emergence
- D. Winged termite colony
- E. None of the Above

106. _____ is stimulated when temperature and moisture conditions are favorable, usually on warm days following rainfall.

- A. Swarming
- B. Ants infestations
- C. Alate emergence
- D. Winged termites flying
- E. None of the Above

107. Swarming occurs during a brief period (typically less than an hour), and _____ quickly shed their wings.

- A. Workers
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

108. _____ are attracted to light, and their shed wings in window sills, cobwebs, or on other surfaces often may be the only evidence that a swarm occurred indoors.

- A. Queens
- B. Alates
- C. Winged termites
- D. Ants
- E. None of the Above

109. The presence of _____ or their shed wings inside a home should be a warning of a termite infestation.

- A. A swarm
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

110. Termite _____ have straight, bead-like antennae; a thick waist; and two pair of long, equal-length wings that break off easily.

- A. Swarmers
- B. Soliders
- C. Alates
- D. Workers
- E. None of the Above

111. _____ can be differentiated from winged ants, which have elbowed antennae, a constricted waist, and two pair of unequal-length wings (forewings are larger than hind wings) that are not easily detached.

- A. Swarming termites
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

112. Ants also generally are harder-bodied than _____.

- A. You think
- B. Bees
- C. Alates
- D. Termites
- E. None of the Above

Mud Tubes

113. Other signs of termite presence include mud tubes and mud _____ between boards and beams.

- A. Nests
- B. Inspected
- C. Protruding from cracks
- D. Construct earthen runways
- E. None of the Above

114. Subterranean termites _____ above ground to construct earthen runways (shelter tubes) that allow them to tunnel across exposed areas to reach wood.

- A. Always
- B. Never go
- C. Walk
- D. Transport soil and water
- E. None of the Above

115. Shelter tubes protect them from the drying effects of air and from natural enemies, such as ants. These tubes usually are about 1/4 to 1 inch wide, and termites _____ between the soil and wood.

- A. Include mud tubes
- B. Use them as passageways
- C. Broken or scraped away
- D. Construct earthen runways
- E. None of the Above

116. To determine if an infestation is active, shelter tubes should be _____ and then monitored to determine whether the termites repair them or construct new ones.

- A. Sprayed
- B. Inspected annually
- C. Broken or scraped away
- D. Noticed
- E. None of the Above

117. Houses should be inspected annually for _____.

- A. Mud tubes
- B. Nests
- C. Alates
- D. Constructed earthen runways
- E. None of the Above

Wood Damage

118. Termite damage to the wood's surface often is not evident because termites _____ within materials as they feed.

- A. Are very small
- B. Hide
- C. Excavate galleries
- D. None of the Above

119. Wood attacked by subterranean termites generally has a honeycombed appearance because termites _____ on the softer spring growth wood.

- A. Probe wood
- B. Carry soil
- C. Excavate galleries
- D. Feed along the grain
- E. None of the Above

120. Their excavations in wood often are _____, and fecal spotting is evident.

- A. Hollow
- B. Packed with soil
- C. Excavated galleries
- D. Along the grain
- E. None of the Above

121. When inspecting for termites, it is useful to _____ with a knife or flat blade screwdriver to detect areas that have been hollowed.

- A. Probe wood
- B. Diagram
- C. Stab the queen
- D. Cut the door
- E. None of the Above

122. Severely damaged wood may have a hollow sound _____.

- A. Like your friend
- B. When it is tapped
- C. In the galleries
- D. Along the grain
- E. None of the Above

123. Subterranean termites do not _____ to a powdery mass, and they do not create wood particles or pellets, as do many other wood-boring insects.

- A. Reproduce
- B. Reduce wood
- C. Excavate galleries
- D. Feed along the grain
- E. None of the Above

Mass Emergence

124. The _____ of winged termites in the spring is often the first sign of an infestation.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detecting infestations
- E. None of the Above

125. In the majority of cases, they _____ in homes near sources of heat - furnaces or water heaters.

- A. Appear
- B. Emerge
- C. Damage wood
- D. Infest
- E. None of the Above

126. The _____ of winged termites means that the infestation has been around for at least 3 or 4 years.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Infestations
- E. None of the Above

127. Therefore it is likely some damage has already been done, so it is important to find where the termites have been feeding, how much _____ has been done, and how much repair is needed.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Work
- E. None of the Above

128. Other means of _____ include knocking on walls, floors, sub-floor wood, joists, etc. and listening for the tapping of soldiers, and looking for shelter tubes on the outside of the building and under the sub-floor.

- A. Termite appearance
- B. Mass emergence
- C. Figuring damage
- D. Detecting infestations
- E. None of the Above

129. Because subterranean termites have a constant _____ for water, one should closely examine areas near moist soil, such as below dripping outside faucets, leaking underground sprinkler pipes and nozzles, and below downspouts.

- A. Appearance
- B. Mass emergence
- C. Demand
- D. Dripping
- E. None of the Above

130. Where _____ or termites are suspected, prod with a sharp narrow implement to check the soundness of the supporting wood structure.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detecting infestations
- E. None of the Above

131. The _____ of termite infestations is best left to professionals who have the experience to do it thoroughly and accurately.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detection
- E. None of the Above

132. Termites can enter a building from one or more points so _____ to locate all points of entry for control purposes.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. None of the Above

133. Outdoors, termites can be _____ by driving wooden stakes into the ground at varying distances from buildings and other wooden structures.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detected
- E. None of the Above

134. Examine the stakes every 3 months for termites or signs of their feeding _____.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Infestations
- E. None of the Above

Evidence of Termite Infestations

135. _____ by subterranean termites can be readily penetrated with a screwdriver, ice pick, or knife.

- A. Shelter tubes Or Mud tube
- B. Foundation walls
- C. Wood damaged
- D. Mud particles with fecal materials
- E. None of the Above

136. The wood easily breaks apart, revealing mud tubes attached to _____ or tunnels in an irregular pattern.

- A. Shelter tubes
- B. Infestation in the building
- C. Wood galleries
- D. Foundation walls
- E. None of the Above

137. The tunnels may contain broken _____. In the case of an active colony, white termites may be found in infested wood.

- A. Shelter tubes
- B. Foundation walls
- C. Vases
- D. Mud particles with fecal materials
- E. None of the Above

138. The presence of winged males, females, or their shed wings, particularly when the adults fly inside the building, _____ in the building.

- A. Mud tubes
- B. Infestation in the building
- C. Dumping fecal material
- D. And inside foundation walls
- E. None of the Above

139. Another indication is the presence of _____ extending from the ground to woodwork or on foundation walls.

- A. Shelter tubes Or Mud tube
- B. Infestation in the building
- C. Mud particles with fecal materials
- D. Nesting materials
- E. None of the Above

140. Workers travel periodically via _____ to their colony to obtain moisture and perform feeding duties.

- A. Shelter tubes Or Mud tube
- B. Foundation walls
- C. Tunnels
- D. Mud particles
- E. None of the Above

141. Workers build mud or shelter tubes from soil and wood particles, and coat them with a(n) _____ that they secrete.

- A. Shelter tubes Or Mud tube
- B. Infestation in the building
- C. Mud particles with fecal materials
- D. Foundation walls
- E. None of the Above

142. Each _____ is about the diameter of a lead pencil.

- A. Mud tube
- B. Infestation
- C. Mud particles
- D. Nursery
- E. None of the Above

Useful Information If Treatment is Necessary

143. If termite activity is _____ and an insecticide treatment is necessary, it is important to outline the plan of the building, indicating sites of termite activity and treatment procedures.

- A. Requiring additional treatment
- B. Generally established
- C. Suspected or found
- D. Continuous insecticide barrier
- E. None of the Above

144. Building owners/managers are encouraged to seek two or more inspections and cost estimates. Ask for information on _____, repair of woodwork, warranties, copies of the insecticide label, and other pertinent information.

- A. Requiring additional treatment
- B. Chemical treatment procedures
- C. Termite activity and treatment procedures
- D. Continuous insecticide barrier
- E. None of the Above

Control Objectives

145. The goal is to establish a(n) _____ between the termite colony (usually in the ground) and the wood in a building.

- A. Additional treatment
- B. Generally established
- C. Termite activity and treatment procedures
- D. Continuous insecticide barrier
- E. None of the Above

146. Sometimes a secondary termite colony may exist above ground (in roof or other areas with a constant moisture supply) which _____.

- A. Requires additional treatment
- B. Are generally established
- C. Termite activity and treatment procedures
- D. None of the Above

General Treatment Guidelines

147. Insecticide barriers _____ during: Pre-construction (during construction).

- A. Requires additional treatment
- B. Are generally established
- C. Require termite activity and treatment procedures
- D. Include a continuous insecticide barrier
- E. None of the Above

148. Insecticide barriers are generally established during: Post-construction (existing building). In an existing building, termite treatments may involve any of the following: a) _____, and b) use of an insecticide for treating the soil, foundation, and wood.

- A. Mechanical alterations
- B. Contact treated
- C. Distribution of insecticide
- D. None of the Above

149. In most cases, an untrained homeowner or building manager should not attempt a _____.

- A. Mechanical alterations
- B. Contact treatment
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

150. _____ should be performed by professional pest control operators (PCOs), that is right!

- A. Mechanical alterations
- B. Contact treatment
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

151. _____ requires special tools such as hammer drills, sub-slab injectors, rodding devices, high pressure pumps, a power supply, protective equipment.

- A. Mechanical alterations
- B. Contact treatments
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

Caution

152. Do not apply insecticides when soil is frozen or water-soaked (saturated). Frozen or saturated soil will not permit _____ for even distribution of insecticide.

- A. Mechanical alterations
- B. Adequate absorption
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

153. Do not permit humans and pets to _____ surfaces until dry.

- A. Walk on
- B. Contact treated
- C. Distribute of insecticide
- D. Adsorption
- E. None of the Above

154. Before _____ for termite control, always read, understand and follow all label directions.

- A. Applying mechanical alterations
- B. Using insecticides
- C. Distribution of insecticide
- D. Applying termite treatment(s)
- E. None of the Above

155. Keep all _____, out of reach of children and do not contaminate food, feed and water.

- A. Mechanical alterations
- B. Pesticides in original containers
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

Pre-Construction Treatment

156. Horizontal Barriers: In general, treat the footing trench with _____ before pouring cement footings.

- A. Diluted insecticide
- B. Establishing a chemical barrier
- C. Insecticide
- D. Penetrating spray
- E. None of the Above

157. After grading is completed, _____ to areas before pouring slab floors, slab-supported porches, patios, carports, and entrance platforms at the rate of 1 gallon per 10 square feet.

- A. Apply diluted insecticide
- B. Establish a chemical barrier
- C. Apply insecticides
- D. Penetrating spray
- E. None of the Above

158. Vertical Barriers: _____ in areas such as around the bases of foundations, plumbing, utility entrances, and backfilled soil against foundation walls.

- A. Apply diluted insecticide
- B. Apply insecticides
- C. Penetrating spray
- D. Establish a chemical barrier
- E. None of the Above

159. Treat crawl space areas either by _____.

- A. Applying diluted insecticide
- B. Applying insecticides
- C. Rodding or trenching procedures
- D. Establishing a chemical barrier
- E. None of the Above

160. To _____ in soil, apply insecticide at the rate of 4 gallons per 10 linear feet per foot of depth. After treatment, cover the crawl space area with a layer of untreated soil or polyethylene sheeting.

- A. Apply diluted insecticide
- B. Apply insecticides
- C. Rod or trench
- D. Produce a vertical barrier
- E. None of the Above

Post-Construction Treatment

161. Do not _____ until locations of radiant heat pipes, water pipes, sewer lines, and electrical conduits are identified.

- A. Apply diluted insecticide
- B. Apply insecticides
- C. Rod or trench
- D. Establish a chemical barrier
- E. None of the Above

162. Buildings requiring treatment generally fall into three categories: a) building on slab construction, b) building with crawl space, and c) building with a basement. There is a common belief that termites _____ slab foundations.

- A. Will not eat
- B. Will not crawl on to
- C. Cannot penetrate
- D. None of the Above

163. Termites _____ solid concrete but they can enter through cracks as small as 1/64 of an inch.
- A. Will not eat
 - B. Will not crawl on to
 - C. Cannot destroy
 - D. Cannot penetrate
 - E. None of the Above

Building on Slab

164. _____ in a building on a slab is especially difficult and hazardous. In this type of construction, heat ducts (pipes) are buried in the concrete and serious damage can occur when they are accidentally drilled for holes to inject insecticide solutions.
- A. Injecting insecticide
 - B. Drilling
 - C. Controlling termite infestation
 - D. Broadcast insecticide spraying
 - E. None of the Above

165. Treat the exterior of the foundation by _____ about 6 inches wide along the outside of the foundation.
- A. Inject insecticide or Injecting the insecticide
 - B. Drill the floor slab or Drilling
 - C. Digging a narrow and shallow trench
 - D. None of the Above

166. _____ to the trench and soil at the rate of 4 gallons per 10 linear feet.
- A. Inject insecticide or Injecting the insecticide
 - B. Drill the floor slab or Drilling
 - C. Applying the diluted insecticide
 - D. Broadcast insecticide spraying
 - E. None of the Above

167. _____ with a thin layer of untreated soil. For an inside barrier, drill slab and space holes about 1 foot apart and 6 inches from the wall.
- A. Inject insecticide or Inject the insecticide
 - B. Drill the floor slab or Drilling
 - C. Cover treated soil in the trench
 - D. Broadcast insecticide spray
 - E. None of the Above

168. Using a subslab injector, inject insecticide through holes at the rate of 4 gallons per 10 linear feet. After application, _____ with mortar or any other special compound.
- A. Inject insecticide or Inject the insecticide
 - B. Drill the floor slab or Drilling
 - C. Plug all holes
 - D. None of the Above

Applications

169. Building With a Basement and Crawl Space

Basement: For an interior vertical barrier, _____ and space holes about one foot apart.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

170. _____ may be required along the foundation walls, along one side of partition walls, along both sides of load-bearing wall, around sewer pipes, floor drains, conduits, and any crack in the basement floor.

- A. Inject insecticide or Inject the insecticide
- B. Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

171. Using a sub-slab injector, _____ at the rate of 4 gallons per 10 linear feet. For an insecticide barrier around the exterior of foundation walls, apply an insecticide by rodding and/or trenching.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

172. The rod holes should be spaced 1 to 1 1/2 feet apart to _____ barrier. If a trench is necessary, it should not be wider than 6 inches.

- A. Inject insecticide or Inject the insecticide
- B. Provide a continuous chemical
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

173. _____ using rodding technique at the rate of 4 gallons per 10 linear feet. Cover the trench with untreated soil.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

Crawl Spaces

174. _____ by rodding and/or trenching procedures. A shallow trench should not be wider than 6 inches.

- A. Inject insecticide or Inject the insecticide
- B. Establish vertical barriers
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

175. _____ about 1 to 1 1/2 feet apart. Apply insecticide at the rate of 4 gallons per 10 linear feet per foot of depth.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

176. Do not treat soil in crawl space area with a(n) _____.

- A. Insecticide
- B. Fungicide
- C. Pesticide
- D. Broadcast insecticide spray
- E. None of the Above

Hollow Masonry Units of the Foundation Walls

177. Treat through _____ to provide a continuous chemical barrier at the top of the footing.

- A. Masonry voids
- B. Debris
- C. All holes
- D. Such situations
- E. None of the Above

178. When treatment is necessary, access holes must be drilled through _____ below the sill plate, as close as possible to the footing.

- A. Mortar joints
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

179. Apply insecticide at the rate of 2 gallons per 10 linear feet. Plug _____ with mortar or any other special compound.

- A. Masonry voids
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

Bath Traps

180. Soil may require insecticide treatment if it is exposed beneath and around plumbing/waste pipe entrances through a _____.

- A. Masonry voids
- B. Other debris
- C. Concrete slab
- D. Such situations
- E. None of the Above

181. Remove _____ or excavated soil and treat the soil by rodding or flooding with an insecticide solution.

- A. Masonry voids
- B. Any wood
- C. All holes
- D. Such situations
- E. None of the Above

182. Treatment Near Ponds, Wells, Cisterns, and Faulty _____, Around Pipes or Utility Lines Insecticide applications through rodding is discouraged in excavated soil.

- A. Masonry voids
- B. Other debris
- C. All holes
- D. Foundation walls
- E. None of the Above

183. The suggested procedure is to make a trench and remove the excavated _____ or similar material.

- A. Soil sheeting
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

184. Treat the _____ with insecticide at the rate of 4 gallons per 10 linear feet per foot of depth. Mix the soil with insecticide and replace it in the trench.

- A. Masonry voids
- B. Excavated soil
- C. All holes
- D. Such situations
- E. None of the Above

185. Cover the _____ with a thin layer of untreated soil. In the case of wells, ponds, and cisterns, if a rodding technique is necessary, the distance between the treated area and the water source should be 50 feet or more.

- A. Masonry voids
- B. Treated soil
- C. All holes
- D. None of the Above

186. Wood Treatment In addition to soil treatment, it may be necessary to treat infested wood with insecticide spray or injection. Applications are made to inaccessible areas by drilling and then _____.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Injecting the insecticide solution
- E. None of the Above

187. _____ must be limited to wood in attics, crawl spaces and unfinished basements or similar unoccupied areas.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Graded or sloped away
- E. None of the Above

188. Treatment of Secondary Subterranean Termite Colony Apply insecticide to infested wood and void spaces with a _____.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Graded or sloped away
- E. None of the Above

Prevention

189. Preventive practices are a(n) _____.

- A. Form of crack and crevice injector
- B. Form of broadcast spraying
- C. Critical aspect of termite management
- D. Graded or sloped away
- E. None of the Above

190. _____ of subterranean termite infestation of wooden structures centers upon disrupting their ability to locate moisture, food (wood), and shelter.

- A. Crack and crevice injecting
- B. Broadcast spraying
- C. Prevention
- D. Grading or sloping away
- E. None of the Above

191. Avoid moisture accumulation near the foundation, which provides water _____.

- A. And this is a bad sign
- B. For Nursery
- C. Needed for termite survival
- D. And needs to be sloped away
- E. None of the Above

192. Divert water _____ with properly functioning downspouts, gutters, and splash blocks.

- A. To sewer
- B. After broadcast spraying
- C. Quickly
- D. Away from the foundation
- E. None of the Above

193. Soil needs to be _____ away from the foundation in order for surface water to drain away from the building.

- A. Sprayed
- B. Drained
- C. Prevented
- D. Graded or sloped away
- E. None of the Above

Soil Barrier Termiticides

194. _____ rely on creating a chemical barrier in the soil that is toxic to termites when they come into contact with it.

- A. Effective termite control
- B. Repellent characteristics
- C. Conventional soil treatments
- D. Such treatments during preconstruction
- E. None of the Above

195. Many also have _____ which causes the termites to avoid treated soil. To achieve termite control for long periods of time, such termiticides must be applied as a continuous barrier in the soil next to and under the foundation. If there are untreated gaps in the soil, termites may circumvent the chemical treatment.

- A. Effective termite control
- B. Repellent characteristics
- C. Conventional soil treatments
- D. Such treatments during preconstruction
- E. None of the Above

196. Such treatments during preconstruction can provide for more _____. Once a home is constructed, the chemical has to be injected through drill holes and trenching around the foundation, which can result in less accurate coverage.

- A. Effective termite control
- B. Repellent characteristics
- C. Uniform coverage
- D. Such treatments during preconstruction
- E. None of the Above

197. In reference to "spot treatments only" (using _____ only in areas of the house where termites are seen), most pest management firms will refuse such treatments or will not guarantee them.

- A. Effective termite control
- B. Repellent characteristics
- C. Chemical barrier termiticides
- D. Such treatments during preconstruction
- E. None of the Above

198. _____ usually requires specialized equipment and often 150 or more gallons of prepared termiticide solution per house, depending on size, basement, etc.

- A. Effective termite control
- B. Repellent characteristics
- C. Conventional soil treatments
- D. Such treatments during preconstruction
- E. None of the Above

199. _____ A caste of termites with specific structures to defend the colony, such as large mandibles or nasute mouths that produce sticky defensive substances.

- A. Tenaculum
- B. Tergina
- C. Worker termite
- D. Soldier termite
- E. None of the Above

200. _____ A caste of termites that do most of the work in the colony. Worker termites can be all immature termites and forms that do not develop into reproductive forms or soldiers.

- A. Tenaculum
- B. Tergina
- C. Soldier termite
- D. Worker termite
- E. None of the Above

You are finished...

When finished, please e-mail the answers and registration form to info@tlch2o.com or fax to (928) 468-0675. If you paid on the Internet, please write your customer number on your registration form.

Please fax or e-mail the registration form, answer Key and a copy of your driver's license. Always call us to ensure we've received the materials.

Termite Control CEU Training Awareness Assignment #4 For Last Names S-Z

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services (928) 468-0665.

Write your answers on the Answer Key found in the front of this assignment.

1. We will require all students to fax or e-mail a copy of their driver's license with the registration form.
2. You will need to pick one of the following four assignments to complete. This selection process is based upon your last name.
3. If your last name begins with an A to G, you will pick assignment number 1, if your last name begins with the letter H to P, you are to complete assignment number 2 and if your last name begins with the letter Q-R, you will pick assignment number 3, and if your last name begins with the letter S-Z, you will pick assignment number 4.

Answer key in front.

Identify the following pictures.

1. This is _____?

- A. Soldier
- B. Worker
- C. Swarmer
- D. Queen
- E. Nymph

2. This is _____?

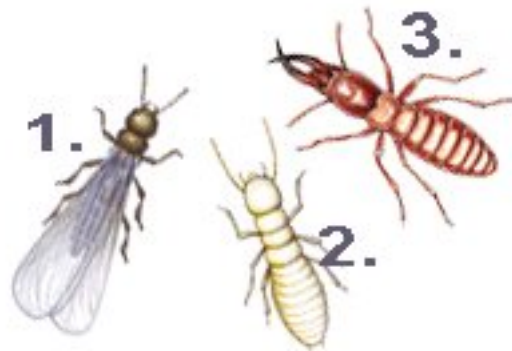
- A. Soldier
- B. Worker
- C. Swarmer
- D. Queen
- E. Nymph

3. This is _____?

- A. Soldier
- B. Worker
- C. Swarmer
- D. Queen
- E. Nymph

4. This is _____?

- A. Soldier
- B. Worker
- C. Swarmer
- D. Queen
- E. Nymph



5. These are _____?

- A. Soldiers
- B. Workers
- C. Swarmer
- D. Queens
- E. Nymphs



6. These are?

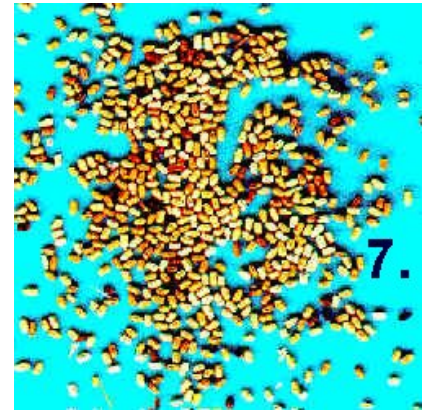
- A. Mud Holes
- B. Frass
- C. Alates
- D. Fungus
- E. Nuptial

7. These are?

- A. Mud Holes
- B. Frass
- C. Alates
- D. Fungus
- E. Nuptial

8. This is ?

- A. Mud Tubes
- B. Frass
- C. Alates
- D. Fungus
- E. Nuptial



9. This is ?

- A. Mud Tubes
- B. Frass
- C. Alates
- D. Fungus
- E. Nuptial



Identify the pesticide trade name with the common name.

10. Equity

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

11. Demon TC

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin

12. Ficam

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

13. Dursban TC

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

14. Dragnet FT

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

15. Prevail FT

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

16. Pyrfon 6

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

17. Torpedo

- A. Cypermethrin
- B. Bendiocarb
- C. Chlorpyrifos
- D. Permethrin
- E. Isofenphos

Biology

18. The ground serves as a protection against extreme temperatures and _____.

- A. Rain storms
- B. Ant attacks
- C. Provides a moisture reservoir
- D. Animals
- E. None of the Above

19. Termites reach wood or cellulose materials _____ by constructing and traveling through earthen (mud) tubes.

- A. Adjusting the depth
- B. To reach its maximum size
- C. Providing a moisture reservoir
- D. Above ground
- E. None of the Above

20. The mature colony consists of three castes: a) reproductives (king and queen), b) soldiers, and c) workers. It takes about 4 to 5 years for a _____ and it may consist of 60,000 to 200,000 workers.

- A. Colony to reach adjust the depth
- B. Colony to reach its maximum size
- C. Colony to reach the moisture reservoir
- D. Queen to mate
- E. None of the Above

21. Caste: A group of insects with a(n) _____ and function within a colony of social insects.

- A. Specific morphology
- B. Ranking order
- C. Swarming order
- D. Reproductive order
- E. None of the Above

Reproduction

22. In spring and fall, the winged males and females emerge from their parent colonies to form new ones. This activity is called _____.

- A. Aletizism
- B. Molting
- C. Swarming
- D. Reproductive cycle
- E. None of the Above

23. These winged _____ are dark brown to brownish black and have two pair of nearly equal size semitransparent wings extending well beyond the body.

- A. Larvae
- B. Survivors
- C. Swarms
- D. Reproductives
- E. None of the Above

24. The _____ are weak flyers and, unless aided by wind, fly only short distances. Many of them are devoured by birds, spiders, ants, and other predators.

- A. Workers
- B. Survivors
- C. Swarms
- D. None of the Above

25. _____ return to the ground and shed their wings.

- A. Workers
- B. Survivors
- C. Swarmer
- D. Reproductives
- E. None of the Above

26. The wingless _____ pair off (male following female in tandem) until they find a source of wood and moisture in the soil. They dig soil near wood, enter the chamber and seal the opening.

- A. Royal queen (Queen) Or Fertilized female
- B. Males and females
- C. Workers
- D. Drones
- E. None of the Above

27. After mating, the _____ begins laying eggs.

- A. Queen
- B. Drones
- C. Workers
- D. Nymphs
- E. None of the Above

28. The _____ is known to survive up to 25 years.

- A. Royal queen (Queen)
- B. Males and females
- C. Drones
- D. Workers
- E. None of the Above

Eggs

29. The _____ usually deposits 6 to 20 eggs during the first six months following the swarming flight and she may lay more than 60,000 eggs in her lifetime.

- A. Fertilized female
- B. Males and females
- C. Drone
- D. Workers
- E. None of the Above

30. _____ are yellowish white and hatch after an incubation period of 50 to 60 days.

- A. Royal queen (Queen) Or Fertilized female
- B. Males and females
- C. Eggs
- D. Nymphs
- E. None of the Above

Workers

31. The first broods of newly hatched _____ (young termites) generally develop into workers. Full grown workers are soft-bodied, wingless, blind, and creamy white. In early stages, they are fed predigested food by the king and queen.

- A. Royal queen (Queen) Or Fertilized female
- B. Males and females
- C. Molts
- D. Nymphs
- E. None of the Above

32. Once workers are able to digest wood, they begin providing food for the entire colony. At this time, the king and _____ cease feeding on wood.

- A. Queen
- B. Males and females
- C. Workers
- D. Nymphs
- E. None of the Above

33. The workers undertake all the labor in the colony such as obtaining food, feeding other _____ and immatures, excavating wood for chambers, and constructing tunnels.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

34. _____ mature within a year and live from 3 to 5 years.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Nymphs
- E. None of the Above

Soldiers

35. _____ are creamy white, soft-bodied, wingless, and blind.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

36. The head of the _____ is enormously elongated, brownish, hard, and equipped with two strong jaws.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldier
- E. None of the Above

37. Soldiers must be fed by _____ as they are incapable of feeding themselves.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

38. They are less numerous than _____ and their sole function is to defend the colony against invaders such as ants.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Soldiers
- E. None of the Above

39. _____ mature within a year and live up to 5 years.
- Royal queen (Queen) Or Fertilized female
 - Caste members
 - Workers
 - Soldiers
 - None of the Above
40. Flying ants and _____ are often difficult to distinguish when these insects are seen around residential and commercial buildings.
- Royal queen (Queen) Or Fertilized female
 - Swarming termites
 - Workers
 - Soldiers
 - None of the Above
41. The main enemy of termites is Ants and the _____ can defend a small number of Ants.
- Royal queen (Queen) Or Fertilized female
 - Swarming termites
 - Workers
 - Soldiers
 - None of the Above
- Reproduction
42. The female assumes a " _____ " position with her abdomen elevated at a right angle to the rest of her body. Sounds familiar?
- Mating
 - Calling
 - Suitable site
 - Molting
 - None of the Above
43. She releases a chemical messenger (pheromone) which attracts nearby males. Once a male encounters a _____ female, she moves off. Sounds familiar?
- Mating
 - Calling
 - Suitable site
 - Molt
 - None of the Above
44. He follows close behind and they search for a _____ for the establishment of a nest.
- Mating site
 - Calling site
 - Suitable site
 - Molting site
 - None of the Above
45. As soon as the pair has located a _____, they excavate (with their jaws) a small chamber large enough for the two of them and then seal the entrance.
- Mating site
 - Calling site
 - Suitable site
 - Molting site
 - None of the Above

46. _____ usually occurs within a few hours to weeks after the pair becomes established.

- A. Mating
- B. Calling
- C. Transference
- D. Molting
- E. None of the Above

47. The single female cannot start a new colony. Establishment of a colony is dependent upon the survival of both sexes in the nest site and that she has successfully _____.

- A. Mated
- B. Called
- C. Paired
- D. Molted
- E. None of the Above

48. The pair continues to _____, and they usually mate periodically.

- A. Mate
- B. Build
- C. Live together for life
- D. Molt
- E. None of the Above

49. The first eggs are laid within one to several weeks after _____, depending on the nutrition available to the female.

- A. Mating
- B. Tunneling
- C. Building nursery
- D. Molting
- E. None of the Above

50. When the first eggs hatch, the new nymphs are _____ by the young pair.

- A. Trained
- B. Fed
- C. Cared for
- D. Abandoned
- E. None of the Above

51. After two _____, the nymphs assume their role as workers and begin to feed and care for the original pair.

- A. Years
- B. Months
- C. Births
- D. Molts
- E. None of the Above

Development of the Colony

52. Development of the colony is very slow for several years. Eggs are not deposited continuously. After the first group of eggs has been laid, _____ before another group is laid.

- A. There is a period of several months
- B. The loss of older individuals happens
- C. A greater number of eggs is laid
- D. Even older a greater number
- E. None of the Above

53. This process continues for several years. As the young queen matures, she _____, and her abdomen becomes enlarged from developing eggs.

- A. Molts
- B. Mates twice a day
- C. Lays a greater number of eggs
- D. Adjusts her empire
- E. None of the Above

54. A point is reached where the colony size stabilizes. That is, the queen has reached maximum egg production, and _____ by death or swarming is approximately the same as the number of new individuals produced each year.

- A. There is a die off
- B. The loss of older individuals
- C. Many leave either
- D. Some return or mate
- E. None of the Above

55. As the colony becomes _____ of swarmers are produced each year.

- A. Larger
- B. More aggressive
- C. More fluid
- D. Even older a greater number
- E. None of the Above

56. It requires a minimum of 3 to 4 years--and as much as 8 to 10 years--for a colony of our native subterranean termites to become _____ to start dispersal flights.

- A. Good enough
- B. A threat
- C. Large enough and strong enough
- D. Trained
- E. None of the Above

Swarming

57. When _____ occurs in a relatively new structure, it is because it was built over or near a strong colony that was not severely damaged during the construction process.

- A. Cellulose
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

58. Termites derive food from wood and other _____ materials.

- A. Cellulosic
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

59. In nature, termites feed exclusively on wood, primarily digesting out the _____ and passing most of the remaining components as waste. In man-invaded environments, termites attack many additional products and commodities.

- A. Cellulose
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

60. Termites still depend primarily on _____ for their nutrition, but will damage many materials they encounter.

- A. Cellulose
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

61. Damaged materials may include plastics, rubber, asphalt, metal, mortar and others. Wood products like paper are favorite foods of termites because they are nearly pure _____.

- A. Cellulose
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

62. _____ are actively consumed by termites as well.

- A. Cellulose or Cellulosic
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

Fungi

63. Fungi also play a role in termite nutrition. Certain _____ fungi are highly attractive to termites.

- A. Brown
- B. Green
- C. Yellow
- D. Mushroom type
- E. None of the Above

64. Partially decayed wood is more easily digested by termites, and the fungus may provide a needed source of _____.

- A. Cellulose or Cellulosic
- B. Wood
- C. Fiber
- D. Minerals
- E. None of the Above

65. Ultimately, wood-destroying _____ exhaust the nutritive value of wood for termites, and extensive decay in wood is of no benefit to foraging termites.

- A. Insects
- B. Pests
- C. Fungi
- D. Ants
- E. None of the Above

66. When termites attack wood, they usually bring _____ spores on their bodies. When water or other liquid reaches the damaged wood, it is more easily trapped.

- A. Plant
- B. Ants
- C. Fungus
- D. Abundant
- E. None of the Above

Moisture

67. _____ is vital to the survival of termites. Subterranean termites obtain most of their moisture from the soil.

- A. Clay base
- B. Moisture
- C. Dry condition
- D. Wood
- E. None of the Above

68. Subterranean termites maintain contact with the _____ in order to survive. The type of soil has a great effect on the ability of subterranean termites to flourish.

- A. Clay base
- B. Soil
- C. Dry conditions
- D. Wood
- E. None of the Above

69. Termites generally prefer sandy soil over a(n) _____. They can and do survive in many other types of soil, however.

- A. Clay base
- B. Moisture
- C. Dry conditions
- D. Wood
- E. None of the Above

Tolerances

70. Termites have very little tolerance to _____, or extremes of hot and cold. But they often must forage far, sometimes above ground, from their initial workings to find food.

- A. Clay base
- B. Moisture
- C. Dry conditions
- D. Wood
- E. None of the Above

71. They move underground through tunnels. Whenever the termites leave the confines of the soil or the wood in which they are feeding, they construct shelter tubes in which to move from the soil to the _____ or the above-ground nest.

- A. Clay base
- B. Moisture
- C. Dry conditions
- D. Wood
- E. None of the Above

Subterranean Termites

72. When subterranean termites invade the wood of a structure that is separated from the soil by intervening concrete, masonry or other impervious material, they construct _____ over the surface to the wood.

- A. Shelter tubes
- B. Castles
- C. Tunnels
- D. Mudsill
- E. None of the Above

73. Contrary to published reports, _____ do not necessarily conduct moist air from the soil to the wood. Shelter tubes also provide some protection from air movement and prevent excess water loss.

- A. Shelter tubes
- B. Castles
- C. Tunnels
- D. Mudsill
- E. None of the Above

74. The primary function of _____ probably is protection from natural enemies.

- A. Shelter tubes
- B. Castles
- C. Heavily infested wood
- D. Mudsill
- E. None of the Above

75. Once termites have established contact with wood above ground and feeding progresses some distance from the initial shelter tunnel, they often will drop shelter tubes straight down from the wood. Evidence of _____ building will be found directly below a suspended tube.

- A. Tube
- B. Castles
- C. Above ground
- D. Mudsill
- E. None of the Above

Castles

76. Under certain conditions a fourth type of tube is constructed. Called swarming tubes or swarming " _____ " they are constructed as flight platforms for swarmers and they have many turret-like projects and flattened horizontal branches that vaguely resemble castle towers.

- A. Shelter tubes or Tubes
- B. Castles
- C. Above ground
- D. Mudsill
- E. None of the Above

77. They usually are constructed on the ground to a height of 4 to 8 inches (10-20 cm), but sometimes are found projecting from _____.

- A. Shelter tubes or Tubes
- B. Castles
- C. Heavily infested wood above ground
- D. None of the Above

78. When swarmers are leaving the colony via these tubes, or directly through a _____ or soil, the openings are heavily guarded by soldiers and workers.

- A. Shelter tubes or Tubes
- B. Castles
- C. Hole in wood
- D. None of the Above

79. The amount of damage that a(n) _____ of subterranean termites might inflict on a structure depends on many factors. The number and size of the attacking colonies and the quality of the environmental conditions (including the wood) are the most important.

- A. Shelter tubes or Tubes
- B. Castles
- C. Infestation
- D. Mudsill
- E. None of the Above

80. Damage usually starts at the mudsill in houses built over a crawl space and with the _____ of those houses built on concrete slabs.

- A. Shelter tubes or Tubes
- B. Castles
- C. Sole plates
- D. Mudsill
- E. None of the Above

81. Given enough time, subterranean termites will extend the damage into the wooden floor members, the interior trim and furnishings, and into the walls up to the _____.

- A. Shelter tubes or Tubes
- B. Castles
- C. Roof timbers
- D. Mudsill
- E. None of the Above

Severe Damage

82. _____ by subterranean termites is not likely to occur in the first 8 or 10 years after construction.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. Severe damage
- E. None of the Above

83. If treatment is undertaken with the first evidence of infestation, very little serious _____ is ever likely to occur.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. Severe damage
- E. None of the Above

84. Houses should be carefully inspected at least once a year in all regions. This will allow detection before _____.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. Severe damage
- E. None of the Above

85. Should _____ be found, there is no cause for extreme alarm or undue haste. Treatment within 6 months is recommended.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. None of the Above

Communication in the Colony

86. Termites primarily communicate via chemicals called _____. Each colony develops its own characteristic odor.

- A. Communication
- B. Vibrations
- C. Pheromones
- D. Recognition
- E. None of the Above

87. Any intruder is instantly recognized and a(n) _____ is released that triggers the soldiers to attack the intruder.

- A. Communication
- B. Vibrations
- C. Alarm pheromone
- D. Recognition
- E. None of the Above

88. If a worker finds a new source of food, it recruits others to that food source by _____. The proportion of castes in the colony is also regulated chemically.

- A. Laying a chemical trail
- B. Vibrations
- C. Alarm pheromones
- D. Recognition
- E. None of the Above

89. Nymphs can develop into workers, soldiers, or reproductive adults, _____.

- A. Communication workers
- B. Vibration makers
- C. Alarm pheromone producers
- D. Recognition soldiers
- E. None of the Above

90. Sound is another means of _____.

- A. Communication
- B. Vibrations
- C. Alarm pheromone
- D. Recognition
- E. None of the Above

91. Soldiers and workers can _____ against tunnel walls.

- A. Hear communication
- B. Hear vibrations
- C. Smell alarm pheromones
- D. Recognize
- E. None of the Above

92. _____ are perceived by other termites in the colony and serve to mobilize the colony to defend itself.

- A. Communication
- B. Vibrations
- C. Alarm pheromones
- D. Recognition
- E. None of the Above

93. _____ of foods enhances recognition of colony members.

- A. Communication
- B. Vibrations
- C. Alarm pheromone
- D. Mutual exchange
- E. None of the Above

Detection of Termites

94. It is important for homeowners to _____ of a subterranean termite infestation.
- A. Notice foraging and feeding
 - B. Recognize the signs
 - C. Identify
 - D. Recognize the sounds
 - E. None of the Above
95. Subterranean termites may be detected by the _____ of winged termites (alates or swarmers), or by the presence of mud tubes and wood damage.
- A. Foraging and feeding
 - B. Sudden emergence
 - C. Color
 - D. Size
 - E. None of the Above
96. We tend to think of termites as feeding/injuring wood only. Termites _____ on almost anything that contains cellulose (the main component of wood), including wood paneling, paper products, cardboard boxes, art canvases, the paper covering of sheetrock, carpeting, etc.
- A. Foraging and feeding
 - B. Actually feed
 - C. Crawl
 - D. Nest
 - E. None of the Above
97. While _____, they may tunnel through non-cellulosic materials, such as plastic and foamboard.
- A. Nesting
 - B. Molting
 - C. Communicating
 - D. Foraging and feeding
 - E. None of the Above
98. According to some research, a colony containing 60,000 workers could _____ of one foot of a 2" x 4" piece of lumber in slightly over 5 months.
- A. Eat twice the equivalent
 - B. Consume the equivalent
 - C. Carry
 - D. Forage
 - E. None of the Above
99. In areas with cold winter temperatures, termite activity (and feeding) _____, but does not necessarily stop.
- A. Increases
 - B. Usually declines
 - C. Slows to a stop
 - D. Remains the same
 - E. None of the Above
100. From a _____, serious termite damage usually takes about 3-8 years.
- A. Sign
 - B. Practical perspective
 - C. Hollow sound
 - D. Foraging perspective
 - E. None of the Above

101. Look for these signs of termite feeding: Wood that sounds " _____ " when it is tapped with the handle of a screwdriver.

- A. Recognize the signs
- B. Consume the equivalent
- C. "Hollow"
- D. Foraging and feeding
- E. None of the Above

102. Look for these signs of termite feeding: Soft wood that is _____ with a knife or screwdriver.

- A. Recognizable
- B. Easily probed
- C. Sounds "hollow"
- D. Has evidence
- E. None of the Above

103. Look for these signs of termite feeding: A thin gritty gray-brown film on the _____.

- A. Top
- B. Surface of damaged material
- C. Floor
- D. Nest
- E. None of the Above

Winged Termites

104. Large numbers of _____ swarming from wood or the soil often are the first obvious sign of a nearby termite colony.

- A. Mating pairs
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

105. _____ occurs in mature colonies that typically contain at least several thousand termites.

- A. Swarming
- B. Emergences
- C. Winged termites
- D. Mating
- E. None of the Above

106. A " _____ " is a group of adult male and female reproductives that leave their colony in an attempt to pair and initiate new colonies.

- A. Swarm
- B. Nest
- C. Alate emergence
- D. Winged termite colony
- E. None of the Above

107. _____ is stimulated when temperature and moisture conditions are favorable, usually on warm days following rainfall.

- A. Swarming
- B. Ants infestations
- C. Alate emergence
- D. Winged termites flying
- E. None of the Above

108. Swarming typically occurs during daytime in the spring (March, April, and May), but _____ can occur indoors during other months.

- A. Swarms
- B. Alate emergence
- C. Winged termites
- D. Ants
- E. None of the Above

109. Swarming occurs during a brief period (typically less than an hour), and _____ quickly shed their wings.

- A. Workers
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

110. _____ are attracted to light, and their shed wings in window sills, cobwebs, or on other surfaces often may be the only evidence that a swarm occurred indoors.

- A. Queens
- B. Alates
- C. Winged termites
- D. Ants
- E. None of the Above

111. The presence of _____ or their shed wings inside a home should be a warning of a termite infestation.

- A. A swarm
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

112. Termite _____ have straight, bead-like antennae; a thick waist; and two pair of long, equal-length wings that break off easily.

- A. Swarmer
- B. Soldier
- C. Alate
- D. Worker
- E. None of the Above

113. _____ can be differentiated from winged ants, which have elbowed antennae, a constricted waist, and two pair of unequal-length wings (forewings are larger than hind wings) that are not easily detached.

- A. Swarming termites
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

114. Ants also generally are harder-bodied than _____.

- A. You think
- B. Bees
- C. Alates
- D. Termites
- E. None of the Above

Mud Tubes

115. Other signs of termite presence include mud tubes and mud _____ between boards and beams.

- A. Nests
- B. Inspected
- C. Protruding from cracks
- D. Construct earthen runways
- E. None of the Above

116. Subterranean termites _____ above ground to construct earthen runways (shelter tubes) that allow them to tunnel across exposed areas to reach wood.

- A. Always
- B. Never go
- C. Walk
- D. Transport soil and water
- E. None of the Above

117. Shelter tubes protect them from the drying effects of air and from natural enemies, such as ants. These tubes usually are about 1/4 to 1 inch wide, and termites _____ between the soil and wood.

- A. Include mud tubes
- B. Use them as passageways
- C. Broken or scraped away
- D. Construct earthen runways
- E. None of the Above

118. To determine if an infestation is active, shelter tubes should be _____ and then monitored to determine whether the termites repair them or construct new ones.

- A. Sprayed
- B. Inspected annually
- C. Broken or scraped away
- D. Noticed
- E. None of the Above

119. Houses should be inspected annually for _____.

- A. Mud tubes
- B. Nests
- C. Alates
- D. Constructed earthen runways
- E. None of the Above

Wood Damage

120. Termite damage to the wood's surface often is not evident because termites _____ within materials as they feed.

- A. Are very small
- B. Hide
- C. Excavate galleries
- D. None of the Above

121. Wood attacked by subterranean termites generally has a honeycombed appearance because termites _____ on the softer spring growth wood.

- A. Probe wood
- B. Carry soil
- C. Excavate galleries
- D. Feed along the grain
- E. None of the Above

122. Their excavations in wood often are _____, and fecal spotting is evident.

- A. Hollow
- B. Packed with soil
- C. Excavated galleries
- D. Along the grain
- E. None of the Above

123. When inspecting for termites, it is useful to _____ with a knife or flat blade screwdriver to detect areas that have been hollowed.

- A. Probe wood
- B. Diagram
- C. Stab the queen
- D. Cut the door
- E. None of the Above

124. Severely damaged wood may have a hollow sound _____.

- A. Like your friend
- B. When it is tapped
- C. In the galleries
- D. Along the grain
- E. None of the Above

125. Subterranean termites do not _____ to a powdery mass, and they do not create wood particles or pellets, as do many other wood-boring insects.

- A. Reproduce
- B. Reduce wood
- C. Excavate galleries
- D. Feed along the grain
- E. None of the Above

Mass Emergence

126. The _____ of winged termites in the spring is often the first sign of an infestation.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detecting infestations
- E. None of the Above

127. In the majority of cases, they _____ in homes near sources of heat - furnaces or water heaters.

- A. Appear
- B. Emerge
- C. Damage wood
- D. Infest
- E. None of the Above

128. The _____ of winged termites means that the infestation has been around for at least 3 or 4 years.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Infestations
- E. None of the Above

129. Therefore it is likely some damage has already been done, so it is important to find where the termites have been feeding, how much _____ has been done, and how much repair is needed.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Work
- E. None of the Above

130. Other means of _____ include knocking on walls, floors, sub-floor wood, joists, etc. and listening for the tapping of soldiers, and looking for shelter tubes on the outside of the building and under the sub-floor.

- A. Termite appearance
- B. Mass emergence
- C. Figuring damage
- D. Detecting infestations
- E. None of the Above

131. Because subterranean termites have a constant _____ for water, one should closely examine areas near moist soil, such as below dripping outside faucets, leaking underground sprinkler pipes and nozzles, and below downspouts.

- A. Appearance
- B. Mass emergence
- C. Demand
- D. Dripping
- E. None of the Above

132. Where _____ or termites are suspected, prod with a sharp narrow implement to check the soundness of the supporting wood structure.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detecting infestations
- E. None of the Above

133. The _____ of termite infestations is best left to professionals who have the experience to do it thoroughly and accurately.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detection
- E. None of the Above

134. Termites can enter a building from one or more points so _____ to locate all points of entry for control purposes.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. None of the Above

135. Outdoors, termites can be _____ by driving wooden stakes into the ground at varying distances from buildings and other wooden structures.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detected
- E. None of the Above

136. Examine the stakes every 3 months for termites or signs of their feeding _____.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Infestations
- E. None of the Above

Evidence of Termite Infestations

137. _____ by subterranean termites can be readily penetrated with a screwdriver, ice pick, or knife.

- A. Shelter tubes Or Mud tube
- B. Foundation walls
- C. Wood damaged
- D. Mud particles with fecal materials
- E. None of the Above

138. The wood easily breaks apart, revealing mud tubes attached to _____ or tunnels in an irregular pattern.

- A. Shelter tubes
- B. Infestation in the building
- C. Wood galleries
- D. Foundation walls
- E. None of the Above

139. The tunnels may contain broken _____. In the case of an active colony, white termites may be found in infested wood.

- A. Shelter tubes
- B. Foundation walls
- C. Vases
- D. Mud particles with fecal materials
- E. None of the Above

140. The presence of winged males, females, or their shed wings, particularly when the adults fly inside the building, _____ in the building.

- A. Mud tubes
- B. Infestation in the building
- C. Dumping fecal material
- D. And inside foundation walls
- E. None of the Above

141. Another indication is the presence of _____ extending from the ground to woodwork or on foundation walls.

- A. Shelter tubes Or Mud tube
- B. Infestation in the building
- C. Mud particles with fecal materials
- D. Nesting materials
- E. None of the Above

142. Workers travel periodically via _____ to their colony to obtain moisture and perform feeding duties.

- A. Shelter tubes Or Mud tube
- B. Foundation walls
- C. Tunnels
- D. Mud particles
- E. None of the Above

143. Workers build mud or shelter tubes from soil and wood particles, and coat them with a(n) _____ that they secrete.

- A. Shelter tubes Or Mud tube
- B. Infestation in the building
- C. Mud particles with fecal materials
- D. Foundation walls
- E. None of the Above

144. Each _____ is about the diameter of a lead pencil.

- A. Mud tube
- B. Infestation
- C. Mud particles
- D. Nursery
- E. None of the Above

Useful Information If Treatment is Necessary

145. If termite activity is _____ and an insecticide treatment is necessary, it is important to outline the plan of the building, indicating sites of termite activity and treatment procedures.

- A. Requiring additional treatment
- B. Generally established
- C. Suspected or found
- D. Continuous insecticide barrier
- E. None of the Above

146. Building owners/managers are encouraged to seek two or more inspections and cost estimates. Ask for information on _____, repair of woodwork, warranties, copies of the insecticide label, and other pertinent information.

- A. Requiring additional treatment
- B. Chemical treatment procedures
- C. Termite activity and treatment procedures
- D. Continuous insecticide barrier
- E. None of the Above

Control Objectives

147. The goal is to establish a(n) _____ between the termite colony (usually in the ground) and the wood in a building.

- A. Additional treatment
- B. Generally established
- C. Termite activity and treatment procedures
- D. Continuous insecticide barrier
- E. None of the Above

148. Sometimes a secondary termite colony may exist above ground (in roof or other areas with a constant moisture supply) which _____.

- A. Requires additional treatment
- B. Are generally established
- C. Termite activity and treatment procedures
- D. None of the Above

General Treatment Guidelines

149. Insecticide barriers _____ during: Pre-construction (during construction).

- A. Requires additional treatment
- B. Are generally established
- C. Require termite activity and treatment procedures
- D. Include a Continuous insecticide barrier
- E. None of the Above

150. Insecticide barriers are generally established during: Post-construction (existing building). In an existing building, termite treatments may involve any of the following: a) _____, and b) use of an insecticide for treating the soil, foundation, and wood.

- A. Mechanical alterations
- B. Contact treated
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

151. In most cases, an untrained homeowner or building manager should not attempt a _____.

- A. Mechanical alterations
- B. Contact treatment
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

152. _____ should be performed by professional pest control operators (PCOs), that is right!

- A. Mechanical alterations
- B. Contact treatment
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

153. _____ requires special tools such as hammer drills, sub-slab injectors, rodding devices, high pressure pumps, a power supply, protective equipment.

- A. Mechanical alterations
- B. Contact treatments
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

Caution

154. Do not apply insecticides when soil is frozen or water-soaked (saturated). Frozen or saturated soil will not permit _____ for even distribution of insecticide.

- A. Mechanical alterations
- B. Adequate absorption
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

155. Do not permit humans and pets to _____ surfaces until dry.

- A. Walk on
- B. Contact treated
- C. Distribute of insecticide
- D. Adsorption
- E. None of the Above

156. Before _____ for termite control, always read, understand and follow all label directions.

- A. Applying mechanical alterations
- B. Using insecticides
- C. Distribution of insecticide
- D. Applying termite treatment(s)
- E. None of the Above

157. Keep all _____, out of reach of children and do not contaminate food, feed and water.
- A. Mechanical alterations
 - B. Pesticides in original containers
 - C. Distribution of insecticide
 - D. Termite treatment(s)
 - E. None of the Above

Pre-Construction Treatment

158. Horizontal Barriers: In general, treat the footing trench with _____ before pouring cement footings.

- A. Diluted insecticide
- B. Establishing a chemical barrier
- C. Insecticide
- D. Penetrating spray
- E. None of the Above

159. After grading is completed, _____ to areas before pouring slab floors, slab-supported porches, patios, carports, and entrance platforms at the rate of 1 gallon per 10 square feet.

- A. Apply diluted insecticide
- B. Establish a chemical barrier
- C. Apply insecticides
- D. Penetrating spray
- E. None of the Above

160. Vertical Barriers: _____ in areas such as around the bases of foundations, plumbing, utility entrances, and backfilled soil against foundation walls.

- A. Apply diluted insecticide
- B. Apply insecticides
- C. Penetrating spray
- D. Establish a chemical barrier
- E. None of the Above

161. Treat crawl space areas either by _____.

- A. Applying diluted insecticide
- B. Applying insecticides
- C. Rodding or trenching procedures
- D. Establishing a chemical barrier
- E. None of the Above

162. To _____ in soil, apply insecticide at the rate of 4 gallons per 10 linear feet per foot of depth. After treatment, cover the crawl space area with a layer of untreated soil or polyethylene sheeting.

- A. Apply diluted insecticide
- B. Apply insecticides
- C. Rod or trench
- D. Produce a vertical barrier
- E. None of the Above

Post-Construction Treatment

163. Do not _____ until locations of radiant heat pipes, water pipes, sewer lines, and electrical conduits are identified.

- A. Apply diluted insecticide
- B. Apply insecticides
- C. Rod or trench
- D. Establish a chemical barrier
- E. None of the Above

164. Buildings requiring treatment generally fall into three categories: a) building on slab construction, b) building with crawl space, and c) building with a basement. There is a common belief that termites _____ slab foundations.

- A. Will not eat
- B. Will not crawl on to
- C. Cannot destroy
- D. Cannot penetrate
- E. None of the Above

165. Termites _____ solid concrete but they can enter through cracks as small as 1/64 of an inch.

- A. Will not eat
- B. Will not crawl on to
- C. Cannot destroy
- D. Cannot penetrate
- E. None of the Above

Building on Slab

166. _____ in a building on a slab is especially difficult and hazardous. In this type of construction, heat ducts (pipes) are buried in the concrete and serious damage can occur when they are accidentally drilled for holes to inject insecticide solutions.

- A. Injecting insecticide
- B. Drilling
- C. Controlling termite infestation
- D. Broadcast insecticide spraying
- E. None of the Above

167. Treat the exterior of the foundation by _____ about 6 inches wide along the outside of the foundation.

- A. Inject insecticide or Injecting the insecticide
- B. Drill the floor slab or Drilling
- C. Digging a narrow and shallow trench
- D. None of the Above

168. _____ to the trench and soil at the rate of 4 gallons per 10 linear feet.

- A. Inject insecticide or Injecting the insecticide
- B. Drill the floor slab or Drilling
- C. Applying the diluted insecticide
- D. Broadcast insecticide spraying
- E. None of the Above

169. _____ with a thin layer of untreated soil. For an inside barrier, drill slab and space holes about 1 foot apart and 6 inches from the wall.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Cover treated soil in the trench
- D. Broadcast insecticide spray
- E. None of the Above

170. Using a subslab injector, inject insecticide through holes at the rate of 4 gallons per 10 linear feet. After application, _____ with mortar or any other special compound.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Plug all holes
- D. None of the Above

Applications

171. Building With a Basement and Crawl Space

Basement: For an interior vertical barrier, _____ and space holes about one foot apart.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

172. _____ may be required along the foundation walls, along one side of partition walls, along both sides of load-bearing wall, around sewer pipes, floor drains, conduits, and any crack in the basement floor.

- A. Inject insecticide or Inject the insecticide
- B. Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

173. Using a sub-slab injector, _____ at the rate of 4 gallons per 10 linear feet. For an insecticide barrier around the exterior of foundation walls, apply an insecticide by rodding and/or trenching.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

174. The rod holes should be spaced 1 to 1 1/2 feet apart to _____ barrier. If a trench is necessary, it should not be wider than 6 inches.

- A. Inject insecticide or Inject the insecticide
- B. Provide a continuous chemical
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

175. _____ using rodding technique at the rate of 4 gallons per 10 linear feet. Cover the trench with untreated soil.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

Crawl Spaces

176. _____ by rodding and/or trenching procedures. A shallow trench should not be wider than 6 inches.

- A. Inject insecticide or Inject the insecticide
- B. Establish vertical barriers
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

177. _____ about 1 to 1 1/2 feet apart. Apply insecticide at the rate of 4 gallons per 10 linear feet per foot of depth.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

178. Do not treat soil in crawl space area with a(n) _____.

- A. Insecticide
- B. Fungicide
- C. Pesticide
- D. Broadcast insecticide spray
- E. None of the Above

Hollow Masonry Units of the Foundation Walls

179. Treat through _____ to provide a continuous chemical barrier at the top of the footing.

- A. Masonry voids
- B. Debris
- C. All holes
- D. Such situations
- E. None of the Above

180. When treatment is necessary, access holes must be drilled through _____ below the sill plate, as close as possible to the footing.

- A. Mortar joints
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

181. Apply insecticide at the rate of 2 gallons per 10 linear feet. Plug _____ with mortar or any other special compound.

- A. Masonry voids
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

Bath Traps

182. Soil may require insecticide treatment if it is exposed beneath and around plumbing/waste pipe entrances through a _____.

- A. Masonry voids
- B. Other debris
- C. Concrete slab
- D. Such situations
- E. None of the Above

183. Remove _____ or excavated soil and treat the soil by rodding or flooding with an insecticide solution.

- A. Masonry voids
- B. Other debris
- C. Any wood
- D. Such situations
- E. None of the Above

184. Treatment Near Ponds, Wells, Cisterns, and Faulty _____, Around Pipes or Utility Lines Insecticide applications through rodding is discouraged in excavated soil.

- A. Masonry voids
- B. Other debris
- C. All holes
- D. Foundation walls
- E. None of the Above

185. The suggested procedure is to make a trench and remove the excavated _____ or similar material.

- A. Soil sheeting
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

186. Treat the _____ with insecticide at the rate of 4 gallons per 10 linear feet per foot of depth. Mix the soil with insecticide and replace it in the trench.

- A. Masonry voids
- B. Excavated soil
- C. All holes
- D. Such situations
- E. None of the Above

187. Cover the _____ with a thin layer of untreated soil. In the case of wells, ponds, and cisterns, if a rodding technique is necessary, the distance between the treated area and the water source should be 50 feet or more.

- A. Masonry voids
- B. Treated soil
- C. All holes
- D. None of the Above

188. Wood Treatment In addition to soil treatment, it may be necessary to treat infested wood with insecticide spray or injection. Applications are made to inaccessible areas by drilling and then _____.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Injecting the insecticide solution
- E. None of the Above

189. _____ must be limited to wood in attics, crawl spaces and unfinished basements or similar unoccupied areas.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Graded or sloped away
- E. None of the Above

190. Treatment of Secondary Subterranean Termite Colony Apply insecticide to infested wood and void spaces with a _____.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Graded or sloped away
- E. None of the Above

Prevention

191. Preventive practices are a(n) _____.

- A. Form of crack and crevice injector
- B. Form of broadcast spraying
- C. Critical aspect of termite management
- D. Graded or sloped away
- E. None of the Above

192. _____ of subterranean termite infestation of wooden structures centers upon disrupting their ability to locate moisture, food (wood), and shelter.

- A. Crack and crevice injecting
- B. Broadcast spraying
- C. Prevention
- D. Grading or sloping away
- E. None of the Above

193. Avoid moisture accumulation near the foundation, which provides water _____.

- A. And this is a bad sign
- B. For Nursery
- C. Needed for termite survival
- D. And needs to be sloped away
- E. None of the Above

194. Divert water _____ with properly functioning downspouts, gutters, and splash blocks.

- A. To sewer
- B. After broadcast spraying
- C. Quickly
- D. Away from the foundation
- E. None of the Above

195. Soil needs to be _____ away from the foundation in order for surface water to drain away from the building.

- A. Sprayed
- B. Drained
- C. Prevented
- D. Graded or sloped away
- E. None of the Above

Soil Barrier Termiticides

196. _____ rely on creating a chemical barrier in the soil that is toxic to termites when they come into contact with it.

- A. Effective termite control
- B. Repellent characteristics
- C. Conventional soil treatments
- D. Such treatments during preconstruction
- E. None of the Above

197. Many also have _____ which causes the termites to avoid treated soil. To achieve termite control for long periods of time, such termiticides must be applied as a continuous barrier in the soil next to and under the foundation. If there are untreated gaps in the soil, termites may circumvent the chemical treatment.

- A. Effective termite control
- B. Repellent characteristics
- C. Conventional soil treatments
- D. Such treatments during preconstruction
- E. None of the Above

198. Such treatments during preconstruction can provide for more _____. Once a home is constructed, the chemical has to be injected through drill holes and trenching around the foundation, which can result in less accurate coverage.

- A. Effective termite control
- B. Repellent characteristics
- C. Uniform coverage
- D. Such treatments during preconstruction
- E. None of the Above

199. In reference to "spot treatments only" (using _____ only in areas of the house where termites are seen), most pest management firms will refuse such treatments or will not guarantee them.

- A. Effective termite control
- B. Repellent characteristics
- C. Chemical barrier termiticides
- D. Such treatments during preconstruction
- E. None of the Above

200. _____ usually requires specialized equipment and often 150 or more gallons of prepared termiticide solution per house, depending on size, basement, etc.

- A. Effective termite control
- B. Repellent characteristics
- C. Conventional soil treatments
- D. Such treatments during preconstruction
- E. None of the Above

You are finished...

When finished, please e-mail the answers and registration form to info@tlch2o.com or fax to (928) 468-0675. If you paid on the Internet, please write your customer number on your registration form.

Please fax or e-mail the registration form, answer Key and a copy of your driver's license. Always call us to ensure we've received the materials.

Termite Control CEU Training Awareness Assignment #5

RETEST ONLY, This is for assignment failures

1. Although termites are _____, their hard, saw-toothed jaws work like shears and can bite off extremely small fragments of wood.
 - A. Formosan termite
 - B. Subterranean termite
 - C. Soft-bodied insects
 - D. Protozoa(ns)
 - E. None of the Above
2. Termites attack flooring, carpeting, art work, books, clothing, and furniture. The most serious damage involves the loss of _____.
 - A. The queen
 - B. Similar habitats
 - C. Life
 - D. Electricity
 - E. None of the Above
3. There are about _____ termite species in the world. North America has 41 termite species, most in the southeast USA.
 - A. 2,500
 - B. 250,000
 - C. 2,000
 - D. 95%
 - E. None of the Above
4. In spring and fall, the winged males and females emerge from their parent colonies to form new ones. This activity is called _____.
 - A. Aletizism
 - B. Molting
 - C. Swarming
 - D. Reproductive cycle
 - E. None of the Above
5. The _____ usually deposits 6 to 20 eggs during the first six months following the swarming flight and she may lay more than 60,000 eggs in her lifetime.
 - A. Fertilized female
 - B. Males and females
 - C. Drone
 - D. Workers
 - E. None of the Above
6. _____ are yellowish white and hatch after an incubation period of 50 to 60 days.
 - A. Royal queen (Queen) Or Fertilized female
 - B. Males and females
 - C. Eggs
 - D. Nymphs
 - E. None of the Above

7. These winged _____ are dark brown to brownish black and have two pair of nearly equal size semitransparent wings extending well beyond the body.
- Larvae
 - Survivors
 - Swarmers
 - Reproductives
 - None of the Above
8. The wingless _____ pair off (male following female in tandem) until they find a source of wood and moisture in the soil. They dig soil near wood, enter the chamber and seal the opening.
- Royal queen (Queen) Or Fertilized female
 - Males and females
 - Workers
 - Drones
 - None of the Above
9. After mating, the _____ begins laying eggs.
- Queen
 - Drones
 - Workers
 - Nymphs
 - None of the Above
10. The _____ is known to survive up to 25 years.
- Royal queen (Queen)
 - Males and females
 - Drones
 - Workers
 - None of the Above
11. The first broods of newly hatched _____ (young termites) generally develop into workers. Full grown workers are soft-bodied, wingless, blind, and creamy white. In early stages, they are fed predigested food by the king and queen.
- Royal queen (Queen) Or Fertilized female
 - Males and females
 - Molts
 - Nymphs
 - None of the Above
12. Subterranean termites, the most destructive of all termite species, account for _____ of the damage.
- 2,500
 - 250,000
 - 2,000
 - 95%
 - None of the Above
13. The _____ are weak flyers and, unless aided by wind, fly only short distances. Many of them are devoured by birds, spiders, ants, and other predators.
- Workers
 - Survivors
 - Swarmers
 - Reproductives
 - None of the Above

14. _____ is vital to the survival of termites. Subterranean termites obtain most of their moisture from the soil.
- A. Clay base
 - B. Moisture
 - C. Dry condition
 - D. Wood
 - E. None of the Above
15. Subterranean termites maintain contact with the _____ in order to survive. The type of soil has a great effect on the ability of subterranean termites to flourish.
- A. Clay base
 - B. Soil
 - C. Dry conditions
 - D. Wood
 - E. None of the Above
16. These termites do not attack live trees, except for the _____.
- A. Formosan termite
 - B. Subterranean termite
 - C. Soft-bodied insects
 - D. Protozoa(ns)
 - E. None of the Above
17. Termites often infest buildings and cause damage to lumber, wood panels, flooring, sheetrock, wallpaper, plastics, paper products, and _____.
- A. Concrete
 - B. Similar habitats
 - C. Attack ants
 - D. Steel
 - E. None of the Above
18. Termites generally prefer sandy soil over a(n) _____. They can and do survive in many other types of soil, however.
- A. Clay base
 - B. Moisture
 - C. Dry conditions
 - D. Wood
 - E. None of the Above
19. Damaged materials may include plastics, rubber, asphalt, metal, mortar and others. Wood products like paper are favorite foods of termites because they are nearly pure _____.
- A. Cellulose
 - B. Cotton, burlap and other plant fibers
 - C. Fungus
 - D. Swarming
 - E. None of the Above
20. _____ are actively consumed by termites as well.
- A. Cellulose or Cellulosic
 - B. Cotton, burlap and other plant fibers
 - C. Fungus
 - D. Swarming
 - E. None of the Above

21. Fungi also play a role in termite nutrition. Certain _____ fungi are highly attractive to termites.
- A. Brown
 - B. Green
 - C. Yellow
 - D. Mushroom type
 - E. None of the Above
22. Partially decayed wood is more easily digested by termites, and the fungus may provide a needed source of _____.
- A. Cellulose or Cellulosic
 - B. Wood
 - C. Fiber
 - D. Minerals
 - E. None of the Above
23. Ultimately, wood-destroying _____ exhaust the nutritive value of wood for termites, and extensive decay in wood is of no benefit to foraging termites.
- A. Insects
 - B. Pests
 - C. Fungi
 - D. Ants
 - E. None of the Above
24. Termite damage to residential and commercial buildings in the U.S. costs more than _____ annually.
- A. 2,500
 - B. 250,000
 - C. 2,000
 - D. 95%
 - E. None of the Above
25. _____ are ground-dwelling social insects living in colonies.
- A. Formosan termite
 - B. Subterranean termite
 - C. Soft-bodied insects
 - D. Protozoa(ns)
 - E. None of the Above
26. The two species found in United States have _____.
- A. Same DNA
 - B. Similar habitats
 - C. Similar attack methods
 - D. Ground-dwelling colonies
 - E. None of the Above
27. These termites have the ability to _____ of their colony (nest) in soil depending on temperature and moisture requirements.
- A. Adjust the depth
 - B. Reach its maximum size
 - C. Measure the moisture reservoir
 - D. Live above ground
 - E. None of the Above

28. The colony may be 18-20 feet _____.
- Deep in the ground
 - In height
 - Long
 - Above ground
 - None of the Above
29. The ground serves as a protection against extreme temperatures and _____.
- Rain storms
 - Ant attacks
 - Provides a moisture reservoir
 - Animals
 - None of the Above
30. Termites reach wood or cellulose materials _____ by constructing and traveling through earthen (mud) tubes.
- Adjusting the depth
 - To reach its maximum size
 - Providing a moisture reservoir
 - Above ground
 - None of the Above
31. The mature colony consists of three castes: a) reproductives (king and queen), b) soldiers, and c) workers. It takes about 4 to 5 years for a _____ and it may consist of 60,000 to 200,000 workers.
- Colony to reach adjust the depth
 - Colony to reach its maximum size
 - Colony to reach the moisture reservoir
 - Queen to mate
 - None of the Above
32. Caste: A group of insects with a(n) _____ and function within a colony of social insects.
- Specific morphology
 - Ranking order
 - Swarming order
 - Reproductive order
 - None of the Above
33. The workers undertake all the labor in the colony such as obtaining food, feeding other _____ and immatures, excavating wood for chambers, and constructing tunnels.
- Royal queen (Queen) Or Fertilized female
 - Caste members
 - Workers
 - Soldiers
 - None of the Above
34. _____ feed mainly on wood and wood products containing cellulose.
- Formosan termite
 - Subterranean termite
 - Soft-bodied insects
 - Protozoa(ns)
 - None of the Above

35. Termites have _____ (microorganisms) in their intestine which provide enzymes to digest cellulose.
- A. Formosan termite
 - B. Subterranean termite
 - C. Soft-bodied insects
 - D. Protozoa(ns)
 - E. None of the Above
36. This relationship is beneficial to both species, since the _____ cause no harm and are provided with food and a protected environment by the termites.
- A. Formosan termite
 - B. Subterranean termite
 - C. Soft-bodied insects
 - D. Protozoa(ns)
 - E. None of the Above
37. Once workers are able to digest wood, they begin providing food for the entire colony. At this time, the king and _____ cease feeding on wood.
- A. Queen
 - B. Males and females
 - C. Workers
 - D. Nymphs
 - E. None of the Above
38. Alaska is the only state without termites. Florida's eastern subterranean termite colonies have about _____ members, but can have 1 million or more.
- A. 2,500
 - B. 250,000
 - C. 2,000
 - D. 95%
 - E. None of the Above
39. Damage usually starts at the mudsill in houses built over a crawl space and with the _____ of those houses built on concrete slabs.
- A. Shelter tubes or Tubes
 - B. Castles
 - C. Sole plates
 - D. Mudsill
 - E. None of the Above
40. Given enough time, subterranean termites will extend the damage into the wooden floor members, the interior trim and furnishings, and into the walls up to the _____.
- A. Shelter tubes or Tubes
 - B. Castles
 - C. Roof timbers
 - D. Mudsill
 - E. None of the Above
41. If a worker finds a new source of food, it recruits others to that food source by _____. The proportion of castes in the colony is also regulated chemically.
- A. Laying a chemical trail
 - B. Vibrations
 - C. Alarm pheromones
 - D. Recognition
 - E. None of the Above

42. Nymphs can develop into workers, soldiers, or reproductive adults, _____.
- A. Communication workers
 - B. Vibration makers
 - C. Alarm pheromone producers
 - D. Recognition soliders
 - E. None of the Above
43. Sound is another means of _____.
- A. Communication
 - B. Vibrations
 - C. Alarm pheromone
 - D. Recognition
 - E. None of the Above
44. Soldiers and workers can _____ against tunnel walls.
- A. Hear communication
 - B. Hear vibrations
 - C. Smell alarm pheromones
 - D. Recognize
 - E. None of the Above
45. A colony eats about 1 cubic foot of wood a year. Australian colonies can have two million termites. The queen can lay _____ eggs per day and live as long as 50 years.
- A. 2,500
 - B. 250,000
 - C. 2,000
 - D. 95%
 - E. None of the Above
46. In nature, termites feed exclusively on wood, primarily digesting out the _____ and passing most of the remaining components as waste. In man-invaded environments, termites attack many additional products and commodities.
- A. Cellulose
 - B. Cotton, burlap and other plant fibers
 - C. Fungus
 - D. Swarming
 - E. None of the Above
47. Termites still depend primarily on _____ for their nutrition, but will damage many materials they encounter.
- A. Cellulose
 - B. Cotton, burlap and other plant fibers
 - C. Fungus
 - D. Swarming
 - E. None of the Above
50. Flying ants and _____ are often difficult to distinguish when these insects are seen around residential and commercial buildings.
- A. Royal queen (Queen) Or Fertilized female
 - B. Swarming termites
 - C. Workers
 - D. Soldiers
 - E. None of the Above

51. The main enemy of termites is Ants and the _____ can defend a small number of Ants.
- Royal queen (Queen) Or Fertilized female
 - Swarming termites
 - Workers
 - Soldiers
 - None of the Above
52. The female assumes a " _____ " position with her abdomen elevated at a right angle to the rest of her body. Sounds familiar?
- Mating
 - Calling
 - Suitable site
 - Molting
 - None of the Above
53. She releases a chemical messenger (pheromone) which attracts nearby males. Once a male encounters a _____ female, she moves off. Sounds familiar?
- Mating
 - Calling
 - Suitable site
 - Molt
 - None of the Above
54. He follows close behind and they search for a _____ for the establishment of a nest.
- Mating site
 - Calling site
 - Suitable site
 - Molting site
 - None of the Above
55. As soon as the pair has located a _____, they excavate (with their jaws) a small chamber large enough for the two of them and then seal the entrance.
- Mating site
 - Calling site
 - Suitable site
 - Molting site
 - None of the Above
56. _____ usually occurs within a few hours to weeks after the pair becomes established.
- Mating
 - Calling
 - Transference
 - Molting
 - None of the Above
57. The single female cannot start a new colony. Establishment of a colony is dependent upon the survival of both sexes in the nest site and that she has successfully _____.
- Mated
 - Called
 - Paired
 - Molted
 - None of the Above

58. The pair continues to _____, and they usually mate periodically.
- Mate
 - Build
 - Live together for life
 - Molt
 - None of the Above
59. This process continues for several years. As the young queen matures, she _____, and her abdomen becomes enlarged from developing eggs.
- Molts
 - Mates twice a day
 - Lays a greater number of eggs
 - Adjusts her empire
 - None of the Above
60. Development of the colony is very slow for several years. Eggs are not deposited continuously. After the first group of eggs has been laid, _____ before another group is laid.
- There is a period of several months
 - The loss of older individuals happens
 - A greater number of eggs is laid
 - Even older a greater number
 - None of the Above
61. When termites attack wood, they usually bring _____ spores on their bodies. When water or other liquid reaches the damaged wood, it is more easily trapped.
- Plant
 - Ants
 - Fungus
 - Abundant
 - None of the Above
62. Termites have very little tolerance to _____, or extremes of hot and cold. But they often must forage far, sometimes above ground, from their initial workings to find food.
- Clay base
 - Moisture
 - Dry conditions
 - Wood
 - None of the Above
63. They move underground through tunnels. Whenever the termites leave the confines of the soil or the wood in which they are feeding, they construct shelter tubes in which to move from the soil to the _____ or the above-ground nest.
- Clay base
 - Moisture
 - Dry conditions
 - Wood
 - None of the Above
64. A point is reached where the colony size stabilizes. That is, the queen has reached maximum egg production, and _____ by death or swarming is approximately the same as the number of new individuals produced each year.
- There is a die off
 - The loss of older individuals
 - Many leave either
 - Some return or mate
 - None of the Above

65. As the colony becomes _____ of swarmers are produced each year.

- A. Larger
- B. More aggressive
- C. More fluid
- D. Even older a greater number
- E. None of the Above

66. It requires a minimum of 3 to 4 years--and as much as 8 to 10 years--for a colony of our native subterranean termites to become _____ to start dispersal flights.

- A. Good enough
- B. A threat
- C. Large enough and strong enough
- D. Trained
- E. None of the Above

67. When _____ occurs in a relatively new structure, it is because it was built over or near a strong colony that was not severely damaged during the construction process.

- A. Cellulose
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

68. Termites derive food from wood and other _____ materials.

- A. Cellulosic
- B. Cotton, burlap and other plant fibers
- C. Fungus
- D. Swarming
- E. None of the Above

69. The first eggs are laid within one to several weeks after _____, depending on the nutrition available to the female.

- A. Mating
- B. Tunneling
- C. Building nursery
- D. Molting
- E. None of the Above

70. When the first eggs hatch, the new nymphs are _____ by the young pair.

- A. Trained
- B. Fed
- C. Cared for
- D. Abandoned
- E. None of the Above

71. After two _____, the nymphs assume their role as workers and begin to feed and care for the original pair.

- A. Years
- B. Months
- C. Births
- D. Molts
- E. None of the Above

72. When subterranean termites invade the wood of a structure that is separated from the soil by intervening concrete, masonry or other impervious material, they construct _____ over the surface to the wood.

- A. Shelter tubes
- B. Castles
- C. Tunnels
- D. Mudsill
- E. None of the Above

73. _____ by subterranean termites is not likely to occur in the first 8 or 10 years after construction.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. Severe damage
- E. None of the Above

74. If treatment is undertaken with the first evidence of infestation, very little serious _____ is ever likely to occur.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. Severe damage
- E. None of the Above

75. Houses should be carefully inspected at least once a year in all regions. This will allow detection before _____.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. Severe damage
- E. None of the Above

76. This striking insect, mines in dead ash, laurel, and willow. It is not a threat to healthy trees.

- A. California laurel borer adult
- B. Bronze birch borer adult
- C. Red headed ash borer adult
- D. Poplar and willow borer larva
- E. None of the Above

77. Paper birches are frequently attacked by this insect. Adults emerge in June and lay eggs in July. Note they have shorter antennae and a different shape than the California laurel borer.

- A. Bark Beetle
- B. Bronze birch borer adult
- C. Red headed ash borer adult
- D. Pine sawyer adult
- E. None of the Above

78. Should _____ be found, there is no cause for extreme alarm or undue haste. Treatment within 6 months is recommended.

- A. Structural damage
- B. Damage is a problem
- C. Evidence of termites
- D. None of the Above

79. Termites primarily communicate via chemicals called _____. Each colony develops its own characteristic odor.
- Communication
 - Vibrations
 - Pheromones
 - Recognition
 - None of the Above
80. Any intruder is instantly recognized and a(n) _____ is released that triggers the soldiers to attack the intruder.
- Communication
 - Vibrations
 - Alarm pheromone
 - Recognition
 - None of the Above
81. Contrary to published reports, _____ do not necessarily conduct moist air from the soil to the wood. Shelter tubes also provide some protection from air movement and prevent excess water loss.
- Shelter tubes
 - Castles
 - Tunnels
 - Mudsill
 - None of the Above
82. The primary function of _____ probably is protection from natural enemies.
- Shelter tubes
 - Castles
 - Heavily infested wood
 - Mudsill
 - None of the Above
83. Once termites have established contact with wood above ground and feeding progresses some distance from the initial shelter tunnel, they often will drop shelter tubes straight down from the wood. Evidence of _____ building will be found directly below a suspended tube.
- Tube
 - Castles
 - Above ground
 - Mudsill
 - None of the Above
84. Under certain conditions a fourth type of tube is constructed. Called swarming tubes or swarming " _____ " they are constructed as flight platforms for swarmers and they have many turret-like projects and flattened horizontal branches that vaguely resemble castle towers.
- Shelter tubes or Tubes
 - Castles
 - Above ground
 - Mudsill
 - None of the Above
85. To determine if an infestation is active, shelter tubes should be _____ and then monitored to determine whether the termites repair them or construct new ones.
- Sprayed
 - Inspected annually
 - Broken or scraped away
 - Noticed
 - None of the Above

86. Houses should be inspected annually for _____.
- A. Mud tubes
 - B. Nests
 - C. Alates
 - D. Constructed earthen runways
 - E. None of the Above
87. Termite damage to the wood's surface often is not evident because termites _____ within materials as they feed.
- A. Are very small
 - B. Hide
 - C. Excavate galleries
 - D. None of the Above
88. Wood attacked by subterranean termites generally has a honeycombed appearance because termites _____ on the softer spring growth wood.
- A. Probe wood
 - B. Carry soil
 - C. Excavate galleries
 - D. Feed along the grain
 - E. None of the Above
89. Their excavations in wood often are _____, and fecal spotting is evident.
- A. Hollow
 - B. Packed with soil
 - C. Excavated galleries
 - D. Along the grain
 - E. None of the Above
90. When inspecting for termites, it is useful to _____ with a knife or flat blade screwdriver to detect areas that have been hollowed.
- A. Probe wood
 - B. Diagram
 - C. Stab the queen
 - D. Cut the door
 - E. None of the Above
- 91 Severely damaged wood may have a hollow sound _____.
- A. Like your friend
 - B. When it is tapped
 - C. In the galleries
 - D. Along the grain
 - E. None of the Above
- 92 They usually are constructed on the ground to a height of 4 to 8 inches (10-20 cm), but sometimes are found projecting from _____.
- A. Shelter tubes or Tubes
 - B. Castles
 - C. Heavily infested wood above ground
 - D. None of the Above

93. This insect attacks black locust trees. The strikingly colored adults emerge in the fall and can be seen feeding on goldenrod.
- A. Carpenter bees
 - B. Black termites
 - C. Locust borer adult
 - D. Poplar borer larva
 - E. None of the Above
94. When swarmers are leaving the colony via these tubes, or directly through a _____ or soil, the openings are heavily guarded by soldiers and workers.
- A. Shelter tubes or Tubes
 - B. Castles
 - C. Hole in wood
 - D. None of the Above
95. The amount of damage that a(n) _____ of subterranean termites might inflict on a structure depends on many factors. The number and size of the attacking colonies and the quality of the environmental conditions (including the wood) are the most important.
- A. Shelter tubes or Tubes
 - B. Castles
 - C. Infestation
 - D. Mudsill
 - E. None of the Above
96. _____ are perceived by other termites in the colony and serve to mobilize the colony to defend it self.
- A. Communication
 - B. Vibrations
 - C. Alarm pheromones
 - D. Recognition
 - E. None of the Above
- 97 _____ of foods enhances recognition of colony members.
- A. Communication
 - B. Vibrations
 - C. Alarm pheromone
 - D. Mutual exchange
 - E. None of the Above
98. The adult insect becomes a large grey moth.
- A. Carpenter worm adult
 - B. Clear-winged moth
 - C. Pine sawyer moth
 - D. Poplar moth larva
 - E. None of the Above
99. Subterranean termites may be detected by the _____ of winged termites (alates or swarmers), or by the presence of mud tubes and wood damage.
- A. Foraging and feeding
 - B. Sudden emergence
 - C. Color
 - D. Size
 - E. None of the Above

100. This insect bores in trees as larvae. The adults resemble wasps in many cases.

- A. Wasp worm adult
- B. Clear-winged moth
- C. Pine sawyer adult
- D. Poplar moth larva
- E. None of the Above

101. It is important for homeowners to _____ of a subterranean termite infestation.

- A. Notice foraging and feeding
- B. Recognize the signs
- C. Identify
- D. Recognize the sounds
- E. None of the Above

102. This insect's life cycle is spent as the larva in the tree. They feed for a period of from 2-4 years and bore in the heartwood and sapwood. Infested trees can be weakened and break. A related species, causes galls on smaller limbs of poplars and aspens.

- A. Carpenter ant
- B. Clear-winged larva
- C. Pine sawyer larva
- D. Poplar borer larva
- E. None of the Above

103. This insect commonly infests ash. The larvae look like those of the locust borer only smaller. It will attack elm, linden, redbud, and oak as well as ash trees.

- A. California laurel borer larva
- B. Bronze birch borer larva
- C. Red headed ash borer adult
- D. Poplar and willow borer larva
- E. None of the Above

104. This insect attacks pine trees and are usually found around homes as a result of being brought in with firewood. They seldom attack pine trees in residential plantings.

- A. California laurel borer adult
- B. Bronze birch borer adult
- C. Red headed ash borer adult
- D. Pine sawyer adult
- E. None of the Above

105. We tend to think of termites as feeding/injuring wood only. Termites _____ on almost anything that contains cellulose (the main component of wood), including wood paneling, paper products, cardboard boxes, art canvases, the paper covering of sheetrock, carpeting, etc.

- A. Foraging and feeding
- B. Actually feed
- C. Crawl
- D. Nest
- E. None of the Above

106. _____ mature within a year and live from 3 to 5 years.

- A. Royal queen (Queen) Or Fertilized female
- B. Caste members
- C. Workers
- D. Nymphs
- E. None of the Above

107. _____ are creamy white, soft-bodied, wingless, and blind.
- Royal queen (Queen) Or Fertilized female
 - Caste members
 - Workers
 - Soldiers
 - None of the Above
108. The head of the _____ is enormously elongated, brownish, hard, and equipped with two strong jaws.
- Royal queen (Queen) Or Fertilized female
 - Caste members
 - Workers
 - Soldier
 - None of the Above
109. Soldiers must be fed by _____ as they are incapable of feeding themselves.
- Royal queen (Queen) Or Fertilized female
 - Caste members
 - Workers
 - Soldiers
 - None of the Above
110. They are less numerous than _____ and their sole function is to defend the colony against invaders such as ants.
- Royal queen (Queen) Or Fertilized female
 - Caste members
 - Workers
 - Soldiers
 - None of the Above
111. _____ mature within a year and live up to 5 years.
- Royal queen (Queen) Or Fertilized female
 - Caste members
 - Workers
 - Soldiers
 - None of the Above
112. _____ return to the ground and shed their wings.
- Workers
 - Survivors
 - Swarmers
 - Reproductives
 - None of the Above
113. Two subterranean termite species, _____ and *R. tibialis*, are commonly found in United States.
- Formosan termite
 - Subterranean termite
 - Soft-bodied insects
 - Protozoa(ns)
 - None of the Above

114. According to some research, a colony containing 60,000 workers could _____ of one foot of a 2" x 4" piece of lumber in slightly over 5 months.

- A. Eat twice the equivalent
- B. Consume the equivalent
- C. Carry
- D. Forage
- E. None of the Above

115. In areas with cold winter temperatures, termite activity (and feeding) _____, but does not necessarily stop.

- A. Increases
- B. Usually declines
- C. Slows to a stop
- D. Remains the same
- E. None of the Above

116. From a _____, serious termite damage usually takes about 3-8 years.

- A. Sign
- B. Practical perspective
- C. Hollow sound
- D. Foraging perspective
- E. None of the Above

117. Look for these signs of termite feeding: Wood that sounds " _____ " when it is tapped with the handle of a screwdriver.

- A. Recognize the signs
- B. Consume the equivalent
- C. "Hollow"
- D. Foraging and feeding
- E. None of the Above

118. Look for these signs of termite feeding: Soft wood that is _____ with a knife or screwdriver.

- A. Recognizable
- B. Easily probed
- C. Sounds "hollow"
- D. Has evidence
- E. None of the Above

119. Because subterranean termites have a constant _____ for water, one should closely examine areas near moist soil, such as below dripping outside faucets, leaking underground sprinkler pipes and nozzles, and below downspouts.

- A. Appearance
- B. Mass emergence
- C. Demand
- D. Dripping
- E. None of the Above

120. Where _____ or termites are suspected, prod with a sharp narrow implement to check the soundness of the supporting wood structure.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detecting infestations
- E. None of the Above

121. The _____ of termite infestations is best left to professionals who have the experience to do it thoroughly and accurately.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detection
- E. None of the Above

122. Termites can enter a building from one or more points so _____ to locate all points of entry for control purposes.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. None of the Above

123. Look for these signs of termite feeding: A thin gritty gray-brown film on the _____.

- A. Top
- B. Surface of damaged material
- C. Floor
- D. Nest
- E. None of the Above

124. Large numbers of _____ swarming from wood or the soil often are the first obvious sign of a nearby termite colony.

- A. Mating pairs
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

125. _____ occurs in mature colonies that typically contain at least several thousand termites.

- A. Swarming
- B. Emergences
- C. Winged termites
- D. Mating
- E. None of the Above

126. A " _____ " is a group of adult male and female reproductives that leave their colony in an attempt to pair and initiate new colonies.

- A. Swarm
- B. Nest
- C. Alate emergence
- D. Winged termite colony
- E. None of the Above

127. _____ is stimulated when temperature and moisture conditions are favorable, usually on warm days following rainfall.

- A. Swarming
- B. Ants infestations
- C. Alate emergence
- D. Winged termites flying
- E. None of the Above

128. Other signs of termite presence include mud tubes and mud _____ between boards and beams.

- A. Nests
- B. Inspected
- C. Protruding from cracks
- D. Construct earthen runways
- E. None of the Above

129. Subterranean termites _____ above ground to construct earthen runways (shelter tubes) that allow them to tunnel across exposed areas to reach wood.

- A. Always
- B. Never go
- C. Walk
- D. Transport soil and water
- E. None of the Above

130. Shelter tubes protect them from the drying effects of air and from natural enemies, such as ants. These tubes usually are about 1/4 to 1 inch wide, and termites _____ between the soil and wood.

- A. Include mud tubes
- B. Use them as passageways
- C. Broken or scraped away
- D. Construct earthen runways
- E. None of the Above

131. Swarming occurs during a brief period (typically less than an hour), and _____ quickly shed their wings.

- A. Workers
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

132. _____ are attracted to light, and their shed wings in window sills, cobwebs, or on other surfaces often may be the only evidence that a swarm occurred indoors.

- A. Queens
- B. Alates
- C. Winged termites
- D. Ants
- E. None of the Above

133. The presence of _____ or their shed wings inside a home should be a warning of a termite infestation.

- A. A swarm
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

134. Termite _____ have straight, bead-like antennae; a thick waist; and two pair of long, equal-length wings that break off easily.

- A. Swarmer
- B. Soldier
- C. Alate
- D. Worker
- E. None of the Above

135. _____ can be differentiated from winged ants, which have elbowed antennae, a constricted waist, and two pair of unequal-length wings (forewings are larger than hind wings) that are not easily detached.

- A. Swarming termites
- B. Ants
- C. Alates
- D. Winged termites
- E. None of the Above

136. Ants also generally are harder-bodied than _____.

- A. You think
- B. Bees
- C. Alates
- D. Termites
- E. None of the Above

137. Subterranean termites do not _____ to a powdery mass, and they do not create wood particles or pellets, as do many other wood-boring insects.

- A. Reproduce
- B. Reduce wood
- C. Excavate galleries
- D. Feed along the grain
- E. None of the Above

138. The _____ of winged termites in the spring is often the first sign of an infestation.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Detecting infestations
- E. None of the Above

139. In the majority of cases, they _____ in homes near sources of heat - furnaces or water heaters.

- A. Appear
- B. Emerge
- C. Damage wood
- D. Infest
- E. None of the Above

140. After grading is completed, _____ to areas before pouring slab floors, slab-supported porches, patios, carports, and entrance platforms at the rate of 1 gallon per 10 square feet.

- A. Apply diluted insecticide
- B. Establish a chemical barrier
- C. Apply insecticides
- D. Penetrating spray
- E. None of the Above

141. Vertical Barriers: _____ in areas such as around the bases of foundations, plumbing, utility entrances, and backfilled soil against foundation walls.

- A. Apply diluted insecticide
- B. Apply insecticides
- C. Penetrating spray
- D. Establish a chemical barrier
- E. None of the Above

142. Treat crawl space areas either by _____.
- A. Applying diluted insecticide
 - B. Applying insecticides
 - C. Rodding or trenching procedures
 - D. Establishing a chemical barrier
 - E. None of the Above
143. To _____ in soil, apply insecticide at the rate of 4 gallons per 10 linear feet per foot of depth. After treatment, cover the crawl space area with a layer of untreated soil or polyethylene sheeting.
- A. Apply diluted insecticide
 - B. Apply insecticides
 - C. Rod or trench
 - D. Produce a vertical barrier
 - E. None of the Above
144. Do not _____ until locations of radiant heat pipes, water pipes, sewer lines, and electrical conduits are identified.
- A. Apply diluted insecticide
 - B. Apply insecticides
 - C. Rod or trench
 - D. Establish a chemical barrier
 - E. None of the Above
145. The _____ of winged termites means that the infestation has been around for at least 3 or 4 years.
- A. Appearance
 - B. Mass emergence
 - C. Damage
 - D. Infestations
 - E. None of the Above
146. Therefore it is likely some damage has already been done, so it is important to find where the termites have been feeding, how much _____ has been done, and how much repair is needed.
- A. Appearance
 - B. Mass emergence
 - C. Damage
 - D. Work
 - E. None of the Above
147. Other means of _____ include knocking on walls, floors, sub-floor wood, joists, etc. and listening for the tapping of soldiers, and looking for shelter tubes on the outside of the building and under the sub-floor.
- A. Termite appearance
 - B. Mass emergence
 - C. Figuring damage
 - D. Detecting infestations
 - E. None of the Above
148. Outdoors, termites can be _____ by driving wooden stakes into the ground at varying distances from buildings and other wooden structures.
- A. Appearance
 - B. Mass emergence
 - C. Damage
 - D. Detected
 - E. None of the Above

149. Examine the stakes every 3 months for termites or signs of their feeding _____.

- A. Appearance
- B. Mass emergence
- C. Damage
- D. Infestations
- E. None of the Above

150. _____ by subterranean termites can be readily penetrated with a screwdriver, ice pick, or knife.

- A. Shelter tubes Or Mud tube
- B. Foundation walls
- C. Wood damaged
- D. Mud particles with fecal materials
- E. None of the Above

151. The wood easily breaks apart, revealing mud tubes attached to _____ or tunnels in an irregular pattern.

- A. Shelter tubes
- B. Infestation in the building
- C. Wood galleries
- D. Foundation walls
- E. None of the Above

152. The tunnels may contain broken _____. In the case of an active colony, white termites may be found in infested wood.

- A. Shelter tubes
- B. Foundation walls
- C. Vases
- D. Mud particles with fecal materials
- E. None of the Above

153. The presence of winged males, females, or their shed wings, particularly when the adults fly inside the building, _____ in the building.

- A. Mud tubes
- B. Infestation in the building
- C. Dumping fecal material
- D. And inside foundation walls
- E. None of the Above

154. Another indication is the presence of _____ extending from the ground to woodwork or on foundation walls.

- A. Shelter tubes Or Mud tube
- B. Infestation in the building
- C. Mud particles with fecal materials
- D. Nesting materials
- E. None of the Above

155. Workers travel periodically via _____ to their colony to obtain moisture and perform feeding duties.

- A. Shelter tubes Or Mud tube
- B. Foundation walls
- C. Tunnels
- D. Mud particles
- E. None of the Above

156. Workers build mud or shelter tubes from soil and wood particles, and coat them with a(n) _____ that they secrete.

- A. Shelter tubes Or Mud tube
- B. Infestation in the building
- C. Mud particles with fecal materials
- D. Foundation walls
- E. None of the Above

157. Each _____ is about the diameter of a lead pencil.

- A. Mud tube
- B. Infestation
- C. Mud particles
- D. Nursery
- E. None of the Above

158. If termite activity is _____ and an insecticide treatment is necessary, it is important to outline the plan of the building, indicating sites of termite activity and treatment procedures.

- A. Requiring additional treatment
- B. Generally established
- C. Suspected or found
- D. Continuous insecticide barrier
- E. None of the Above

159. Building owners/managers are encouraged to seek two or more inspections and cost estimates. Ask for information on _____, repair of woodwork, warranties, copies of the insecticide label, and other pertinent information.

- A. Requiring additional treatment
- B. Chemical treatment procedures
- C. Termite activity and treatment procedures
- D. Continuous insecticide barrier
- E. None of the Above

160. The goal is to establish a(n) _____ between the termite colony (usually in the ground) and the wood in a building.

- A. Additional treatment
- B. Generally established
- C. Termite activity and treatment procedures
- D. Continuous insecticide barrier
- E. None of the Above

161. Sometimes a secondary termite colony may exist above ground (in roof or other areas with a constant moisture supply) which _____.

- A. Requires additional treatment
- B. Are generally established
- C. Termite activity and treatment procedures
- D. None of the Above

162. Insecticide barriers _____ during: Pre-construction (during construction).

- A. Requires additional treatment
- B. Are generally established
- C. Require termite activity and treatment procedures
- D. Include a coContinuous insecticide barrier
- E. None of the Above

163. Insecticide barriers are generally established during: Post-construction (existing building). In an existing building, termite treatments may involve any of the following: a) _____, and b) use of an insecticide for treating the soil, foundation, and wood.

- A. Mechanical alterations
- B. Contact treated
- C. Distribution of insecticide
- D. None of the Above

164. In most cases, an untrained homeowner or building manager should not attempt a _____.

- A. Mechanical alterations
- B. Contact treatment
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

165. _____ should be performed by professional pest control operators (PCOs), that is right!

- A. Mechanical alterations
- B. Contact treatment
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

166. _____ requires special tools such as hammer drills, sub-slab injectors, rodding devices, high pressure pumps, a power supply, protective equipment.

- A. Mechanical alterations
- B. Contact treatments
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

167. Do not apply insecticides when soil is frozen or water-soaked (saturated). Frozen or saturated soil will not permit _____ for even distribution of insecticide.

- A. Mechanical alterations
- B. Adequate absorption
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

168. Do not permit humans and pets to _____ surfaces until dry.

- A. Walk on
- B. Contact treated
- C. Distribute of insecticide
- D. Adsorption
- E. None of the Above

169. Before _____ for termite control, always read, understand and follow all label directions.

- A. Applying mechanical alterations
- B. Using insecticides
- C. Distribution of insecticide
- D. Applying termite treatment(s)
- E. None of the Above

170. Keep all _____, out of reach of children and do not contaminate food, feed and water.

- A. Mechanical alterations
- B. Pesticides in original containers
- C. Distribution of insecticide
- D. Termite treatment(s)
- E. None of the Above

171. Horizontal Barriers: In general, treat the footing trench with _____ before pouring cement footings.

- A. Diluted insecticide
- B. Establishing a chemical barrier
- C. Insecticide
- D. Penetrating spray
- E. None of the Above

172. Buildings requiring treatment generally fall into three categories: a) building on slab construction, b) building with crawl space, and c) building with a basement. There is a common belief that termites _____ slab foundations.

- A. Will not eat
- B. Will not crawl on to
- C. Cannot penetrate
- D. None of the Above

173. Termites _____ solid concrete but they can enter through cracks as small as 1/64 of an inch.

- A. Will not eat
- B. Will not crawl on to
- C. Cannot destroy
- D. Cannot penetrate
- E. None of the Above

174. _____ in a building on a slab is especially difficult and hazardous. In this type of construction, heat ducts (pipes) are buried in the concrete and serious damage can occur when they are accidentally drilled for holes to inject insecticide solutions.

- A. Injecting insecticide
- B. Drilling
- C. Controlling termite infestation
- D. Broadcast insecticide spraying
- E. None of the Above

175. Treat the exterior of the foundation by _____ about 6 inches wide along the outside of the foundation.

- A. Inject insecticide or Injecting the insecticide
- B. Drill the floor slab or Drilling
- C. Digging a narrow and shallow trench
- D. None of the Above

176. _____ to the trench and soil at the rate of 4 gallons per 10 linear feet.

- A. Inject insecticide or Injecting the insecticide
- B. Drill the floor slab or Drilling
- C. Applying the diluted insecticide
- D. Broadcast insecticide spraying
- E. None of the Above

177. _____ with a thin layer of untreated soil. For an inside barrier, drill slab and space holes about 1 foot apart and 6 inches from the wall.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Cover treated soil in the trench
- D. Broadcast insecticide spray
- E. None of the Above

178. Soil may require insecticide treatment if it is exposed beneath and around plumbing/waste pipe entrances through a _____.

- A. Masonry voids
- B. Other debris
- C. Concrete slab
- D. Such situations
- E. None of the Above

179. Do not treat soil in crawl space area with a(n) _____.

- A. Insecticide
- B. Fungicide
- C. Pesticide
- D. Broadcast insecticide spray
- E. None of the Above

180. Treat through _____ to provide a continuous chemical barrier at the top of the footing.

- A. Masonry voids
- B. Debris
- C. All holes
- D. Such situations
- E. None of the Above

181. When treatment is necessary, access holes must be drilled through _____ below the sill plate, as close as possible to the footing.

- A. Mortar joints
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

182. Apply insecticide at the rate of 2 gallons per 10 linear feet. Plug _____ with mortar or any other special compound.

- A. Masonry voids
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

183. Remove _____ or excavated soil and treat the soil by rodding or flooding with an insecticide solution.

- A. Masonry voids
- B. Any wood
- C. All holes
- D. Such situations
- E. None of the Above

184. Treatment Near Ponds, Wells, Cisterns, and Faulty _____, Around Pipes or Utility Lines Insecticide applications through rodding is discouraged in excavated soil.

- A. Masonry voids
- B. Other debris
- C. All holes
- D. Foundation walls
- E. None of the Above

185. The suggested procedure is to make a trench and remove the excavated _____ or similar material.

- A. Soil sheeting
- B. Other debris
- C. All holes
- D. Such situations
- E. None of the Above

186. Treat the _____ with insecticide at the rate of 4 gallons per 10 linear feet per foot of depth. Mix the soil with insecticide and replace it in the trench.

- A. Masonry voids
- B. Excavated soil
- C. All holes
- D. Such situations
- E. None of the Above

187. Using a subslab injector, inject insecticide through holes at the rate of 4 gallons per 10 linear feet. After application, _____ with mortar or any other special compound.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Plug all holes
- D. None of the Above

188. Basement: For an interior vertical barrier, _____ and space holes about one foot apart.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

189. _____ may be required along the foundation walls, along one side of partition walls, along both sides of load-bearing wall, around sewer pipes, floor drains, conduits, and any crack in the basement floor.

- A. Inject insecticide or Inject the insecticide
- B. Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

190. Using a sub-slab injector, _____ at the rate of 4 gallons per 10 linear feet. For an insecticide barrier around the exterior of foundation walls, apply an insecticide by rodding and/or trenching.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

190. The rod holes should be spaced 1 to 1 1/2 feet apart to _____ barrier. If a trench is necessary, it should not be wider than 6 inches.

- A. Inject insecticide or Inject the insecticide
- B. Provide a continuous chemical
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

191. _____ using rodding technique at the rate of 4 gallons per 10 linear feet. Cover the trench with untreated soil.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

192. _____ by rodding and/or trenching procedures. A shallow trench should not be wider than 6 inches.

- A. Inject insecticide or Inject the insecticide
- B. Establish vertical barriers
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

193. _____ about 1 to 1 1/2 feet apart. Apply insecticide at the rate of 4 gallons per 10 linear feet per foot of depth.

- A. Inject insecticide or Inject the insecticide
- B. Drill the floor slab or Drilling
- C. Space rod holes
- D. Broadcast insecticide spray
- E. None of the Above

194. Cover the _____ with a thin layer of untreated soil. In the case of wells, ponds, and cisterns, if a rodding technique is necessary, the distance between the treated area and the water source should be 50 feet or more.

- A. Masonry voids
- B. Treated soil
- C. All holes
- D. None of the Above

195. Wood Treatment In addition to soil treatment, it may be necessary to treat infested wood with insecticide spray or injection. Applications are made to inaccessible areas by drilling and then _____.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Injecting the insecticide solution
- E. None of the Above

196. _____ must be limited to wood in attics, crawl spaces and unfinished basements or similar unoccupied areas.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Graded or sloped away
- E. None of the Above

197. Treatment of Secondary Subterranean Termite Colony Apply insecticide to infested wood and void spaces with a _____.

- A. Crack and crevice injector
- B. Broadcast spray
- C. Prevention
- D. Graded or sloped away
- E. None of the Above

198. . Preventive practices are a(n) _____.

- A. Form of crack and crevice injector
- B. Form of broadcast spraying
- C. Critical aspect of termite management
- D. Graded or sloped away
- E. None of the Above

199. _____rely on creating a chemical barrier in the soil that is toxic to termites when they come into contact with it.

- A. Effective termite control
- B. Repellent characteristics
- C. Conventional soil treatments
- D. Such treatments during preconstruction
- E. None of the Above

200. Many also have _____which causes the termites to avoid treated soil. To achieve termite control for long periods of time, such termiticides must be applied as a continuous barrier in the soil next to and under the foundation. If there are untreated gaps in the soil, termites may circumvent the chemical treatment.

- A. Effective termite control
- B. Repellent characteristics
- C. Conventional soil treatments
- D. Such treatments during preconstruction
- E. None of the Above

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Please fax or e-mail the registration form, answer Key and a copy of your driver's license. Always call us to ensure we've received the materials.