Registration form

Advanced Pest Control $200.00

48 HOUR RUSH ORDER PROCESSING FEE ADDITIONAL $50.00

Rush service does not include overnight delivery or FedEx fees.

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 page 2 & 4. 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 _____

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

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

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 a 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. ALWAYS FOLLOW THE PRODUCT'S LABEL INSTRUCTIONS.

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 conditions and that I will not hold Technical Learning College, Technical Learning Consultants, Inc. (TLC) liable 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. 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.

CUSTOMER SERVICE RESPONSE CARD

Advanced Pest Control Training Course

DATE: _____

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?

_____

_____

6. How about the price of the course?

Poor_____ Fair ____ Average ____ Good____ Great_____

7. How was your customer service?

Poor___ Fair ____ Average ____ Good _____ Great_____

8. Any other concerns or comments.

_____

_____

DISCLAIMER 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 also understand that this type of study program deals with dangerous conditions and that I will not hold Technical Learning College, Technical Learning Consultants, Inc. (TLC) liable for any errors or omissions or advice contained in this CEU education training course or for any violation or injury caused by this CEU education training course material. I will 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.

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 have received your assignment and to confirm your identity.

Thank you…

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.

Advanced Pest Control Answer Key

Name_____

Phone# _____

Multiple Choice. Pick only one answer per question. Exactly as in text. Circle or Mark off, Underline or Bold the answer.

You are solely responsible in ensuring that this course is accepted for credit by your State. Did you check with your State agency to ensure this course is accepted for credit? No refunds.

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.

Pesticide Section

1. A B C D E F	10. A B C D E F	19. A B C D E F
2. A B C D E F	11. A B C D E F	20. A B C D E F
3. A B C D E F	12. A B C D E F	21. A B C D E F
4. A B C D E F	13. A B C D E F	22. A B C D E F
5. A B C D E F	14. A B C D E F	23. A B C D E F
6. A B C D E F	15. A B C D E F	24. A B C D E F
7. A B C D E F	16. A B C D E F	25. A B C D E F
8. A B C D E F	17. A B C D E F	
9. A B C D E F	18. A B C D E F	

Bee Section

1. A B C D E F
2. A B C D E F
3. A B C D E F
4. A B C D E F
5. A B C D E F
6. A B C D E F
7. A B C D E F
8. A B C D E F
9. A B C D E F
10. A B C D E F
11. A B C D E F
12. A B C D E F
13. A B C D E F
14. A B C D E F
15. A B C D E F
16. A B C D E F
17. A B C D E F
18. A B C D E F
19. A B C D E F
20. A B C D E F
21. A B C D E F
22. A B C D E F
23. A B C D E F
24. A B C D E F
25. A B C D E F

Mosquito Section

1. A B C D E F
2. A B C D E F
3. A B C D E F
4. A B C D E F
5. A B C D E F
6. A B C D E F
7. A B C D E F
8. A B C D E F
9. A B C D E F
10. A B C D E F
11. A B C D E F
12. A B C D E F
13. A B C D E F
14. A B C D E F
15. A B C D E F
16. A B C D E F
17. A B C D E F
18. A B C D E F
19. A B C D E F
20. A B C D E F
21. A B C D E F
22. A B C D E F
23. A B C D E F
24. A B C D E F
25. A B C D E F

Termite Section

1. A B C D E F
2. A B C D E F
3. A B C D E F
4. A B C D E F
5. A B C D E F
6. A B C D E F
7. A B C D E F
8. A B C D E F
9. A B C D E F
10. A B C D E F
11. A B C D E F
12. A B C D E F
13. A B C D E F
14. A B C D E F
15. A B C D E F
16. A B C D E F
17. A B C D E F
18. A B C D E F
19. A B C D E F
20. A B C D E F
21. A B C D E F
22. A B C D E F
23. A B C D E F
24. A B C D E F
25. A B C D E F

Spider Section

1. A B C D E F
2. A B C D E F
3. A B C D E F
4. A B C D E F
5. A B C D E F
6. A B C D E F
7. A B C D E F
8. A B C D E F
9. A B C D E F
10. A B C D E F
11. A B C D E F
12. A B C D E F
13. A B C D E F
14. A B C D E F
15. A B C D E F
16. A B C D E F
17. A B C D E F
18. A B C D E F
19. A B C D E F
20. A B C D E F
21. A B C D E F
22. A B C D E F
23. A B C D E F
24. A B C D E F
25. A B C D E F

Bark Beetle Section

1. A B C D E F
2. A B C D E F
3. A B C D E F
4. A B C D E F
5. A B C D E F
6. A B C D E F
7. A B C D E F
8. A B C D E F
9. A B C D E F
10. A B C D E F
11. A B C D E F
12. A B C D E F
13. A B C D E F
14. A B C D E F
15. A B C D E F
16. A B C D E F
17. A B C D E F
18. A B C D E F
19. A B C D E F
20. A B C D E F
21. A B C D E F
22. A B C D E F
23. A B C D E F
24. A B C D E F
25. A B C D E F

Tick Section

1. A B C D E F
2. A B C D E F
3. A B C D E F
4. A B C D E F
5. A B C D E F
6. A B C D E F
7. A B C D E F
8. A B C D E F
9. A B C D E F
10. A B C D E F
11. A B C D E F
12. A B C D E F
13. A B C D E F
14. A B C D E F
15. A B C D E F
16. A B C D E F
17. A B C D E F
18. A B C D E F
19. A B C D E F
20. A B C D E F
21. A B C D E F
22. A B C D E F
23. A B C D E F
24. A B C D E F
25. A B C D E F

Cockroach Section

26. A B C D E F
27. A B C D E F
28. A B C D E F
29. A B C D E F
30. A B C D E F
31. A B C D E F
32. A B C D E F
33. A B C D E F
34. A B C D E F
35. A B C D E F
36. A B C D E F
37. A B C D E F
38. A B C D E F
39. A B C D E F
40. A B C D E F
41. A B C D E F
42. A B C D E F
43. A B C D E F
44. A B C D E F
45. A B C D E F
46. A B C D E F
47. A B C D E F
48. A B C D E F
49. A B C D E F
50. A B C D E F

Pesticide Application Section

1. A B C D E F
2. A B C D E F
3. A B C D E F
4. A B C D E F
5. A B C D E F
6. A B C D E F
7. A B C D E F
8. A B C D E F
9. A B C D E F
10. A B C D E F
11. A B C D E F
12. A B C D E F
13. A B C D E F
14. A B C D E F
15. A B C D E F
16. A B C D E F
17. A B C D E F
18. A B C D E F
19. A B C D E F
20. A B C D E F
21. A B C D E F
22. A B C D E F
23. A B C D E F
24. A B C D E F
25. A B C D E F

Amount of Time for Course Completion – How many hours you spent on course?

Must match State Hour Requirement _____ (Hours)

Please fax or email this answer key and the registration Page to TLC.
Call 15 minutes later to ensure we have received the paperwork

Advanced Pest Control Assignment

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.
If you are a California DPR or Nevada student, things have changed and we had to implement new security features to keep those agencies happy.
1. We will require all students to fax or e-mail a copy of their driver's license with the registration form.

Multiple Choice, Please select one answer and mark it on the answer key. The answer must come from the course text. (s) Means answer can be plural or singular.

Pesticide Section

1. By their very nature, _____create some risk of harm to humans, animals, or the environment because they are designed to kill or otherwise adversely affect living organisms. At the same time, pesticides are useful to society because of their ability to kill potential disease-causing organisms and control insects, weeds, and other pests.

A. Structural pest control or lawn pest control
B. Insect growth regulator (IGR)
C. Biological control agent(s)
D. Biochemical pesticide(s)
E. Most pesticides
F. None of the Above

2. _____, such as pheromones and microbial pesticides are becoming increasingly popular and often are safer than traditional chemical pesticides.

A. Biologically-based pesticides
B. Not pesticides
C. Consumer products pesticide
D. Infection control activities
E. IGRs
F. None of the Above

3. _____used to control diseases of humans or animals (such as livestock and pets) are not considered pesticides; such drugs are regulated by the Food and Drug Administration.

A. Drugs
B. Insect growth regulator (IGR)
C. Biological control agent(s)
D. Biochemical pesticide(s)
E. Disinfectant(s)
F. None of the Above

4. Fertilizers, nutrients, and other substances used to promote plant survival and health are not considered plant growth regulators and thus are_____.

A. Structural pest control or lawn pest control
B. Not pesticides
C. Biological control agent(s)
D. Biochemical pesticide(s)
E. Most pesticides
F. None of the Above

5. _____, except for certain microorganisms, are exempted from regulation by the EPA. (Biological control agents include beneficial predators such as birds or ladybugs that eat insect pests.)

A. Structural pest control or lawn pest control
B. Insect growth regulator (IGR)
C. Biological control agent(s)
D. Biochemical pesticide(s)
E. Disinfectant(s)
F. None of the Above

6. The term ‘‘service technician’’ means any individual who uses or supervises the use of _____(other than a ready to use consumer products pesticide) for the purpose of providing structural pest control or lawn pest control on the property of another for a fee.

A. Structural pest control or lawn pest control
B. Insect growth regulator (IGR)
C. Biological control agent(s)
D. Pesticide(s)
E. Most pesticides
F. None of the Above

7. The term ‘‘service technician’’ does not include individuals who use_____ , sanitizers or disinfectants; or who otherwise apply ready to use consumer products pesticides.

A. Structural pest control or lawn pest control
B. Insect growth regulator (IGR)
C. Biological control agent(s)
D. Biochemical pesticide(s)
E. Antimicrobial pesticides
F. None of the Above

8. _____ are used as disinfectants in medical settings, where they are present in products used in cleaning cabinets, floors, walls, toilets, and other surfaces.

A. Chitin synthesis inhibitor(s)
B. Insect growth regulator (IGR)
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Antimicrobial public health pesticides
F. None of the Above

9. Proper use of these _____is an important part of infection control activities employed by hospitals and other medical establishments.

A. Disinfectants
B. Insect growth regulator (IGR)
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Plant-Incorporated-Protectants (PIPs)
F. None of the Above

10. _____ are certain types of pesticides derived from such natural materials as animals, plants, bacteria, and certain minerals.

A. Chitin synthesis inhibitor(s)
B. Insect growth regulator (IGR)
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Biopesticides
F. None of the Above

11. _____ consist of a microorganism (e.g., a bacterium, fungus, virus or protozoan) as the active ingredient. Microbial pesticides can control many different kinds of pests, although each separate active ingredient is relatively specific for its target pest[s].

A. Chitin synthesis inhibitor(s)
B. Insect growth regulator (IGR)
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Plant-Incorporated-Protectants (PIPs)
F. None of the Above

12. _____ are pesticidal substances that plants produce from genetic material that has been added to the plant.

A. Chitin synthesis inhibitor(s)
B. Insect growth regulator (IGR)
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Plant-Incorporated-Protectants (PIPs)
F. None of the Above

13. _____ are naturally occurring substances that control pests by non-toxic mechanisms. Conventional pesticides, by contrast, are generally synthetic materials that directly kill or inactivate the pest.

A. Chitin synthesis inhibitor(s)
B. Insect growth regulator (IGR)
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Plant-Incorporated-Protectants (PIPs)
F. None of the Above

14. _____ include substances, such as insect sex pheromones that interfere with mating as well as various scented plant extracts that attract insect pests to traps. Because it is sometimes difficult to determine whether a substance meets the criteria for classification as a biochemical pesticide, the EPA has established a special committee to make such decisions.

A. Chitin synthesis inhibitor(s)
B. Insect growth regulator (IGR)
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Plant-Incorporated-Protectants (PIPs)
F. None of the Above

15. _____ is a synthetic chemical that mimics insect hormones. Hormones regulate a wide array of body and growth (physiological) functions.

A. Chitin synthesis inhibitor(s)
B. Insect growth regulator (IGR)
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Antimicrobial pesticides
F. None of the Above

16. _____ may interfere with molting, pupal emergence, or body wall formation.

A. Chitin synthesis inhibitor(s)
B. IGR
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Plant-Incorporated-Protectants (PIPs)
F. None of the Above

17. _____are often specific for an insect species or a group of very closely related species. They often have delayed effects because they are taken into the insect and stored until the insect reaches the right growth stage. This may range from days to weeks or even months.

A. Chitin synthesis inhibitor(s)
B. IGR
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Antimicrobial pesticides
F. None of the Above

18. _____ work by preventing the formation of chitin, a carbohydrate needed to form the insect's exoskeleton. With these inhibitors, an insect grows normally until it molts.

A. Chitin synthesis inhibitor(s)
B. Insect growth regulator (IGR)
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Plant-Incorporated-Protectants (PIPs)
F. None of the Above

19. The _____ prevent the new exoskeleton from forming properly, causing the insect to die. Death may be quick, or take up to several days depending on the insect.

A. Inhibitor(s)
B. Insect growth regulator (IGR)
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Plant-Incorporated-Protectants (PIPs)
F. None of the Above

20. _____ can also kill eggs by disrupting normal embryonic development.

A. Biochemical pesticide(s)
B. Insect growth regulator (IGR)
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Chitin synthesis inhibitor(s)
F. None of the Above

21. _____ affect insects for longer periods of time than hormonal IGRs. These are also quicker acting but can affect predaceous insects, arthropods and even fish.

A. Biochemical pesticide(s)
B. Insect growth regulator (IGR)
C. Microbial pesticide(s)
D. Biochemical pesticide(s)
E. Chitin synthesis inhibitor(s)
F. None of the Above

22. _____ (hexaflumeron) is an insect growth regulator that interferes with insects' chitin synthesis.

A. Methoprene
B. Nylar
C. Pyriproxyfen
D. Diflubenzuron
E. Hexaflumuron
F. None of the Above

23. _____ is not approved for use in indoor residences.

A. Methoprene
B. Nylar
C. Pyriproxyfen
D. Diflubenzuron
E. Hexaflumuron
F. None of the Above

24. _____ is an insecticide of the benzamide class. It is used in forest management and on field crops to selectively control insect pests.

A. Methoprene
B. Nylar
C. Pyriproxyfen
D. Diflubenzuron
E. Hexaflumuron
F. None of the Above

25. _____ is used primarily on cattle, citrus, cotton, mushrooms, ornamentals, standing water, forestry trees and in programs to control mosquito larvae and gypsy moth populations. Formulations include a soluble concentrate, flowable concentrate, wettable powder and a pelleted/tableted.

A. Methoprene
B. Nylar
C. Pyriproxyfen
D. Diflubenzuron
E. Hexaflumuron
F. None of the Above

(S) means the answer may be plural or singular. There are no intentional trick questions. Please provide the answer as exactly in the text. If you need assistance, please e-mail us your concern.

Bee Section

(S) means the answer may be plural or singular. There are no intentional trick questions. Please provide the answer as exactly in the text. If you need assistance, please e-mail us your concern.

Differences between Africanized and European Bees

1. _____are adapted to seasonal availability of food; Africanized bees are adapted to the tropics, where food is more available year-round.

A. EHB
B. Killer Bee
C. AHB
D. Wasps and similar meat eating bees
E. Both EHB and AHB
F. None of the Above

2. _____make large, fairly permanent colonies; Africanized bees make smaller colonies that reproduce (swarm) often. The table outlines some differences between the two bee types.

A. EHB
B. Killer Bee
C. AHB
D. Wasps and similar meat eating bees
E. Both EHB and AHB
F. None of the Above

3. _____usually nest in hollow trees or in wall voids of houses.

A. EHB
B. Killer Bee
C. AHB
D. Wasps and similar meat eating bees
E. Both EHB and AHB
F. None of the Above

4. Africanized bees nest in these places and in unusual places, such as old tires, tin cans, other trash and _____. These types of nest sites increase the chance of human encounters with Africanized bees, especially in urban settings.

A. EHB
B. Killer Bee
C. AHB
D. Wasps and similar meat eating bees
E. Both EHB and AHB
F. None of the Above

Potential Range of Africanized Bees in the United States

5. As Africanized bees expand into temperate areas, their _____are less advantageous.

A. EHB
B. Killer Bee
C. AHB
D. Wasps and similar meat eating bees
E. Both EHB and AHB
F. None of the Above

Characteristics of the AHB

6. A number of _____have been identified in the AHB.

A. EHB
B. Killer Bee
C. AHB
D. Wasps and similar meat eating bees
E. Both EHB and AHB
F. None of the Above

Aggressive Hive Defense and Stinging

7. Although the _____ does not attack unprovoked, it is very defensive of its colony. When compared to the EHB, it is much easier to provoke.

A. EHB
B. Killer Bee
C. AHB
D. Wasps and similar meat eating bees
E. Both EHB and AHB
F. None of the Above

8. The AHB responds quicker and in larger numbers when its colony is threatened. Once provoked, the AHB remains agitated for a longer period of time than does the _____.

A. EHB
B. Killer Bee
C. AHB
D. Wasps and similar meat eating bees
E. Both EHB and AHB
F. None of the Above

9. Disturbing an AHB colony may result in 6-10 times as many stings as European bees inflict. This phenomenon is attributed to the _____'s more acute sensitivity and response to the "alarm pheromone," a chemical odor that is released after stinging is initiated.

A. EHB
B. Killer Bee
C. AHB
D. Wasps and similar meat eating bees
E. Both EHB and AHB
F. None of the Above

Excessive Swarming

10. The _____will swarm more frequently than the EHB.

A. EHB
B. Killer Bee
C. AHB
D. Wasps and similar meat eating bees
E. Both EHB and AHB
F. None of the Above

11. Typically, an EHB colony swarms once every year or two; a(n) _____ colony may swarm 4-8 times a year.

A. EHB
B. Killer Bee
C. AHB
D. Wasps and similar meat eating bees
E. Both EHB and AHB
F. None of the Above

12. Generally, an AHB swarm is much smaller that a(n) _____ swarm; some aren't much larger than a coffee cup.

A. EHB
B. Killer Bee
C. AHB
D. Wasps and similar meat eating bees
E. Both EHB and AHB
F. None of the Above

13. Swarming reduces the number of bees in a colony, thus reducing the _____, resulting in diminished honey production.

A. EHB
B. Killer Bee
C. AHB
D. Wasps and similar meat eating bees
E. Both EHB and AHB
F. None of the Above

14. Management practices directed at reducing swarming, such as dividing large colonies into smaller colonies and frequent harvesting of honey, add costs for beekeepers.

A. Adds to the feral population
B. Nest almost anyplace
C. Lack of selectivity
D. Directed at reducing swarming
E. Excessive Absconding or Absconding
F. None of the Above

Excessive Absconding

15. While absconding is rare in the EHB, it's rather common with the AHB. Absconding not only results in loss of a managed colony but _____competing with managed bees for nectar and pollen.

A. Adds to the feral population
B. Nest almost anyplace
C. Lack of selectivity
D. Directed at reducing swarming
E. Excessive Absconding or Absconding
F. None of the Above

Selection of Nesting Site

16. EHBs are very _____. They prefer hollow trees, wall voids or other cavities (about 10 gallons in size) well above the ground that are clean and dry.

A. At living anywhere
B. Good at swarming
D. Selective
D. Particular in selecting nesting sites
E. Excessive Absconding or Absconding
F. None of the Above

17. The AHB will _____that is protected from the weather. Selected sites are often much smaller, closer to the ground, and may not be as protected from the elements.

A. Take days to choose a colony
B. Take weeks to choose a queen
C. Nest almost anyplace
D. Not move anywhere
E. All of the Above
F. None of the Above

18. This _____is thought by some to be due to greater competition resulting from the larger number of AHB swarms.

A. Adds to the feral population
B. Nest almost anyplace
C. Lack of selectivity
D. Directed at reducing swarming
E. Excessive Absconding or Absconding
F. None of the Above

Reproductive Capacity

19. Compared with the EHB, the AHB _____ of its nest to brood production and less to honey storage.

A. Adds to the feral population
B. Builds
C. Chooses
D. Devotes a greater percentage
E. Excessive Absconds or Absconded
F. None of the Above

20. The developmental period of the _____ is shorter than that of the EHB, it's able to produce more bees in less time.

A. AHB
B. EHB
C. Feral colonies
D. Larvae or Workers
E. Queen or Queens
F. None of the Above

Number of Feral Colonies

21. In areas where the _____ has become established, a noticeable increase in the number of feral honey bee colonies occurs. This is generally thought to be the result of higher reproductive capacity, increased swarming rate, and tendency to abscond.

A. AHB
B. EHB
C. Feral colonies
D. Workers
E. Queen or Queens
F. None of the Above

22. In much of the area where the _____ is now established, feral colonies were extremely rare, probably because the EHBs were not adapted to the tropical climate.

A. AHB
B. EHB
C. Feral colonies
D. Drones
E. Queen(s)
F. None of the Above

23. This marked increase of _____may not be as great in an area where feral bees are common.

A. AHB
B. EHB
C. Feral colonies
D. Drones
E. Queen(s)
F. None of the Above

Robbing

24. _____ is a type of foraging behavior where bees take honey from other bee colonies. This often occurs when nectar is scarce or unavailable, or when some colonies are weak and others are strong.

A. Absconding
B. Feral colonies
C. Gathering
D. Forging
E. Robbing
F. None of the Above

Winter Survival

25. Since the _____ is tropical in nature, it may not be able to regulate its body temperature as efficiently as the EHB.

A. AHB
B. EHB
C. Feral colonies
D. Workers
E. All of the Above
F. None of the Above

Mosquito Section

Identify the Term

1. Inflammation of the brain, which can be caused by numerous viruses, including West Nile Virus endemic the normal presence of a disease or infectious agent among human beings within a geographic area.

A. Enzootic D. Epizootic
B. Encephalitis E. Flavivirus
C. Endemic F. None of the Above

2. A disease outbreak affecting certain human or animal populations.

A. Enzootic D. Epizootic
B. Encephalitis E. Inflammation
C. Endemic F. None of the Above

3. A disease outbreak affecting certain animal populations (sometimes used in contrast with "epidemic").

A. Enzootic D. Epizootic
B. Encephalitis E. Inflammation
C. Endemic F. None of the Above

4. Agents biologic organism or chemical material that cause disease.

A. Enzootic D. Epizootic
B. Encephalitis E. Etiologic
C. Endemic F. None of the Above

5. A subset of arboviruses (transmitted by arthropods); this family of viruses includes West Nile Virus, St. Louis Encephalitis and several others.

A. Flavivirus D. Intermediate Host
B. Gravid Traps E. IPM
C. Host F. None of the Above

6. Type of mosquito traps designed to attract pregnant female mosquitoes

A. Flavivirus D. Intermediate Host
B. Gravid Traps E. IPM
C. Host F. None of the Above

7. A living organism that serves as a blood source for blood-feeding arthropods, or on which a parasite lives.

A. Flavivirus D. Intermediate Host
B. Gravid Traps E. IPM
C. Host F. None of the Above

8. The arthropod carrier of a parasitic organism.

A. Flavivirus D. Intermediate Host
B. Gravid Traps E. IPM
C. Host F. None of the Above

9. A system for minimizing the impact of vectors and pests by using a variety of control procedures, and decreasing the chemical input to the environment.
A. Flavivirus D. Intermediate Host
B. Gravid Traps E. IPM
C. Host F. None of the Above

10. Immature mosquitoes; stage which hatches from the egg, prior to adult stage.
A. Larvae D. Larvicide
B. Autochthonous E. Alante
C. Adulticide F. None of the Above

11. A type of pesticide used to eradicate immature mosquitoes (larvae).
A. Larvae D. Larvicide
B. Autochthonous E. Alante
C. Adulticide F. None of the Above

12. A type of pesticide used to kill adult mosquitoes.
A. Larvae D. Larvicide
B. Autochthonous E. Alante
C. Adulticide F. None of the Above

13. Native to a place; not imported; used to describe a disease transmitted by vectors that became infected from a local source.
A. Larvae D. Larvicide
B. Autochthonous E. Alante
C. Adulticide F. None of the Above

14. A type of larvicide; chemical that is used to prevent mosquito larvae from emerging and developing into adult mosquitoes.
A. Methoprene D. Bacillus Sphaericus
B. Altosid E. Microbial insecticide
C. Suspend SC F. None of the Above

15. An insecticide made of bacteria whose infection kills insects; a substance produced by bacteria that is lethal to insects.
A. Methoprene D. Bacillus Sphaericus
B. Altosid E. Microbial insecticide
C. Suspend SC F. None of the Above

16. A location where mosquitoes lay eggs, usually in stagnant water with organic material.
A. Larvae D. Tree holes
B. Ponds E. Rafts
C. Lakes F. None of the Above

17. Brand name of methoprene, a type of larvicide.
A. Methoprene D. Bacillus Sphaericus
B. Altosid E. Microbial insecticide
C. Suspend SC F. None of the Above

18. A bacterium; type of biological pesticide used to eradicate mosquito larvae in water. Mosquito larvae die after ingesting this bacteria.
A. Methoprene D. Bacillus Sphaericus
B. Altosid E. Microbial insecticide
C. Suspend SC F. None of the Above

19. Blood serum collected from patients recently recovered from a disease, often used to test whether a person has had a specific infection.
A. Methoprene D. Convalescent Blood Sera
B. Altosid E. Microbial insecticide
C. Suspend SC F. None of the Above

20. A virus whose life cycle includes transmission by arthropods.
A. Aseptic Meningitis D. Arbovirus
B. Mosquito Pools E. Spinal Menningtis
C. Arthropod F. None of the Above

21. An invertebrate animal with jointed legs and a segmented body (includes flies, mosquitoes, ticks; also centipedes, scorpions, spiders etc.)
A. Termite D. Arthropod
B. Mosquito E. Flying insects
C. Spider F. None of the Above

22. Inflammation of the lining of the brain and spinal cord, not due to a bacterial infection.
A. Aseptic Meningitis D. Arbovirus
B. Mosquito fever E. Spinal Menningtis
C. Arthropod hives F. None of the Above

23. A group of mosquitoes collected in one area and combined at the laboratory for testing for the presence of West Nile and related viruses.
A. Raft D. Arthropod Nesting
B. Mosquito Pools E. Flock
C. Nest F. None of the Above

24. This chemical name **N,N-diethyl-meta-toluamide**, is the active ingredient in many insect repellent products.
A. Malathion D. DEET
B. Naled E. Suspend
C. Dursban F. None of the Above

25. A synthetic pyrethroid pesticide used to eradicate adult mosquitoes in the home, lawn, garden and at industrial sites; active ingredient in the product **Scourge**.
A. Vectolex D. Vectobac
B. Resmethrin E. Scourge
C. Rickettsia F. None of the Above

Termite Section

General Treatment Guidelines

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

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

2. 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. All of the Above
F. None of the Above

3. 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. All of the Above
F. None of the Above

4. _____ 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. All of the Above
F. None of the Above

5. _____ 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. B and D
F. None of the Above

Caution

6. 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. All of the Above
F. None of the Above

7. Do not permit humans and pets to _____surfaces until dry.

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

8. 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. All of the Above except A
F. None of the Above

9. Keep all _____, out of reach of children and do not contaminate food, feed and water.

A. Mechanical alterations
B. Distribution of insecticide
C. A and B
D. Pesticides in original containers
E. Termite treatment(s)
F. None of the Above

Pre-Construction Treatment

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

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

11. 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. Apply insecticides
C. A and D
D. Establish a chemical barrier
E. Penetrating spray
F. None of the Above

12. 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. All of the Above
F. None of the Above

13. Treat crawl space areas either by _____.

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

14. 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. All of the Above
F. None of the Above

Post-Construction Treatment

15. 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. All of the Above
F. None of the Above

16. 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. All of the Above
F. None of the Above

17. 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. All of the Above
F. None of the Above

Building on Slab

18. _____ 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. B and C
F. None of the Above

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

A. Injecting the insecticide
B. Drilling
C. Digging a narrow and shallow trench
D. Broadcast insecticide spraying
E. All of the Above
F. None of the Above

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

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

21. _____ 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
C. Cover treated soil in the trench
D. Broadcast insecticide spray
E. All of the Above
F. None of the Above

22. 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 the insecticide
B. Drill the floor slab or Drilling
C. Plug all holes
D. Broadcast insecticide spray
E. All of the Above
F. None of the Above

Applications
23. Building With a Basement and Crawl Space
Basement: For an interior vertical barrier, _____and space holes about one foot apart.
A. Inject insecticide
B. Drill the floor slab or Drilling
C. Space rod holes
D. Broadcast insecticide spray
E. A and B
F. None of the Above

24. _____ 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
B. Drilling
C. Space rod holes
D. Broadcast insecticide spray
E. All of the Above except D
F. None of the Above

25. 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
C. Space rod holes
D. Broadcast insecticide spray
E. All of the Above
F. None of the Above

Spider Section

(S) means the answer may be plural or singular. There are no intentional trick questions. Please provide the answer as exactly in the text. If you need assistance, please e-mail us your concern

Chelicerata

1. _____, which is called a subphylum here for convenience, but which called a phylum in some texts, is an extremely ancient group of arthropods, including the extinct Eurypterida.

A. Metaphidippus
B. Mites and ticks
C. Crabs
D. Arthropod groups
E. The Chelicerata
F. None of the Above

Spider Introduction

2. On the underside of the head (the cephalic part of the cephalothorax) are two pairs of appendages, the anterior pair called_____, and the second pair pedipalps, with which the spider captures and paralyzes its prey, injecting into it venom produced in the poison glands.

A. Digestive gland
B. Cephalothorax
C. Pedipalp(s)
D. Chelicerae
E. Poison gland(s)
F. None of the Above

Spider's Life
Biology

3. Spiders range in size from less than 1.0 mm (0.04 in) to more than 10 cm (4 in) in length, with a leg span of up to 20 cm (8 in). A spider's body is divided into two parts: the front portion, called the _____or cephalothorax, and the rear portion, called the opisthosoma or abdomen. A narrow stalk called the pedicel connects these two parts.

A. Digestive gland
B. Cuticle
C. Pedipalp(s)
D. Prosoma
E. Poison gland(s)
F. None of the Above

Poison Glands

4. Most spiders have a pair of poison glands that lie within the cephalothorax. Each bulblike poison gland produces and stores toxin. A muscle spirals around the gland. When this muscle contracts, it squeezes poison from the gland through a duct into the fangs of the_____, which then pass the poison into the prey.

A. Chelicerae
B. Cephalothorax
C. Pedipalp(s)
D. Cephalothorax cuticle
E. Poison gland(s)
F. None of the Above

Spider Reproduction

5. The male spider has two sperm-producing testes. A sexually mature male spider uses its large palps to transfer sperm cells into the female during mating. In this process, the male builds a small, triangular sperm web, onto which he deposits_____.

A. Pheromones
B. A drop of sperm from his abdomen
C. Egg cells or Eggs
D. Vibrations
E. Female's egg cells
F. None of the Above

Life Cycle

6. The life cycle of the spider consists of four stages: egg, larva, young spider, (known as a nymph or spiderling), and_____. Like insects, spiders grow only by molting, a process that involves periodically shedding their exoskeleton. In each molting stage, young spiderlings resemble tiny adults, a process known as incomplete metamorphosis.

A. Cocoon
B. Egg cells or Eggs
C. Adult
D. Larvae
E. Nymph
F. None of the Above

Development and Growth

7. In order to grow to an adult size, spiderlings undergo a series of molts that enables them to increase in size. During molting, the _____slowly lifts off, while a thin new cuticle forms underneath. The new cuticle is wrinkled and pliable at first, but as molting progresses and the spiderling grows, the new cuticle stretches to accommodate the larger spiderling body.

A. Chelicerae
B. Cephalothorax
C. Pedipalp(s)
D. Cephalothorax cuticle
E. Old cuticle
F. None of the Above

Types of Spider Webs

8. Many spider webs are found near the ground or in low vegetation, although orb webs often span the open spaces between bushes or trees in order to trap flying insects. The size of a web depends on the size of the spider. Whether the web has _____ depends on the size of the prey the spider expects to capture.

A. Silk web(s)
B. Horizontal silk sheet with a dome
C. A tight or wide mesh
D. Raised tube in the corner
E. Flimsy webs
F. None of the Above

Web Building

9. The spider then climbs to the midpoint of the Y-structure, known as the hub, and begins creating radius lines, or spokes, around the web. As the spider builds radius lines, it connects these lines with a few narrow circles of thread in the center of the web that forms the auxiliary spiral. _____prevents radius lines from sagging when the spider walks on them. Using the auxiliary spiral as scaffolding, the spider begins the formation of the catching spiral, fastening sticky threads to each radius line. As the spider constructs the catching spiral, it dismantles the auxiliary spiral.

A. The auxiliary spiral
B. A complex process
C. Spinning a thread
D. Forming a Y-shaped structure
E. The initial three center spiral threads
F. None of the Above

Constructing an Orb Web

10. Once the web is completed, the spider will chew of the initial three center spiral threads then sit and wait for its prey. During construction, if the web becomes broken but without structural damage, the spider will not initially attempt to fix the problem. After having made the web, the spider will wait on or near the web for its prey to fall victim to its sticky trap. Once its prey has become trapped, the spider will _____from the impact and then the struggle.

A. Initially feel the vibrations
B. A complex process
C. Spinning a thread
D. Form a Y-shaped structure
E. Chew of the initial three center spiral threads
F. None of the Above

Two Primary Spider Groups

11. _____construct webs in rather quiet, undisturbed places to capture their food. They live in or near their web and wait for food to come to them. They generally have poor eyesight and rely on sensing vibrations in their web to detect prey.

A. Hobo spider(s)
B. House spider(s)
C. Orb-Weaving Spider(s)
D. Pirate spider(s)
E. Web-building spiders
F. None of the Above

Jumping Spiders

12. Are common spiders outdoors and indoors. They are active during the day and are often found around windows, ceilings, walls, and other areas exposed to sunlight. _____ are generally small to medium-sized (about 1/5 - 1/2 inch long) and compact-looking. They are usually dark-colored with white markings, although some can be brightly colored, including some with iridescent mouthparts.

A. Brown recluse spider(s)
B. Jumping spider(s)
C. Trap-Door Spider(s)
D. Garden spider(s)
E. Hobo spider(s)
F. None of the Above

Ground Spiders

Crab Spider

13. _____are dark or tan; some are lightly colored orange, yellow or creamy white. Their legs extend out from their sides causing them to scuttle back and forth in a crab-like fashion. These spiders hide in flower blossoms and may be brought inside in cut flowers.

A. Small crab spider(s)
B. Jumping spider(s)
C. Trap-Door Spider(s)
D. Garden spider(s)
E. Hobo spider(s)
F. None of the Above

Black Widow Spider

14. The female _____rarely leaves her web. The web she constructs is an irregular, tangled, crisscross web of rather coarse silk. The core of the web is almost funnel shaped, woven into a silken tunnel in which the female spider spends the majority of her daylight hours.

A. Brown recluse spider(s)
B. Jumping spider(s)
C. Trap-Door Spider(s)
D. Garden spider(s)
E. Black widow spider(s)
F. None of the Above

Cyphophthalmi

15. The Cyphophthalmi are a suborder of harvestmen, with about 36 genera, and more than hundred described species. The six families are currently grouped into two infraorders, the Tropicophthalmi and the Temperophthalmi; however, these are not supported by modern phylogenetic analysis. They are smaller than the more familiar _____, with adults ranging from 1 to 6mm, including legs.

A. Hobo spider(s)
B. House spider(s)
C. Orb-Weaving Spider(s)
D. Pirate spider(s)
E. All spiders
F. None of the Above

(S) means the answer may be plural or singular. There are no intentional trick questions. Please provide the answer as exactly in the text. If you need assistance, please e-mail us your concern.

16. Bites most often occur when the spider is engaging in defense while trapped against the skin, such as when the person is putting on clothes the recluse is inside of, or when the person while sleeping rolls over against the recluse. However, bug spray and other chemicals intended to repel or kill arthropods that do not kill the recluse will cause its nervous system to break down partially, inducing_____.

A. Painless bite
B. Nasty bite
C. Spider venom
D. A burning sensation develop(s)
E. Undesirable aggressive behavior
F. None of the Above

Mygalomorphae

17. Almost all species of Mygalomorphae have eight eyes, however there are some with fewer (Masteria lewisi has only six eyes). They have ample venom glands that lie entirely within their chelicerae, but only spiders of the _____ can be really harmful to humans. Their chelicerae and fangs are large and powerful. Occasionally members of this suborder will even kill small fish, small mammals, and the like. While the world's biggest spiders are mygalomorphs - Theraphosa blondi (Latreille, 1804) has a body length of 10 cm, and a leg span of 28 cm - some species are less than one millimeter long.

A. Solifugae
B. Australasian funnel-web spiders
C. Araneomorphae
D. Mygalomorphae
E. Australian genus Atrax
F. None of the Above

18. Unlike Araneomorphae, which die after about a year, _____ can live for up to 25 years, and some don't reach maturity until they are about six years old. Some flies in the family Acroceridae which are endoparasites of mygalomorphs may remain dormant in the book lungs for as long as 20 years before beginning their development and consuming the spider.

A. Solifugae
B. Australasian funnel-web spiders
C. Araneomorphae
D. Mygalomorphae
E. Theraphosa blondi
F. None of the Above

Trap-Door Spiders

19. Venom toxicity - the bite of the _____ is of low risk (non-toxic) to humans. It is a non-aggressive spider - usually timid but may stand up and present its fangs if harassed. Rarely bites - but if so it can be painful.

A. Brown recluse spider(s)
B. Jumping spider(s)
C. Trap-Door Spider(s)
D. Garden spider(s)
E. Hobo spider(s)
F. None of the Above

House Spider

20. _____are found throughout Europe and North America. This spider is so named because its horizontal sheet web is often seen in wall corners of houses, but it can also be found in any cool, dark place, such as dense vegetation or crevices of logs or rocks. The spider's web forms a tube, and the narrowed end serves as a retreat where the spider can hide. When an insect walks over the sheet web, the spider immediately rushes out from the funnel, grabs its victim, and delivers a poisonous bite. The spider then carries its prey back to its retreat, where it begins to feed.

A. Hobo spider(s)
B. House spider(s)
C. Orb-Weaving Spider(s)
D. Pirate spider(s)
E. All spiders
F. None of the Above

Garden Spiders

21. Garden spiders belong to the family Araneidae, a group of 2,500 different species of spiders that weave orb, or circular, webs. Marked with varying shades of brown, _____ have a distinctive white cross on their abdomens, and some people refer to them as cross spiders. They are found throughout the continental United States, Canada, and Mexico. Some species are found in Europe and Hawaii.

A. Brown recluse spider(s) D. Garden spider(s)
B. Jumping spider(s) E. Hobo spider(s)
C. Trap-Door Spider(s) F. None of the Above

Hobo Spider Information

22. The hobo spider is a member of the funnel-web spider family _____. Funnel-web spiders are long-legged, swift-running spiders that build funnel or tube-shaped retreats. The hobo spider runs at an average speed of about 0.45 meters (17 inches) per second, with a maximum speed of about 1.1 meters (40 inches) per second.

A. Solifugae D. Mygalomorphae
B. Uloboridae E. Agelenidae
C. Araneomorphae F. None of the Above

Spider Bite Section

23. All spiders (except the family _____) have venom glands, but not all are venomous to man. In fact very few species pose a threat to man. Some spider bites might need medical attention even if the species is recognized as not being venomous to man, as secondary infections can occur.

A. Solifugae D. Mygalomorphae
B. Uloboridae E. Agelenidae
C. Araneomorphae F. None of the Above

24. Spider venom, like_____, is generally either neurotoxic or cytotoxic. Generally, it is the web dwellers that have neurotoxic venom, and the non-web dwellers have the cytotoxic venom.

A. A painless bite D. A burning sensation
B. A nasty bite E. Snakebite venom
C. Scorpian venom F. None of the Above

Jumping Spiders

25. The _____is probably the most common biting spider in the United States. People are caught by surprise and scared when they see the spider jump, especially if it jumps towards them. Bites from a jumping spider are painful, itchy and cause redness and significant swelling. Other symptoms may include painful muscles and joints, headache, fever, chills, nausea and vomiting. The symptoms usually last about 1-4 days.

A. Brown recluse spider(s) D. Garden spider(s)
B. Jumping spider(s) E. Hobo spider(s)
C. Trap-Door Spider(s) F. None of the Above

Bark Beetle Section

1. This insect is a large caterpillars that grow to almost three inches long. They mine the heart wood of trees. They attack poplars and cottonwoods and can attack many other trees as well.

A. Bark beetle adults
B. Termite
C. Carpenter worm
D. Shot-hole borer
E. Clear-winged moth larva
F. None of the Above

2. This insect can extensively mine limbs of susceptible trees. Poplars, willow, and cottonwood trees are hosts of several species.

A. Bark beetle adults
B. Poplar borer
C. Ants
D. Termites
E. Clear-winged moth larva
F. None of the Above

3. This insect is a pest because it mines in the ends of the new twigs of fruit trees and ornamental fruit trees. The new twigs start to grow and then wilt because these larvae are tunneling down the center of them. Adults are small grey moths.

A. Black moth
B. Woody moth
C. Carpenter moth
D. Peach twig borer larva
E. Clear-winged moth larva
F. None of the Above

4. 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. Locust moth
F. None of the Above

5. 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. Wasp larva
E. Locust borer adult
F. None of the Above

6. 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. Locust borer larva
F. None of the Above

7. 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. Pine sawyer larva
D. Poplar borer larva
E. Locust borer adult
F. None of the Above

8. 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. Pine sawyer larva
E. Poplar and willow borer larva
F. None of the Above

9. 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. Poplar and willow borer larva
F. None of the Above

10. 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. Pine sawyer adult
E. Poplar and willow borer larva
F. None of the Above

11. 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. Poplar and willow borer larva
F. None of the Above

12. The larvae mine the sapwood. Swollen areas on limbs show where the larvae feed and frass can be seen being forced out of holes in the bark as the larva feeds.

A. California laurel borer larva
B. Bronze birch borer larva
C. Red headed ash borer larva
D. Pine sawyer larva
E. Poplar and willow borer larva
F. None of the Above

13. This insect is a serious pest of Poplar tree. Adults emerge and are around from June through August.

A. California laurel borer adult
B. Bronze birch borer adult
C. Red headed ash borer adult
D. Pine sawyer adult
E. Poplar borer
F. None of the Above

14. Although not true borers, this insect attacks several evergreen trees. The adults usually emerge in mid-summer and lay eggs.

A. Bark beetle adults
B. Poplar borer
C. Carpenter bee
D. Shot-hole borer
E. Ips Beetle larva
F. None of the Above

15. This insect attacks weakened or dead trees and shrubs. They feed deeper in the wood than bark beetles. The larvae are legless grubs.

A. Bark beetle adults
B. Poplar borer
C. Carpenter bee
D. Shot-hole borer
E. Termite
F. None of the Above

16. There are many bark beetle genera, of which the most important with respect to forest damage are Dendroctanus, Pitch, and Acolytes.
A. True
B. False

17. Adult bark beetles bore through the inner cambial to the outer bark layer, where they channel in galleries in which to lay eggs.
A. True
B. False

18. Pine bark beetles in Arizona are generally of the genus Ips or Dendroctonus. However, several other genera also attack pine, including: Hylastes, Hylurgops, and Pityogenes.
A. True
B. False

19. Often several species will attack at the same time. Identification of specific beetle species can be difficult. Identification can be aided by knowing the host species attacked, time of year, and the design of the galleries (tunnels) created by the adults and larvae.
A. True
B. False

20. Bark beetles contribute to the death of thousands of ponderosa pines in Arizona each year. Most often when larger trees are attacked and killed they have been weakened by drought, lightning, construction activity or they have been growing on poor sites. Of special concern is the loss of high-value trees at home sites or in developed recreation areas.
A. True
B. False

21. Increased foliage in the tree is often the first sign of a beetle attack.
A. True
B. False

22. Trees attacked by Ips spp. Typically fade from the bottom of the tree, upwards while Dendroctonus spp. killed trees fade from the crown downwards. The needles change from green to a light green color within a few weeks to one year after attack and eventually become brown or red.
A. True
B. False

23. Dust caused by boring in the bark crevices and at the tree base is another sign of Bark Beetles.
A. True
B. False

24. Often, numerous small pitch tubes (globules of pitch ³.. to 1 ¹.." diameter) appear on the trunk of infested trees. The pitch tubes generally have a creamy appearance, much like crystallized honey.
A. True
B. False

25. A black tint may be present in the pitch. The presence of one or two pitch tubes means that a beetle was successful. Often a few pitch tubes can indicate that the tree unsuccessfully repelled the attacking beetle. Clear sap that runs down the bole (trunk) or limbs is generally from bark beetles.

A. True
B. False

Tick Section

(S) means the answer may be plural or singular in nature. Or means either answer may work.

1. More than 800 species of these obligate blood-sucking creatures inhabit the planet. They are second only to mosquitoes as vectors of human disease,_____.

A. Including pparasitic mechanisms
B. Which are vectors of human disease
C. Causing allergic reaction(s)
D. Both infectious and toxic
E. And many serious diseases
F. None of the Above

2. In Ixodidae nymphs and adults, a prominent capitulum (head) projects forwards from the body; in the Argasidae, conversely, the capitulum is concealed beneath the_____.

A. Idiosoma
B. Head
C. Body
D. Scutum
E. Ecdysis
F. None of the Above

3. When larvae emerge, they feed primarily on small mammals and birds. After feeding, they detach from their host and molt to _____ on the ground, which then feed on larger hosts and molt to adults. Female adults attach to larger hosts, feed, and lay eggs, while males feed very little and occupy larger hosts primarily for mating

A. Nymph(s)
B. Both male and female adults
C. Larvae
D. The adult female
E. Several nymphal stages
F. None of the Above

4. Soft ticks have no hard shell (Scutum). In the United States, only ticks of the genus Ornithodoros transmit human disease, namely, relapsing fever.

A. Argasidae or Argasid
B. Ornithodoros
C. Ixodidae
D. Antricola, Argas, Nothaspis, Ornithodoros, and Otobius
E. Dermacentor
F. None of the Above

5. _____ feed on blood, and they mate off the host. During feeding, any excess fluid is excreted by the coxal glands, a process which is unique to argasid ticks

A. Nymph(s)
B. Both male and female adults
C. Larvae
D. The adult female
E. Several nymphal stages
F. None of the Above

Ixodidae

6. Ixodid ticks require three hosts, and their life cycle takes at least one year to complete. Up to 3,000 eggs are laid on the ground by _____ tick.

A. Nymph(s)
B. Both male and female adults
C. An adult female
D. The female
E. Several nymphal stages
F. None of the Above

7. All ticks have an incomplete metamorphosis: after hatching from the egg a series of similar stages (instars) develop from a_____, to eight legged nymph and then a sexually developed eight legged adult.

A. Feeding
B. Six legged larva
C. Seven instar
D. An incomplete metamorphosis
E. Hematophagy
F. None of the Above

8. Between each stage there is a molt (ecdysis) which enables the developing tick to expand within a new_____.

A. Idiosoma
B. Capitulum (head)
C. Coxae
D. External skeleton
E. Haller's organ
F. None of the Above

Argasidae

9. Nymphs may go through as many as seven instars, each requiring a blood meal. Both male and female adults feed on blood, and they mate off the host. During feeding, any excess fluid is excreted by the_____, a process which is unique to argasid ticks

A. Idiosoma
B. Capitulum
C. Coxae
D. Coxal glands
E. Haller's organ
F. None of the Above

General Characteristics and Habits of Hard Ticks (Family Ixodidae)

10. The _____ lie behind the fourth pair of coxae, or basal segments of the leg.

A. Idiosoma
B. Capitulum
C. Coxae
D. Spiracles
E. Scutum
F. None of the Above

Tick Life Cycle

Deer Tick Life Cycle

11. The deer tick passes through four life stages (egg, larva, nymph, adult), over a _____

A. Two month period
B. Three month period
C. Season
D. Two year period
E. Three year period
F. None of the Above

Egg to Larvae

12. Eggs are fertilized in the fall and deposited in leaf litter the following_____. They emerge as larvae in late summer of that year, seeking their first blood meal. The tiny larva crawls around the forest floor and onto low-lying vegetation looking for an appropriate host.

A. Summer
B. Month
C. Full moon
D. Spring
E. Year
F. None of the Above

13. The larvae then drop off their host into the leaf litter where they molt into the next stage, the nymph, remaining dormant until the following _____.

A. Summer
B. Month
C. Full moon
D. Spring
E. Year
F. None of the Above

Larvae to Nymph

14. During the spring and early summer of the next year the nymphs end their dormancy and begin to seek a host. _____ are commonly found on the forest floor in leaf litter and on low lying vegetation. Their host primarily consists of mice and other rodents, deer, birds and unfortunately humans.

A. Nymph(s)
B. Male and female adults
C. Seven instars
D. Females
E. Larvae
F. None of the Above

Nymph to Adult

15. Over the next few months the nymph molts into the larger adult tick, which emerges in fall, with a peak in October through November. _____find and feed on a host, then the females lay eggs sometime after feeding.

A. Nymph(s)
B. Both male and female adults
C. Seven instars
D. Females
E. Larvae
F. None of the Above

Adult Ticks

16. In the fall of the second year, nymphs molt into adult ticks. Female adults are _____and larger than males.

A. Red or orange
B. Brown
C. Seven instars
D. Black
E. Black and red
F. None of the Above

17. As female ticks feed over the course of several days, their bodies slowly enlarge with blood (engorge). Adult females infected with disease agents as _____may transmit disease during this feeding.

A. Nymph(s)
B. Both male and female adults
C. Larvae or nymphs
D. The adult female
E. Several nymphal stages
F. None of the Above

18. _____ticks attach, but do not feed or become engorged. Because the adult males do not take a blood meal, they do not transmit Lyme disease, human anaplasmosis, or babesiosis.

A. Nymph(s)
B. Both male and female adults
C. Male
D. The adult female
E. Several nymphal stage
F. None of the Above

Lone Star Tick Amblyomma americanum

19. Each female produces 3,000-8,000 eggs, which are deposited under leaf and soil litter in middle to late spring.

A. Both male and female adults
B. All life stages
C. Oviposition
D. Four life stages
E. Dormant until the following spring
F. None of the Above

Winter Tick Dermacentor albipictus

20. _____is found throughout North America. It is widely distributed throughout California, but populations are concentrated around the central coastal and sierra foothill areas.

A. This two host tick
B. This no host tick
C. This three host tick
D. This one host tick
E. Human-biting tick with a broad host range
F. None of the Above

Mites

21. The tropical rat mite and the mouse mite come from rodents, whereas the itch mite and follicle mite are permanent residents on _____.

A. Household pests
B. Fleas
C. Rodents or Rats
D. Humans
E. Carpet
F. None of the above

Tropical rat mite (Ornithonyssus bacoti)

22. This mite is associated with rats throughout the U.S., where it also feeds on humans and many other warm-blooded animals. The bite is painful, causing intense itching and a skin irritation known as _____.

A. Grocers' itch
B. Rickettsial pox
C. Rat-mite dermatitis
D. Bulls eye
E. Tick-borne disease
F. None of the above

House mouse mite (Liponissoides sanguineus)

23. This mite in the U.S. is primarily a parasite of mice. It tends to leave its rodent host to wander throughout buildings and bite people. Its major importance is that it has been identified as the vector of _____, a mild and nonfatal human disease.

A. Grocers' itch
B. Rickettsial pox
C. Rat-mite dermatitis
D. Bulls eye
E. Tick-borne disease
F. None of the above

Pyrethroids

24. To mimic the insecticidal activity of the natural compound pyrethrum another class of pesticides, pyrethroid pesticides, has been developed. These are_____, which is a sodium channel modulators, and are much less acutely toxic than organophosphates and carbamates. Compounds in this group are often applied against household pests.

A. Beneficial
B. Allethrin stereoisomers
C. Sodium channel modulators
D. Non-systemic insecticide
E. Isopropanol
F. None of the above

Pyrethroids include:

25. _____, Bifenthrin, Beta-Cyfluthrin, Cyfluthrin, Cypermethrin, Cyphenothrin, Deltamethrin, Esfenvalerate, Fenpropathrin, Tau-Fluvalinate, Lambda-Cyhalothrin, Gamma Cyhalothrin, Imiprothrin, 1RS cis-Permethrin, Permethrin, Prallethrin, Resmethrin, Sumithrin (d-phenothrin), Tefluthrin, Tetramethrin, Tralomethrin, and Zeta-Cypermethrin

A. Beneficial
B. Allethrin stereoisomers
C. Sodium channel modulators
D. Non-systemic insecticide
E. Isopropanol
F. None of the above

Cockroach Section

Common Pest Cockroaches
Life Cycle

1. All roaches have _____in their life cycle -- egg, nymph (young) and adult.

A. Ootheca D. Internode
B. Imago E. Three stages
C. Pedipalps F. None of the Above

Live Everywhere

2. Cockroaches can be present in almost any_____. They move quickly and are especially active at night.

A. Home D. Place inhabited by humans
B. Inside household goods E. Area
C. Business F. None of the Above

3. Characteristically, most roaches _____or between surfaces that provide darkness and cover. Inside buildings, roaches move freely between rooms or adjoining apartments using wall spaces, plumbing and other utility installations.

A. Live in cracks and crevices D. Molt in cracks and crevices
B. Breed in cracks and crevices E. Hide in cracks and crevices
C. Die in cracks and crevices F. None of the Above

4. They _____in food and beverage boxes, grocery sacks, animal food and other household goods.

A. Cause allergens D. Reject pesticides
B. Love to eat E. Can be carried into structures
C. Are especially active at night F. None of the Above

5. Cockroaches can eat almost anything, but they are especially partial to starchy foods and meat products. They feed on such diverse items as cereals, pastries, chocolate, milk products, beverages, cooked potatoes, glue, _____, wall paper, animal food, fresh or dried blood, excrement, dead animals and leather products.

A. Allergens D. Vegetables
B. Book bindings E. Starchy foods and meat products
C. Bait Gel F. None of the Above

6. Common pest cockroaches include the American, German, Oriental, Madeira, and _____.

A. Asian D. Brown-banded
B. American E. Oriental
C. Madeira F. None of the Above

7. The _____ cockroach began to cause concern in the United States when it appeared in large numbers in Florida in the late 1980s.

A. Asian D. German
B. American E. Oriental
C. Madeira F. None of the Above

8. All but the _____ cockroach are introduced species to North America.
A. Asian D. German
B. American E. Oriental
C. Madeira F. None of the Above

Damage
9. Disease Transmission. Cockroaches can carry _____that cause human diseases, including food poisoning, dysentery and diarrhea. However, roaches have not been associated with serious disease outbreaks in the United States.
A. Allergen(s) D. Germs
B. Organisms E. Pathogen(s)
C. Repulsive odor F. None of the Above

Allergy
10. Roaches can cause _____in some people. The response is caused by roach "allergen" that is ingested with contaminated food or inhaled when dried fecal particles and fragments of ground-up bodies of dead roaches are mixed with house dust.
A. Allergens D. Considerable psychological or emotional distress
B. Mutations E. Disease
C. Allergic reactions F. None of the Above

Anxiety
11. The _____of cockroaches can cause considerable psychological or emotional distress in some individuals.
A. Sight D. Considerable psychological or emotional distress
B. Odor E. Long lasting view
C. Smell F. None of the Above

12. Cockroaches usually do not bite, but their heavy leg spines_____.
A. Will poke D. Will cause considerable psychological or emotional distress
B. May scratch E. Are not a threat
C. Have sharp edges F. None of the Above

Scientific Classification
13. Cockroaches make up the order Blattodea, which contains_____.
A. Family Blattidae D. Five families
B. Madeira cockroach E. Gromphadorina portentosa
C. Cryptocercidae F. None of the Above

14. The American cockroach is_____, and the Oriental cockroach is Blatta orientalis, both in the family Blattidae.
A. Family Blattidae D. Blatella germanica
B. Madeira cockroach E. Gromphadorina portentosa
C. Periplaneta americana F. None of the Above

15. The German cockroach, Blatella germanica, the Asian cockroach, _____, and the brownbanded cockroach, Supella longipalpa, are in the family Blatellidae.
A. Family Blattidae D. Blatella germanica
B. Madeira cockroach E. Blatella asahinai
C. Cryptocercidae F. None of the Above

German Cockroach

16. The German cockroach is the most common and the most difficult to control. Both adults and nymphs are _____and have two longitudinal dark lines on their thorax (back).

A. General in appearance
B. Instars
C. Light brown
D. Have two longitudinal dark lines on their thorax (back)
E. Black
F. None of the Above

17. Adults are 1/2 to 3/4 inch long, and both males and females have _____as long as the body.

A. Antennas
B. Wings
C. Eggs
D. Two longitudinal dark lines on their thorax (back)
E. Legs
F. None of the Above

18. _____ are similar in general appearance, but lack wings and may be as small as 1/8 inch.

A. Instars
B. Filiforms
C. Immature stages
D. Two longitudinal dark lines on their thorax (back)
E. Nymph(s)
F. None of the Above

19. The adult German cockroach is about 5/8 inch long, overall light brown in color with wings that cover the_____.

A. Internode
B. Dealates
C. Proboscis
D. Abdomen
E. Furculum
F. None of the Above

20. The _____just behind the head (pronotum) is marked with two prominent black stripes.

A. Osmeterium
B. Thoracic shield
C. Scutellum
D. Wings
E. Poikilotherm
F. None of the Above

21. Compared to the _____, it is more active during daylight hours and will be found around lights. They also are known to fly when disturbed.

A. German cockroach
B. Field cockroach
C. Banded
D. Brownbanded cockroach
E. Nymphs
F. None of the Above

22. The _____, Supella longipalpa (Fabricius) is about the same size as the German cockroach, but appear " banded" because the wings are marked with a pale brown band at the base and another about a third of the distance from the base.

A. German cockroach
B. Field cockroach
C. Banded
D. Brownbanded cockroach
E. Nymphs
F. None of the Above

23. _____ produce an egg capsule that is attached to the end of the abdomen for up to a month before being dropped a day or so before eggs hatch.

A. German cockroach
B. Field cockroach
C. Banded
D. Brownbanded cockroach
E. Nymphs
F. None of the Above

24. German cockroaches are mainly active at night, when they _____for food and water.

A. Search
B. Frass
C. Detritivore
D. Mesophyll
E. Roset
F. None of the Above

25. One of the most common household cockroach pests in the U.S.; presence in homes is a nuisance and they may spread food contaminants. Some people have _____ to cockroaches or cockroach residues (e.g., feces, body extracts).

A. Infinity
B. Attraction
C. Allergic reactions
D. Desire
E. Move immediately from
F. None of the Above

Pesticide Applicator Section

1. Rinsate from the containers, when added directly into the_____, efficiently and economically uses all pesticide in the container. This eliminates the need to store and later dispose of the rinsate.

A. Sprayer tank D. Potential source of pesticide exposure
B. Ground water E. Pesticide container recycling
C. Disposed of F. None of the Above

2. Unless rinsed from the container immediately, _____ will solidify and become difficult to remove.

A. Contamination D. Some pesticides
B. Rinsing E. Environmental practice
C. Pesticide containers F. None of the Above

3. _____containers removes a potential source of pesticide exposure to people, animals, and wildlife.

A. Rinsate D. Potential source of pesticide exposure
B. Rinsing E. Pesticide container recycling
C. Disposed of F. None of the Above

4. _____ is required by federal and state regulations and is a good, sound agricultural and environmental practice.

A. Contamination D. Some pesticides
B. Rinsing E. Proper rinsing
C. Pesticide containers F. None of the Above

Rinsing Helps Protect the Environment

5. _____reduces a potential source of contamination of soil, surface, and ground water.

A. Rinsate D. Potential source of pesticide exposure
B. Proper rinsing of pesticide containers E. Pesticide container recycling
C. Disposed of F. None of the Above

6. When contamination occurs, plants and animals may be harmed and water supplies affected. Prevention of environmental contamination is always better than cleanup. _____also helps in reducing the problem of handling pesticide wastes.

A. Contamination D. Some pesticides
B. Rinsing E. Environmental practice
C. Pesticide containers F. None of the Above

7. No matter how an empty pesticide container is disposed of**,** it must be properly_____ .

A. Rinsate D. Rinsed and triple punched
B. Ground water E. Pesticide container recycling
C. Disposed of F. None of the Above

8. Both federal and state laws require rinsing. Landfill operators and recyclers can only accept_____ .

A. Contamination
B. Properly rinsed containers
C. Pesticide containers
D. Some pesticides
E. Environmental practice
F. None of the Above

9. Pesticide containers should only be offered to recycling projects designed for pesticide containers and not general plastic and metal recycling programs. _____ project personnel will inspect containers to determine if they have been properly rinsed.

A. Rinsate
B. Ground water
C. Disposed of
D. Potential source of pesticide exposure
E. Pesticide container recycling
F. None of the Above

Federal Pesticide Recordkeeping Requirements

10. The EPA currently requires certified commercial applicators to keep records under regulations implementing the Federal Insecticide, Fungicide, and Rodenticide Act (**FIFRA**). The EPA is prohibited from requiring certified private applicators to maintain _____. However, some individual States require certified private applicators to maintain records.

A. Location of the application
B. Record(s)
C. EPA registration number
D. Spot application(s)
E. Restricted use pesticide
F. None of the Above

The recordkeeping requirements are:

11. The brand or product name, and the _____ of the restricted use pesticide that was applied;

A. Location of the application
B. Record(s)
C. EPA registration number
D. Spot application(s)
E. Restricted use pesticide
F. None of the Above

12. The total amount of the _____ applied;

A. Location of the application
B. Record(s)
C. EPA registration number
D. Spot application(s)
E. Restricted use pesticide
F. None of the Above

13. The location of the application, the_____ , and the crop, commodity, stored product, or site to which a restricted use pesticide was applied;

A. Size of area treated
B. Record(s)
C. EPA registration number
D. Spot application(s)
E. Restricted use pesticide
F. None of the Above

14. The name and certification number (if applicable) of the certified applicator who applied or who supervised the application of the _____.

A. Location of the application
B. Record(s)
C. EPA registration number
D. Spot application(s)
E. Restricted use pesticide
F. None of the Above

15. The _____were amended to require a more detailed description of the location of a "spot application."

A. Location of the application
B. Record(s)
C. EPA registration number
D. Regulations
E. Restricted use pesticide
F. None of the Above

16. _____ must be recorded with the following information: Brand or product name and EPA registration number; total amount applied; location must be designated as "spot application," followed by a concise description of the location.

A. Location of the application
B. Record(s)
C. EPA registration number
D. Spot application(s)
E. Restricted use pesticide
F. None of the Above

17. When working with _____is long sleeves, long pants, shoes and socks, rubber gloves, and splash-proof eye protection, regardless of the toxicity level of the pesticide.

A. ANSI standard Z87.1, 1968
B. Chronic exposure
C. Pesticides
D. Toxicity level of the pesticide
E. Highly toxic pesticides
F. None of the Above

18. Rubber boots and a respirator are necessary when working with moderately or highly toxic pesticides. The _____ include wearing a double layer of clothing. This can be accomplished by wearing coveralls over the long pants and longsleeve shirt, and rubber boots over the shoes and socks.

A. EPA's recommendation(s)
B. Acidity of a pesticide
C. Runoff pesticide
D. Mixing or applying pesticides
E. Contaminate the wearer
F. None of the Above

19. The use of gloves is _____ when working with highly toxic pesticides. It is recommended that only unlined rubber or neoprene (nitrile, etc.) gloves be used when handling or using all pesticides. Unlined gloves should be thoroughly washed (inside and outside) after each use.

A. ANSI standard Z87.1, 1968
B. Chronic exposure
C. Guidance
D. Toxicity level of the pesticide
E. Mandatory
F. None of the Above

20. Gloves should be at least 12 inches long to provide _____ for wrists and the cuffs should be inside sleeves for most work. This will keep runoff pesticide from getting into the gloves. However when working overhead put the cuffs of gloves outside sleeves.

A. EPA's recommendation(s)
B. Acidity of a pesticide
C. Runoff pesticide
D. Mixing or applying pesticides
E. Adequate protection
F. None of the Above

Goggles and Face Shields

21. It is necessary to wear splash-proof goggles when working with pesticides. Not only can the pesticide be absorbed through the eyes but the _____ can cause permanent eye injuries also.

A. EPA's recommendation(s)
B. Acidity of a pesticide
C. Runoff pesticide
D. Mixing or applying pesticides
E. Contaminate the wearer
F. None of the Above

22. Use goggles meeting or exceeding _____ estimate. When pouring or mixing concentrates it is preferable to use a full-face shield to protect the face from splashes. Always wash the goggles or face shield with soap and water after use.

A. ANSI standard Z87.1, 1968
B. Chronic exposure
C. Guidance
D. Toxicity level of the pesticide
E. Highly toxic pesticides
F. None of the Above

23. Unlined rubber or neoprene (nitrile, etc.) boots should be worn over work shoes or in place of work shoes when mixing or applying pesticides. Pull the legs of trousers over the tops of boots to help prevent _____ from getting inside boots. Wash boots with soap and water after each use.

A. Spilled pesticide
B. Acidity of a pesticide
C. Runoff pesticide
D. Mixing or applying pesticides
E. Contaminate the wearer
F. None of the Above

24. Cloth or leather boots will absorb pesticides and allow the pesticide to contact the skin of the leg or foot and will be a source of residues causing _____.

A. ANSI standard Z87.1, 1968
B. Chronic exposure
C. Guidance
D. Toxicity level of the pesticide
E. Highly toxic pesticides
F. None of the Above

25. Plastic safety hats are ideal for use with pesticides and should be washed in soap and water after each use. Cloth hats may absorb _____ the wearer.

A. EPA's recommendation(s)
B. Acidity of a pesticide
C. Runoff pesticide
D. Mixing or applying pesticides
E. Pesticides and contaminate
F. None of the Above