

**Registration form**

**Spider Control CEU Training \$100.00**  
**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 and 4. Signature is required.  
You can electronically sign with XXX

**Signature** \_\_\_\_\_

**Address:** \_\_\_\_\_

**City** \_\_\_\_\_ **State** \_\_\_\_\_ **Zip** \_\_\_\_\_

**Email** \_\_\_\_\_ **Phone ( )** \_\_\_\_\_

**Work ( )** \_\_\_\_\_ **Fax ( )** \_\_\_\_\_

**License or App. ID #** \_\_\_\_\_ **Exp. Date** \_\_\_\_\_

**Class/Grade** \_\_\_\_\_

**Please circle which certification you are applying the course CEU's/PDH'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 Back-up Fax (928) 468-0675**  
**info@tlch2o.com Visit us on the web at [www.abctlc.com](http://www.abctlc.com)**

**Customer Sales ID Number 4 or 5 digit code** \_\_\_\_\_

**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.**

## **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 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.

**State Approval Listing Link**, check to see if your State accepts or has pre-approved this course. Not all States are listed. Not all courses are listed. If the course is not accepted for CEU credit, we will give you the course free if you ask your State to accept it for credit.

## **State Approval Listing URL...**

<http://www.tlch2o.com/downloads/PDF/CEU%20State%20Approvals.pdf>

*You can obtain a printed version of the course manual from TLC for an additional \$129.95 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.

Thank you...

**CUSTOMER SERVICE RESPONSE CARD**

**Spider 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?

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Any other concerns or comments.

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## 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**

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### **Grading Information**

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## Spider Control CEU Course Answer Key

Name \_\_\_\_\_

Telephone \_\_\_\_\_

You are responsible to ensure that this course is accepted for credit by your State. No refunds. 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? \_\_\_\_\_

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

**Multiple Choice. Pick only one answer per question.**

**Circle or Mark off or Bold the answer. Please circle the number of the assignment version 1 or 2 or 3 or 4 or 5**

### Topic 1 Arachnid Introduction

Ten Questions

- |            |            |             |
|------------|------------|-------------|
| 1. A B C D | 5. A B C D | 9. A B C D  |
| 2. A B C D | 6. A B C D | 10. A B C D |
| 3. A B C D | 7. A B C D |             |
| 4. A B C D | 8. A B C D |             |

### Topic 2 Spider Identification Section

Ten Questions

- |            |            |             |
|------------|------------|-------------|
| 1. A B C D | 5. A B C D | 9. A B C D  |
| 2. A B C D | 6. A B C D | 10. A B C D |
| 3. A B C D | 7. A B C D |             |
| 4. A B C D | 8. A B C D |             |

### Topic 3 Web Spiders

Ten Questions

- |            |            |             |
|------------|------------|-------------|
| 1. A B C D | 5. A B C D | 9. A B C D  |
| 2. A B C D | 6. A B C D | 10. A B C D |
| 3. A B C D | 7. A B C D |             |
| 4. A B C D | 8. A B C D |             |

### Topic 4 Spider Control Section

Ten Questions

- |            |            |             |
|------------|------------|-------------|
| 1. A B C D | 5. A B C D | 9. A B C D  |
| 2. A B C D | 6. A B C D | 10. A B C D |
| 3. A B C D | 7. A B C D |             |
| 4. A B C D | 8. A B C D |             |

**Complete all the Topical Sections before submitting the answer key**

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

**Must match State Hour Requirement \_\_\_\_\_ (Hours)**

*I understand that I am 100 percent responsible to ensure that TLC receives the Assignment and Registration Key. I understand that TLC has a zero tolerance towards not following their rules, cheating or hostility towards staff or instructors. I need to complete the entire assignment for credit. There is no credit for partial assignment completion. My exam was proctored.*

*I will contact TLC if I do not hear back from them within 2 days of assignment submission. I will forfeit my purchase costs and will not receive credit or a refund if I do not abide with TLC's rules.*

**Please Sign that you understand and will abide with TLC's Rules.**

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**Signature**

## **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.

### **Assignment for Last Names**

*If your last name...*

**A-G Assignment #1 Pages 9-14**

**H-M Assignment #2 Pages 15-20**

**N-S Assignment #3 Pages 21-26**

**T-Z Assignment #4 Pages 27-32**

**Alternative Assignment #5 for repeat students Pages 33-38**

**These exams are frequently rotated.  
Complete all topics before submitting the answers key.**

### **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.





## Spider Control CEU Conventional Assignment #1

You will have 90 days from the start of this course to have successfully completed this CEU assignment with a score of 80%. You may e-mail the answers to TLC, info@tlch2o.com, you can also find a copy of this assignment in Word on the Assignment Page on TLC's website or fax the answers to TLC (928) 468-0675. Write your answers on the Answer Key found in the front of first assignment.

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

### Topic 1 Arachnid Introduction 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.

1. Not all arachnids are spiders.

- A. True      B. False

2. \_\_\_\_\_ includes spiders and scorpions, mites and ticks, horseshoe crabs, daddy-longlegs, and extinct "sea-scorpions", to name a few.

- A. The Chelicerata      C. The Nematodes  
B. The Chaetognatha      D. None of the above

### Spider Introduction

3. The spider then liquefies the tissues of the prey with a digestive fluid and sucks this broth into its \_\_\_\_\_, where it may be stored in a digestive gland.

- A. Digestive gland      C. Stomach  
B. Cephalothorax      D. None of the above

### Spider's Life Biology

4. The \_\_\_\_\_ is strong and stiff, while the cuticle of the abdomen is soft and extensible.

- A. Chelicerae cuticle      C. Cephalothorax cuticle  
B. Pedipalp cuticle      D. None of the above

### Spider Reproduction

5. All species of spiders have two separate sexes, and the males are usually larger than the females.

- A. True      B. False

6. A sexually mature male spider uses its pedipalp cuticle to transfer sperm cells into the female during mating. In this process, the male builds a sperm tower, onto which he deposits a drop of sperm from his abdomen.

- A. True      B. False

### Types of Spider Webs

7. Web patterns vary considerably, depending on the species of spider. Perhaps the most recognizable web is the \_\_\_\_\_, in which an outer framework supports a continuous spiraling thread and a series of threads radiating from the center of the web.

- A. Horizontal silk sheet with a dome
- B. A tight or wide mesh web
- C. Almost circular orb web
- D. None of the above

### Web Building

8. Spiders that weave orb webs generally begin by spinning a thread that is carried by \_\_\_\_\_ until it catches on a tree limb or other firm support. From this thread, the spider lays down another thread to form \_\_\_\_\_ that is the basic framework of the web.

- A. Silk glands or glands - W-shaped structure
- B. Air currents - Y-shaped structure
- C. A raised tube in the corner – X -shaped structure
- D. None of the above

### Constructing an Orb Web

9. After having made the web, the spider will wait on or near the web for its prey to fall victim to its sticky trap.

- A. True
- B. False

### Spider Web Uses

10. Some species of spiders do not use their webs for catching prey directly, some spiders pounce from hiding such as trapdoor spiders, or some chase down their prey such as the wolf spider.

- A. True
- B. False

## Topic 2 Spider Identification 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.

### Two Primary Spider Groups

1. \_\_\_\_\_ 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. Web-building spiders
- C. Pirate spider(s)
- D. None of the above

### Jumping Spiders

2. Jumping spiders are generally small to medium-sized (about 1/5 - 1/2 inch long) and compact-looking. They are usually \_\_\_\_\_ with \_\_\_\_\_, although some can be brightly colored, including some with iridescent mouthparts.

- A. Dark-colored – White markings
- B. Light colored – Dark markings
- C. White-colored – Black markings
- D. None of the above

## Ground Spiders

### Crab Spider

3. Small crab spiders 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. True      B. False

### Brown Recluse Spider

4. The most definitive physical feature of recluse spiders is their eyes: most spiders have \_\_\_\_\_ eyes that typically are arranged in two rows of \_\_\_\_\_, but recluse spiders have \_\_\_\_\_ equal-sized eyes arranged in three pairs.

- A. 6 – 8 -- 3      C. 8 – 4 - 6  
B. 3 – 6 - 8      D. None of the above

### Cyphophthalmi

5. The Cyphophthalmi are a suborder of harvestmen, with about \_\_\_\_\_ genera, and more than \_\_\_\_\_ described species.

- A. 100 - 36      C. 50 - 1000  
B. 36 - 100      D. None of the above

### Mygalomorphae

6. The Mygalomorphae, (also called the Orthognatha), are an infraorder of spiders. The latter name comes from the orientation of the fangs which point straight down and do not cross each other (as opposed to \_\_\_\_\_).

- A. Australasian funnel-web spiders      C. Theraphosa blondi  
B. Araneomorph      D. None of the above

7. Almost all species of Mygalomorphae have \_\_\_\_\_ eyes, however there are some with fewer (Masteria lewisi has only \_\_\_\_\_ eyes).

- A. 6 – 8      C. 8 - 6  
B. 3 - 8      D. None of the above

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

- A. 30 – 6 - 25      C. 25 – 6 - 20  
B. 10 – 3 - 20      D. None of the above

### Solifugae (Sun Spiders or Wind Scorpions)

9. Most Solifugae species live in deserts and feed opportunistically on ground-dwelling arthropods and other animals.

- A. True      B. False

### Vinegarroons

10. The Vinegarroons' acetic acid gives this spray a vinegar-like smell, giving rise to the common name vinegarroon.

- A. True      B. False

### Topic 3 Web Spiders 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.

#### Orb Weaving Spiders

1. Venom toxicity - the bite of Orb-Weaving Spider is of high risk (toxic) to humans.  
A. True      B. False

#### Trap-Door Spiders

2. Venom toxicity - the bite of the Trap-Door Spider 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. True      B. False

#### House Spider

3. 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 \_\_\_\_\_, 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. Sheet web                      C. Oval web  
B. Trap web                        D. None of the above

#### Garden Spiders

4. Garden spiders belong to the family Araneidae, a group of \_\_\_\_\_ different species of spiders that weave orb, or circular, webs.  
A. 36              C. 2,500  
B. 5,000        D. None of the above

#### Hobo Spider Information

5. The hobo spider is a member of the funnel-web spider family \_\_\_\_\_.  
A. Solifugae              C. Agelenidae  
B. Araneomorphae    D. None of the above

#### Spider Bite Section

6. 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. Uloboridae              C. Agelenidae  
B. Araneomorphae    D. None of the above
7. Spider venom, like bee venom, is non-fatal.  
A. True      B. False

8. A patient may also have symptoms from a spider bite such as a red, itchy rash over the torso, arms and legs that is usually seen in the first 24-72 hours. Patients may have pain in the muscles and joints, fever, chills, swollen lymph nodes, headaches, and nausea and vomiting.  
A. True      B. False

9. Cytotoxic venom affects the cellular tissue, usually restricted to the area of the bite, but it can spread. The bite is at first painless, with symptoms developing about 2 to 8 hours after the bite. It starts by resembling a mosquito sting, becoming more painful and swollen. Eventually it ulcerates into a large surface lesion (up to 10 centimeters) that will require medical attention. This type of bite would result from members of the genera \_\_\_\_\_(family Sicariidae) and \_\_\_\_\_(family Miturgidae).  
A. Loxosceles - Cheiracanthium      C. Mygalomorphae - Loxosceles  
B. Loxosceles - Araneomorphae      D. None of the above

### Jumping Spiders

10. 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.  
A. Brown recluse spider(s)      C. Jumping spider(s)  
B. Trap-Door Spider(s)      D. None of the above

### Topic 4 Spider Control Section

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1. Occasional spiders can be removed by \_\_\_\_\_ or with a vacuum. Sticky traps, used to control cockroaches and rodents, can capture spiders when placed along baseboards or other migration areas.  
A. Partial release foggers      C. Hand (wear gloves or grasp the spider with a tissue)  
B. Pesticides alone      D. None of the above

### Natural spider repellents

2. Though you won't find much research to back them up, there are a variety of popular natural spider repellents. Of these, the most widely-used are \_\_\_\_\_, which can be found in the produce section of some grocery stores (you can ask your grocer to order some). You place them in corners of rooms and windows and apparently spiders don't like this.  
A. Osage hedge balls      C. Pyrethrins, pipernyl butoxide, and silica gel  
B. Other insecticidal dusts      D. None of the above

3. \_\_\_\_\_ and eucalyptus are other popular spider repellents that are used in the same manner.  
A. Chemicals alone      C. Horse chestnuts  
B. Other insecticidal dusts      D. None of the above

### Chemical Control: Spider control products

4. Chemicals alone will solve your problem.  
A. True      B. False

5. Lastly, always pay close attention to directions when dealing with pesticides. They are only deemed safe by the OSHA when used according to the label.

- A. True      B. False

### **Esfenvalerate**

6. Trade names for the older compound fenvalerate included Ectrin, Sanmarton, Sumifly, Sumiflower, Sumitick and Pydrin. The trade name for the new product, Esfenvalerate, is Asana XL. The compound may also be listed as \_\_\_\_\_.

- A. S-fenvalerate      C. P-Fenvalerate  
B. Esfenvalerate 5      D. None of the above

7. \_\_\_\_\_ is an insecticide. It is a mixture of four optical isomers which have different insecticidal activities. The 2-S alpha (or SS) configuration is the most insecticidally active isomer. Fenvalerate consists of about 23% of this isomer.

- A. Esfenvalerate      C. Fenvalerate  
B. Other insecticidal dusts      D. None of the above

8. \_\_\_\_\_ has applications against a wide range of pests. Residue levels are minimized by low application rates.

- A. Esfenvalerate      C. p-fenvalerate  
B. Fenvalerate      D. None of the above

### **Pyrethroids**

9. The pyrethroids are a large family of modern synthetic insecticides similar to the \_\_\_\_\_.

- A. Naturally derived botanical pyrethrins      C. Pyrethrins, pipernyl butoxide, and silica gel  
B. Esfenvalerate      D. None of the above

10. Pyrethroid(s) are formulated as emulsifiable concentrates (EC), wettable powders (WP), granulars (G), and aerosols.

- A. True      B. False

## Spider Control CEU Conventional Assignment #2

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

### Topic 1 Arachnid Introduction Section

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1. 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. Cephalothorax                      C. Old cuticle  
B. Chelicerae                          D. None of the above

### Types of Spider Webs

2. Web patterns vary considerably, depending on the species of spider. Perhaps the most recognizable web is the \_\_\_\_\_, in which an outer framework supports a continuous spiraling thread and a series of threads radiating from the center of the web.
- A. Horizontal silk sheet with a dome                      C. Almost circular orb web  
B. A tight or wide mesh web                                  D. None of the above

### Web Building

3. \_\_\_\_\_ 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                      C. Forming a Y-shaped structure  
B. Spinning a thread                      D. None of the above
4. The spider may sit upside down with its legs placed in the center of its web to detect vibrations in the web when prey gets caught in the sticky catching \_\_\_\_\_.
- A. Tunnel                                      C. Orb webs  
B. Spiral                                        D. None of the above

### Constructing an Orb Web

5. 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.
- A. True                                      B. False

6. A spider that positions its self at the center of the web is very visible to predators such as birds. many orb web spiders that hunt during the day will reduce this risk by hiding at the edge of its web, with \_\_\_\_\_.
- A. True      B. False

### Spider Web Uses

7. The Net casting spider will weave a \_\_\_\_\_ that it attaches to its front legs, it will then lurk in wait for potential prey, when potential prey comes along, and the spider will lunge forward at its prey and wrap its victim in the net, followed by biting and paralyzing its victim.
- A. Horizontal silk sheet with a dome      C. Large net  
B. Small net      D. None of the above

### Spider Prevention and Non-Chemical Control

8. Regular vacuuming or \_\_\_\_\_ of windows, corners of rooms, storage areas, basements, and other seldom used areas helps remove spiders and their webs.
- A. Sealing cracks      C. Spraying chemical  
B. Sweeping      D. None of the above
9. \_\_\_\_\_ spiders can be an effective control technique because their soft bodies usually do not survive this process.
- A. Good screening      C. Vacuuming  
B. Spraying chemical      D. None of the above
10. \_\_\_\_\_ not only will keep out many spiders but also will discourage them by keeping out insects that they must have for food.
- A. Good screening      C. Sealing cracks in the foundation  
B. Spraying chemical      D. None of the above

### Topic 2 Spider Identification 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.

### Two Primary Spider Groups

1. \_\_\_\_\_ 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. House spider(s)      C. Web-building spiders  
B. Orb-Weaving Spider(s)      D. None of the above

### Jumping Spiders

2. Jumping spiders are generally small to medium-sized (about 1/5 - 1/2 inch long) and compact-looking. They are usually \_\_\_\_\_ with \_\_\_\_\_, although some can be brightly colored, including some with iridescent mouthparts.
- A. Dark-colored – White markings      C. White-colored – Black markings  
B. Light colored – Dark markings      D. None of the above

### Ground Spiders

#### Crab Spider

3. Small crab spiders are lightly colored red or green.
- A. True      B. False



### **Black Widow Spider**

4. The core of the Black widow spider's web is almost funnel shaped, woven into a silken tunnel in which the female spider spends the majority of her daylight hours.  
A. True      B. False

### **Cyphophthalmi**

5. The Cyphophthalmi are a suborder of harvestmen, with about \_\_\_\_\_ genera, and more than \_\_\_\_\_ described species.  
A. 100 - 36      C. 50 - 1000  
B. 36 - 100      D. None of the above
6. 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. A nasty bite      C. Undesirable aggressive behavior  
B. Passive behavior      D. None of the above

### **Mygalomorphae**

7. Almost all species of Mygalomorphae have \_\_\_\_\_ eyes, however there are some with fewer (Masteria lewisi has only \_\_\_\_\_ eyes).  
A. 6 – 8      C. 8 - 6  
B. 3 - 8      D. None of the above
8. Unlike Araneomorphae, which die after about a year, Mygalomorphae can live for up to \_\_\_\_\_years, and some don't reach maturity until they are about \_\_\_\_\_years old. Some flies in the family Acroceridae which are endoparasites of mygalomorphs may remain dormant in the book lungs for as long as \_\_\_\_\_ years before beginning their development and consuming the spider.  
A. 30 – 6 - 25      C. 25 – 6 - 20  
B. 10 – 3 - 20      D. None of the above

### **Sun Spiders or Wind Scorpions**

9. \_\_\_\_\_is an order of Arachnida, known as camel spiders, wind scorpions or sun spiders, comprising more than 1,000 described species in about 153 genera.  
A. Solifugae      C. Mygalomorphae  
B. Araneomorphae      D. None of the above

### **Vinegarroons**

10. The Vinegarroons' acetic acid gives this spray a vinegar-like smell, giving rise to the common name vinegarroon.  
A. True      B. False

### **Topic 3 Web Spiders 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.

### **Orb Weaving Spiders**

1. Venom toxicity - the bite of Orb-Weaving Spider is of high risk (toxic) to humans.  
A. True      B. False

### Trap-Door Spiders

2. Venom toxicity - the bite of the Trap-Door Spider 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. True      B. False

### House Spider

3. 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 \_\_\_\_\_, grabs its victim, and delivers a poisonous bite. The spider then carries its prey back to its retreat, where it begins to feed.
- A. Funnel      C. Oval web  
B. Trap web      D. None of the above

### Garden Spiders

4. Garden spiders belong to the family Araneidae, a group of \_\_\_\_\_ different species of spiders that weave orb, or circular, webs.
- A. 36      C. 2,500  
B. 5,000      D. None of the above

### Hobo Spider Information

5. The hobo spider is a member of the funnel-web spider family \_\_\_\_\_.
- A. Uloboridae      C. Agelenidae  
B. Araneomorphae      D. None of the above

### Spider Bite Section

6. 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      C. Uloboridae  
B. Araneomorphae      D. None of the above
7. 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. Bee venom      C. Snakebite venom  
B. Scorpion venom      D. None of the above
8. A patient may also have symptoms such as a red, itchy rash over the torso, arms and legs that is usually seen in the first \_\_\_\_\_ hours. Patients may have pain in the muscles and joints, fever, chills, swollen lymph nodes, headaches, and nausea and vomiting.
- A. 24-72      C. 12 -24  
B. 2 -8      D. None of the above
9. Cytotoxic venom affects the cellular tissue, usually restricted to the area of the bite, but it can spread. The bite is at first painless, with symptoms developing about \_\_\_\_\_ hours after the bite. It starts by resembling a mosquito sting, becoming more painful and swollen.
- A. 24-72      C. 12 -24  
B. 2 -8      D. None of the above

## Jumping Spiders

10. 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 \_\_\_\_\_ days.

- A. 1-4
- B. 2-6
- C. 5-7
- D. None of the above

## Topic 4 Spider Control 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.

1. \_\_\_\_\_ can be used to control spiders when applied to corners and other sites where spiders tend to breed.

- A. Good screening
- B. Residual insecticides
- C. Seal cracks in the foundation
- D. None of the above

2. \_\_\_\_\_ products containing various pyrethroids (bifenthrin, cyfluthrin, permethrin, tetramethrin) are commonly available for this purpose and should be applied in accordance with the label's instructions.

- A. Household insecticide
- B. Total release foggers
- C. Various pyrethroids
- D. None of the above

3. \_\_\_\_\_, containing pyrethrins, probably will have little effect on spiders.

- A. Good screening
- B. Spraying chemical
- C. Total release foggers
- D. None of the above

## Mechanical control: Spider traps and manual spider removal

4. Use \_\_\_\_\_ for spider control and monitoring. While sticky traps won't work for web-building spiders, they are outstanding for the many ground-dwelling, hunting spider species, including funnel-web, wolf, and brown recluse spiders. With glue boards, more is better.

- A. Tracking dusts
- B. Chemical traps
- C. Glue boards
- D. None of the above

## Biological Control: Natural Spider Control

5. When spiders (or any creature blessed with an exoskeleton) walk over a thin layer of \_\_\_\_\_, they leak fluids, dehydrate, and die.

- A. DE
- B. Fenvalerate
- C. Drione Dust (pyrethrins, pipernyl butoxide, and silica gel)
- D. None of the above

## For outdoor spider control

6. Barrier treatments, in conjunction with pest proofing, can effectively protect your home from spiders. Before sealing off cracks and crevices in siding and foundation, apply something like \_\_\_\_\_ or Drione Dust (pyrethrins, pipernyl butoxide, and silica gel).

- A. Bifenthrin
- B. Fenvalerate
- C. Delta Dust Insecticide (deltamethrin)
- D. None of the above

7. Besides the cracks and crevices, you may want to treat under the eaves of the roof, under porches, along the base of the foundation, the lowest edge of siding, behind shutters, and around doors and windows. For these areas you'll want a \_\_\_\_\_ for spider control.

- A. Dust outdoor insecticide
- B. Spray insecticide
- C. Non-dust outdoor insecticide
- D. None of the above

### **Esfenvalerate**

8. Trade names for the older compound fenvalerate included Ectrin, Sanmarton, Sumifly, Sumiflower, Sumitick and Pydrin. The trade name for the new product, Esfenvalerate, is Asana XL. The compound may also be listed as \_\_\_\_\_.

- A. S-fenvalerate
- B. Esfenvalerate 5
- C. P-Fenvalerate
- D. None of the above

9. \_\_\_\_\_ is most toxic to bees and fish. It is found in some emulsifiable concentrates, ULV, wettable powders, slow release formulations, insecticidal fogs, and granules. It is most commonly used to control insects in food, feed, and cotton products, and for the control of flies and ticks in barns and stables.

- A. Fenvalerate
- B. Esfenvalerate
- C. Pyrethrins, pipernyl butoxide, and silica gel
- D. None of the above

### **Pyrethroids**

10. To mimic the insecticidal activity of the natural compound \_\_\_\_\_ another class of pesticides, pyrethroid pesticides, has been developed. These are non-persistent, 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. Pyrethrum
- B. Fenvalerate
- C. Esfenvalerate
- D. None of the above

## Spider Control CEU Conventional Assignment #3

You will have 90 days from the start of this course to have successfully completed this CEU assignment with a score of 80%. You may e-mail the answers to TLC, info@tlch2o.com, you can also find a copy of this assignment in Word on the Assignment Page on TLC's website or fax the answers to TLC (928) 468-0675. Write your answers on the Answer Key found in the front of first assignment.

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

### Topic 1 Arachnid Introduction 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.

1. All arachnids are spiders.  
A. True      B. False

### Chelicerata

2. \_\_\_\_\_, which is an extremely ancient group of arthropods, including the extinct Eurypterida.  
A. The Chondrichthyes      C. The Chelicerata  
B. The Alves      D. None of the above

### Poison Glands

3. 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      C. Cephalothorax cuticle  
B. Cephalothorax      D. None of the above

### Palps and Legs

4. Adjacent to the palps are four pairs of long, hairy legs. Unlike human hair, each spider hair found on the legs acts as a \_\_\_\_\_, sensitive to touch and vibration.  
A. Body fluid      C. Seven jointed segment  
B. Sensory organ      D. None of the above

### Spider Reproduction

5. 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 drop of sperm from his abdomen.  
A. True      B. False
6. 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. Cephalothorax      C. Old cuticle  
B. Chelicerae      D. None of the above

### Types of Spider Webs

7. Web patterns vary considerably, depending on the species of spider. Perhaps the most recognizable web is the \_\_\_\_\_, in which an outer framework supports a continuous spiraling thread and a series of threads radiating from the center of the web.

- A. Horizontal silk sheet with a dome
- B. A tight or wide mesh web
- C. Almost circular orb web
- D. None of the above

8. 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. Horizontal silk sheet with a dome web
- B. A tight or wide mesh
- C. Flimsy web
- D. None of the above

### Web Building

9. Spiders that weave orb webs generally begin by spinning a thread that is carried by \_\_\_\_\_ until it catches on a tree limb or other firm support. From this thread, the spider lays down another thread to form \_\_\_\_\_ that is the basic framework of the web.

- A. Silk glands or glands - W-shaped structure
- B. Air currents - Y-shaped structure
- C. A raised tube in the corner – X-shaped structure
- D. None of the above

### Spider Prevention and Non-Chemical Control

10. Sweeping or Regular vacuuming of windows, corners of rooms, storage areas, basements, and other seldom used areas helps remove spiders and their webs.

- A. True
- B. False

### Topic 2 Spider Identification 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.

### Two Primary Spider Groups

1. \_\_\_\_\_ 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. Orb-Weaving Spider(s)
- C. Web-building spiders
- D. None of the above

### Jumping Spiders

2. Jumping spiders are generally small to medium-sized (about 1/5 - 1/2 inch long) and compact-looking. They are usually \_\_\_\_\_ with \_\_\_\_\_, although some can be brightly colored, including some with iridescent mouthparts.

- A. Dark-colored – White markings
- B. Light colored – Dark markings
- C. White-colored – Black markings
- D. None of the above

### Ground Spiders

#### Crab Spider

3. Small crab spiders extend out from their sides causing them to jump up and down a crab-like fashion.

- A. True
- B. False

### **Brown Recluse Spider**

4. The most definitive physical feature of recluse spiders is their eyes: most spiders have \_\_\_\_\_ eyes that typically are arranged in two rows of \_\_\_\_\_, but recluse spiders have \_\_\_\_\_ equal-sized eyes arranged in three pairs.
- A. 6 – 8 -- 3                      C. 8 – 4 - 6  
B. 3 – 6 - 8                        D. None of the above

### **Cyphophthalmi**

5. The Cyphophthalmi are a suborder of harvestmen, with about \_\_\_\_\_ genera, and more than \_\_\_\_\_ described species.
- A. 100 - 36                        C. 50 - 1000  
B. 36 - 100                        D. None of the above

### **Mygalomorphae**

6. The Mygalomorphae, (also called the \_\_\_\_\_), are an infraorder of spiders. The latter name comes from the orientation of the fangs which point straight down and do not cross each other (as opposed to \_\_\_\_\_).
- A. Orthognatha - Solifugae                      C. Mygalomorphae - Orthognatha  
B. Orthognatha - Araneomorph                      D. None of the above

7. Almost all species of Mygalomorphae have \_\_\_\_\_ eyes, however there are some with fewer (Masteria lewisi has only \_\_\_\_\_ eyes).
- A. 6 – 8                              C. 8 - 6  
B. 3 - 8                              D. None of the above

8. Unlike Araneomorphae, which die after about a year, Mygalomorphae can live for up to \_\_\_\_\_ years, and some don't reach maturity until they are about \_\_\_\_\_ years old. Some flies in the family Acroceridae which are endoparasites of mygalomorphs may remain dormant in the book lungs for as long as \_\_\_\_\_ years before beginning their development and consuming the spider.
- A. 30 – 6 - 25                        C. 25 – 6 - 20  
B. 10 – 3 - 20                        D. None of the above

### **Solifugae (Sun Spiders or Wind Scorpions)**

9. Most Solifugae species live in forests and feed opportunistically on ground-dwelling arthropods and other animals.
- A. True                      B. False

### **Vinegarroons**

10. The Vinegarroons' acetic acid gives this spray a vinegar-like smell, giving rise to the common name vinegarroon.
- A. True                      B. False

### **Topic 3 Web Spiders 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.

### **Orb Weaving Spiders**

1. Venom toxicity - the bite of Orb-Weaving Spider is of high risk (toxic) to humans.
- A. True                      B. False

### Trap-Door Spiders

2. Venom toxicity - the bite of the Trap-Door Spider 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. True      B. False

### House Spider

3. 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 \_\_\_\_\_, 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. Sheet web      C. Oval web  
B. Trap web      D. None of the above

### Garden Spiders

4. Garden spiders belong to the family Araneidae, a group of \_\_\_\_\_ different species of spiders that weave orb, or circular, webs.

- A. 36      C. 2,500  
B. 5,000      D. None of the above

### Hobo Spider Information

5. 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. Uloboridae      C. Agelenidae  
B. Araneomorphae      D. None of the above

### Spider Bite Section

6. 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      C. Mygalomorphae  
B. Uloboridae      D. None of the above

7. Spider venom, like bee venom, is non-fatal.

- A. True      B. False

8. A pale or blanched area may surround the discolored reddened area. The blister may rupture, leaving an open ulcer. In severe cases the ulcer can become deep and infected causing \_\_\_\_\_. Worsening pain, itching and a burning sensation develop. A patient may also have symptoms such as a red, itchy rash over the torso, arms and legs that is usually seen in the first 24-72 hours. Patients may have pain in the muscles and joints, fever, chills, swollen lymph nodes, headaches, and nausea and vomiting.

- A. A burning sensation      C. Tissue breakdown or tissue death (necrosis)  
B. Painless bite      D. None of the above



9. Cytotoxic venom affects the cellular tissue, usually restricted to the area of the bite, but it can spread. The bite is at first painless, with symptoms developing about 2 to 8 hours after the bite. It starts by resembling a mosquito sting, becoming more painful and swollen. Eventually it ulcerates into a large surface lesion (up to 10 centimeters) that will require medical attention.

This type of bite would result from members of the genera \_\_\_\_\_ (family Sicariidae) and \_\_\_\_\_ (family Miturgidae).

- A. Loxosceles - Cheiracanthium      C. Mygalomorphae - Loxosceles  
B. Loxosceles - Araneomorphae      D. None of the above

10. 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.

- A. Jumping spider(s)                  C. Hobo spider(s)  
B. Trap-Door Spider(s)              D. None of the above

#### **Topic 4 Spider Control 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.

#### **Mechanical control: Spider traps and manual spider removal**

1. Use \_\_\_\_\_ for spider control and monitoring. Sticky traps won't work for web-building spiders, they are outstanding for the many ground-dwelling, hunting spider species, including funnel-web, wolf, and brown recluse spiders. With glue boards, more is better. Place them along walls, in corners, behind furniture, and in dark, protected areas, in outbuildings and garages, in window sills and near doors, as well as places you've seen spider activity.

- A. Good screening      C. Glue boards  
B. Vacuuming          D. None of the above

#### **Biological Control: Natural Spider Control**

2. When spiders (or any creature blessed with an exoskeleton) walk over a thin layer of \_\_\_\_\_, they leak fluids, dehydrate, and die.

- A. DE                                  C. Silica spray  
B. Other insecticidal dusts      D. None of the above

3. Indoors, use \_\_\_\_\_ in basements, crawl spaces, cracks and crevices, door and window thresholds – anywhere you've seen spider activity.

- A. DE                                  C. Silica spray  
B. Other insecticidal dusts      D. None of the above

#### **Natural spider repellents**

4. Though you won't find much research to back them up, there are a variety of popular natural spider repellents. Of these, the most widely-used are \_\_\_\_\_, which can be found in the produce section of some grocery stores (you can ask your grocer to order some). You place them in corners of rooms and windows and apparently spiders don't like this.

- A. Osage hedge balls                  C. Pyrethrins, pipernyl butoxide, and silica gel  
B. Chemicals alone                  D. None of the above

### **Esfenvalerate**

5. Trade names for the older compound fenvalerate included Estrin, Summerton, Sumfly, Sunflower, Smackers and Pidgin.  
A. True      B. False
6. The trade name for the new product, Esfenvalerate, is Asana XL. The compound may also be listed as \_\_\_\_\_.  
A. S-fenvalerate      C. P-Fenvalerate  
B. Esfenvalerate 5      D. None of the above
7. \_\_\_\_\_ is an insecticide. It is a mixture of four optical isomers which have different insecticidal activities. The 2-S alpha (or SS) configuration is the most insecticidally active isomer. Fenvalerate consists of about 23% of this isomer.  
A. Esfenvalerate      C. Fenvalerate  
B. Other insecticidal dusts      D. None of the above

### **Pyrethroids**

8. To mimic the insecticidal activity of the natural compound \_\_\_\_\_ another class of pesticides, pyrethroid pesticides, has been developed. These are non-persistent, 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. Pyrethrum      C. Esfenvalerate  
B. Fenvalerate      D. None of the above
9. The pyrethroids are a large family of modern synthetic insecticides similar to the \_\_\_\_\_.  
A. Naturally derived botanical pyrethrins  
B. Artificially derived botanical pyrethrins  
C. Pyrethrins, pipernyl butoxide, and silica gel  
D. None of the above
10. \_\_\_\_\_ are formulated as emulsifiable concentrates (EC), wettable powders (WP), granulars (G), and aerosols.  
A. Pyrethroid(s)  
B. Artificially derived botanical pyrethrins  
C. Pyrethrins, pipernyl butoxide, and silica gel  
D. None of the above

## Spider Control CEU Conventional Assignment #4

You will have 90 days from the start of this course to have successfully completed this CEU assignment with a score of 80%. You may e-mail the answers to TLC, info@tlch2o.com, you can also find a copy of this assignment in Word on the Assignment Page on TLC's website or fax the answers to TLC (928) 468-0675. Write your answers on the Answer Key found in the front of first assignment.

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

### Topic 1 Arachnid Introduction 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 an extremely ancient group of arthropods, including the extinct Eurypterida.
- A. The Chondrichthyes            C. The Chelicerata  
B. The Alves                      D. 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. Chelicerae                      C. Prosoma  
B. Pedipalp(s)                    D. 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. Chelicerae                      C. Prosoma  
B. Pedipalp(s)                    D. 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                      C. Prosoma  
B. Pedipalp(s)                    D. None of the above

### Spider Reproduction

5. 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 drop of sperm from his abdomen.
- A. True      B. False

### Life Cycle

6. The life cycle of the spider consists of four stages: egg, larva, young spider, (known as a nymph or spiderling), and \_\_\_\_\_.
- A. Cocoon      C. Larvae  
B. Adults      D. None of the above

### Development and Growth

7. The new cuticle is wrinkled and pliable at first, but as molting progresses and the spiderling grows, the \_\_\_\_\_ stretches to accommodate the larger spiderling body.
- A. Cephalothorax      C. New cuticle  
B. Chelicerae      D. None of the above

### Types of Spider Webs

8. 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. Horizontal silk sheet with a dome web      C. Flimsy web  
B. A tight or wide mesh      D. None of the above

### Web Building

9. The spider then climbs to the midpoint of the \_\_\_\_\_, known as the \_\_\_\_\_, 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.
- A. Y-structure - The auxiliary spiral      C. Y-shaped structure – X – shaped structure  
B. Y-structure - Hub      D. 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.
- A. True      B. False

## Topic 2 Spider Identification 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.

### Two Primary Spider Groups

1. \_\_\_\_\_ 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)      C. Pirate spider(s)  
B. Web-building spiders      D. None of the above

### Jumping Spiders

2. Jumping spiders are generally small to medium-sized (about 1/5 - 1/2 inch long) and compact-looking. They are usually \_\_\_\_\_ with \_\_\_\_\_, although some can be brightly colored, including some with iridescent mouthparts.

- A. Dark-colored – White markings
- B. Light colored – Dark markings
- C. White-colored – Black markings
- D. None of the above

### Ground Spiders

#### Crab Spider

3. Small crab spiders 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. True
- B. False

#### Black Widow Spider

4. 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. Black widow spider(s)
- D. None of the above

### Cyphophthalmi

5. The Cyphophthalmi are a suborder of harvestmen, with about \_\_\_\_\_ genera, and more than \_\_\_\_\_ described species.

- A. 100 - 36
- B. 36 - 100
- C. 50 - 1000
- D. None of the above

6. 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. Spider venom
- C. Undesirable aggressive behavior
- D. None of the above

### Mygalomorphae

7. Almost all species of Mygalomorphae have \_\_\_\_\_ eyes, however there are some with fewer (Masteria lewisi has only \_\_\_\_\_ eyes).

- A. 6 – 8
- B. 3 - 8
- C. 8 - 6
- D. None of the above

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

- A. 30 – 6 - 25
- B. 10 – 3 - 20
- C. 25 – 6 - 20
- D. None of the above

### **Solifugae (Sun Spiders or Wind Scorpions)**

9. Most Solifugae species live in deserts and feed opportunistically on ground-dwelling arthropods and other animals.  
A. True      B. False

### **Vinegarroons**

10. The Vinegarroons' acetic acid gives this spray a vinegar-like smell, giving rise to the common name vinegarroon.  
A. True      B. False

### **Topic 3 Web Spiders 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.

### **Orb Weaving Spiders**

1. Venom toxicity - the bite of Orb-Weaving Spider is of high risk (toxic) to humans.  
A. True      B. False

### **Trap-Door Spiders**

2. Venom toxicity - the bite of the Trap-Door Spider 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. True      B. False

### **House Spider**

3. 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 \_\_\_\_\_, grabs its victim, and delivers a poisonous bite. The spider then carries its prey back to its retreat, where it begins to feed.  
A. Funnel              C. Oval web  
B. Trap web          D. None of the above

### **Garden Spiders**

4. Garden spiders belong to the family Araneidae, a group of \_\_\_\_\_ different species of spiders that weave orb, or circular, webs.  
A. 36              C. 2,500  
B. 5,000          D. None of the above

### **Hobo Spider Information**

5. 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              C. Agelenidae  
B. Araneomorphae      D. None of the above

### **Spider Bite Section**

6. All spiders (except the family \_\_\_\_\_) have venom glands, but not all are venomous to man.  
A. Solifugae              C. Mygalomorphae  
B. Uloboridae          D. None of the above

7. 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. Bee venom
- B. Scorpion venom
- C. Snakebite venom
- D. None of the above

8. A pale or blanched area may surround the discolored reddened area. The blister may rupture, leaving an open ulcer. In severe cases the ulcer can become deep and infected causing \_\_\_\_\_. Worsening pain, itching and a burning sensation develop. A patient may also have symptoms such as a red, itchy rash over the torso, arms and legs that is usually seen in the first 24-72 hours. Patients may have pain in the muscles and joints, fever, chills, swollen lymph nodes, headaches, and nausea and vomiting.

- A. A burning sensation
- B. Spider venom
- C. Tissue breakdown or tissue death (necrosis)
- D. None of the above

9. Cytotoxic venom affects the cellular tissue, usually restricted to the area of the bite, but it can spread. The bite is at first painless, with symptoms developing about 2 to 8 hours after the bite. It starts by resembling a mosquito sting, becoming more painful and swollen. Eventually it ulcerates into a large surface lesion (up to 10 centimeters) that will require medical attention. This type of bite would result from members of the genera \_\_\_\_\_(family Sicariidae) and \_\_\_\_\_(family Miturgidae).

- A. Loxosceles - Cheiracanthium
- B. Loxosceles - Araneomorphae
- C. Mygalomorphae - Loxosceles
- D. None of the above

10. 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.

- A. Brown recluse spider(s)
- B. Jumping spider(s)
- C. Garden spider(s)
- D. None of the above

#### Topic 4 Spider Control 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.

1. Eliminate migration of spiders into homes by caulking cracks and crevices around the foundation. Make sure all screens and doors are sealed tight.

- A. True
- B. False

2. \_\_\_\_\_ can be used to control spiders when applied to corners and other sites where spiders tend to breed.

- A. Non-residual insecticides
- B. Spraying chemical
- C. Residual insecticides
- D. None of the above

3. Total release foggers, containing pyrethrins, have huge effect on spiders.

- A. True
- B. False

#### Biological Control: Natural Spider Control

4. When spiders (or any creature blessed with an exoskeleton) walk over a thin layer of \_\_\_\_\_, they leak fluids, dehydrate, and die.

- A. DE
- B. Chemicals alone
- C. Drione Dust (pyrethrins, pipernyl butoxide, and silica gel)
- D. None of the above

### Natural spider repellents

5. Though you won't find much research to back them up, there are a variety of popular natural spider repellents. Of these, the most widely-used are \_\_\_\_\_, which can be found in the produce section of some grocery stores (you can ask your grocer to order some). You place them in corners of rooms and windows and apparently spiders don't like this.

- A. Osage hedge balls
- B. Other insecticidal dusts
- C. Pyrethrins, pipernyl butoxide, and silica gel
- D. None of the above

### Chemical Control: Spider control products

6. When it comes to chemical spider control, more important than what you use is how you use it.

- A. True
- B. False

### For outdoor spider control

7. Barrier treatments, in conjunction with pest proofing, can effectively protect your home from spiders. Before sealing off cracks and crevices in siding and foundation, apply something like \_\_\_\_\_ or Drione Dust (pyrethrins, pipernyl butoxide, and silica gel).

- A. Bifenthrin
- B. Fenvalerate
- C. Delta Dust Insecticide (deltamethrin)
- D. None of the above

### Esfenvalerate

8. Trade names for the older compound fenvalerate included Ectrin, Sanmarton, Sumifly, Sumiflower, Sumitick and Pydrin. The trade name for the new product, Esfenvalerate, is Asana XL. The compound may also be listed as \_\_\_\_\_.

- A. S-fenvalerate
- B. Esfenvalerate 5
- C. P-Fenvalerate
- D. None of the above

9. \_\_\_\_\_ is an insecticide of moderate mammalian toxicity. In laboratory animals, central nervous system toxicity is observed following acute or long-term exposure.

- A. Esfenvalerate
- B. Other insecticidal dusts
- C. Fenvalerate
- D. None of the above

### Pyrethroids

10. To mimic the insecticidal activity of the natural compound \_\_\_\_\_ another class of pesticides, pyrethroid pesticides, has been developed. These are non-persistent, 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. Pyrethrum
- B. Fenvalerate
- C. Esfenvalerate
- D. None of the above





7. The spider then liquefies the tissues of the prey with a digestive fluid and sucks this broth into its \_\_\_\_\_, where it may be stored in a digestive gland. Breathing is by means of tracheae (air tubes) or book lungs, or both.

- A. Digestive gland
- B. Cephalothorax
- C. Stomach
- D. None of the above

8. 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. Chelicerae
- B. Cephalothorax cuticle
- C. Prosoma
- D. None of the above

9. The spider's cuticle provides attachment sites for many muscles, and it also prevents desiccation (loss of body water). The \_\_\_\_\_ is strong and stiff, while the cuticle of the abdomen is soft and extensible. As a spider grows, it sheds or molts its exoskeleton and grows a new one to cover its larger body.

- A. Chelicerae
- B. Cephalothorax cuticle
- C. Prosoma
- D. None of the above

10. 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 cuticle
- C. Prosoma
- D. None of the above

## Topic 2 Spider Identification 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.

1. \_\_\_\_\_ 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. Tunnel building spiders
- B. Hunting spiders
- C. Web-building spiders
- D. None of the above

2. The Cyphophthalmi are a suborder of harvestmen, with about \_\_\_\_\_ genera, and more than \_\_\_\_\_ described species.

- A. 100 - 36
- B. 36 - 100
- C. 50 - 1000
- D. None of the above

3. 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. Passive behaviors
- B. Spider venom
- C. Undesirable aggressive behavior
- D. None of the above

4. The Mygalomorphae, (also called the \_\_\_\_\_), are an infraorder of spiders. The latter name comes from the orientation of the fangs which point straight down and do not cross each other (as opposed to \_\_\_\_\_). This suborder includes the heavy bodied, stout legged spiders popularly known as tarantulas as well as the dangerous Australasian funnel-web spiders.

- A. Solifugae - Orthognatha
- B. Orthognatha - Araneomorph
- C. Mygalomorphae - Orthognatha
- D. None of the above

5. Jumping spiders are generally small to medium-sized (about 1/5 - 1/2 inch long) and compact-looking. They are usually \_\_\_\_\_ with \_\_\_\_\_, although some can be brightly colored, including some with iridescent mouthparts.

- A. Dark-colored – White markings
- B. Light colored – Dark markings
- C. White-colored – Black markings
- D. None of the above

6. Small crab spiders are never dark or tan; but are lightly colored green with white spots.

- A. True
- B. False

7. 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. Black widow spider(s)
- D. None of the above

8. The most definitive physical feature of recluse spiders is their eyes: most spiders have \_\_\_\_\_ eyes that typically are arranged in two rows of \_\_\_\_\_, but recluse spiders have \_\_\_\_\_ equal-sized eyes arranged in three pairs.

- A. 6 – 8 -- 3
- B. 3 – 6 - 8
- C. 8 – 4 - 6
- D. None of the above

9. Almost all species of Mygalomorphae have \_\_\_\_\_ eyes, however there are some with fewer (Masteria lewisi has only \_\_\_\_\_ eyes).

- A. 6 – 8
- B. 3 - 8
- C. 8 - 6
- D. None of the above

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

- A. 30 – 6 - 25
- B. 10 – 3 - 20
- C. 25 – 6 - 20
- D. None of the above

### Topic 3 Web Spiders Section

1. \_\_\_\_\_ 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.

- A. Hobo spider(s)
- B. House spider(s)
- C. Pirate spider(s)
- D. None of the above

2. Garden spiders belong to the family Araneidae, a group of \_\_\_\_\_ different species of spiders that weave orb, or circular, webs.  
 A. 36                      C. 2,500  
 B. 5,000                  D. None of the above
3. 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                C. Mygalomorphae  
 B. Agelenidae              D. None of the above
4. 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. Uloboridae              C. Agelenidae  
 B. Araneomorphae        D. None of the above
5. Spider venom, like \_\_\_\_\_, is generally either neurotoxic or cytotoxic.  
 A. A nasty bite            C. Snakebite venom  
 B. Scorpion venom        D. None of the above
6. A pale or blanched area may surround the discolored reddened area. The blister may rupture, leaving an open ulcer. In severe cases the ulcer can become deep and infected causing \_\_\_\_\_.  
 A. Painless bite            C. Tissue breakdown or tissue death (necrosis)  
 B. Spider venom            D. None of the above
7. Cytotoxic venom affects the cellular tissue, usually restricted to the area of the bite, but it can spread. The bite is at first painless, with symptoms developing about 2 to 8 hours after the bite. It starts by resembling a mosquito sting, becoming more painful and swollen. Eventually it ulcerates into a large surface lesion (up to 10 centimeters) that will require medical attention. This type of bite would result from members of the genera \_\_\_\_\_ (family Sicariidae) and \_\_\_\_\_ (family Miturgidae).  
 A. Loxosceles - Cheiracanthium        C. Mygalomorphae - Loxosceles  
 B. Loxosceles - Araneomorphae        D. None of the above
8. Venom toxicity - the bite of Orb-Weaving Spider is of high risk (toxic) to humans.  
 A. True                      B. False
9. Venom toxicity - the bite of the Trap-Door Spider 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. True                      B. False
10. The \_\_\_\_\_ is probably the most common biting spider in the United States.  
 A. Brown recluse spider(s)        C. Garden spider(s)  
 B. Jumping spider(s)                D. None of the above

#### Topic 4 Spider Control 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.

1. \_\_\_\_\_ is most toxic to bees and fish. It is found in some emulsifiable concentrates, ULV, wettable powders, slow release formulations, insecticidal fogs, and granules. It is most commonly used to control insects in food, feed, and cotton products, and for the control of flies and ticks in barns and stables.

- A. Pyrethroid(s)
- B. Fenvalerate
- C. Esfenvalerate
- D. None of the above

2. \_\_\_\_\_ does not affect plants, but is active for an extended period of time and may irritate the skin and eyes on contact, and is also harmful if swallowed.

- A. Pyrethroid(s)
- B. Fenvalerate
- C. Esfenvalerate
- D. None of the above

3. To mimic the insecticidal activity of the natural compound \_\_\_\_\_ another class of pesticides, pyrethroid pesticides, has been developed. These are non-persistent, 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. Pyrethrum
- B. Fenvalerate
- C. Esfenvalerate
- D. None of the above

4. The pyrethroids are a large family of modern synthetic insecticides similar to the \_\_\_\_\_.

- A. Naturally derived botanical pyrethrins
- B. Esfenvalerate
- C. DE
- D. None of the above

5. When spiders (or any creature blessed with an exoskeleton) walk over a thin layer of \_\_\_\_\_, they leak fluids, dehydrate, and die.

- A. DE
- B. Other insecticidal dusts
- C. Drione Dust (pyrethrins, pipernyl butoxide, and silica gel)
- D. None of the above

6. Indoors, use \_\_\_\_\_ in basements, crawl spaces, cracks and crevices, door and window thresholds – anywhere you've seen spider activity.

- A. Pyrethroid(s)
- B. DE
- C. S-fenvalerate
- D. None of the above

7. Though you won't find much research to back them up, there are a variety of popular natural spider repellents. Of these, the most widely-used are \_\_\_\_\_, which can be found in the produce section of some grocery stores (you can ask your grocer to order some). You place them in corners of rooms and windows and apparently spiders don't like this.

- A. Osage hedge balls
- B. Other insecticidal dusts
- C. Pyrethrins, pipernyl butoxide, and silica gel
- D. None of the above

8. \_\_\_\_\_ and eucalyptus are other popular spider repellents that are used in the same manner.

- A. Horse chestnuts
- B. Other insecticidal dusts
- C. Pyrethrins, pipernyl butoxide, and silica gel
- D. None of the above

9. \_\_\_\_\_ can be used to control spiders when applied to corners and other sites where spiders tend to breed.

- A. Non-residual insecticides
- B. Spraying chemicals
- C. Residual insecticides
- D. None of the above

10. Barrier treatments, in conjunction with pest proofing, can effectively protect your home from spiders. Before sealing off cracks and crevices in siding and foundation, apply something like \_\_\_\_\_ or Drione Dust (pyrethrins, pipernyl butoxide, and silica gel).

- A. Bifenthrin
- B. Fenvalerate
- C. Delta Dust Insecticide (deltamethrin)
- D. None of the above