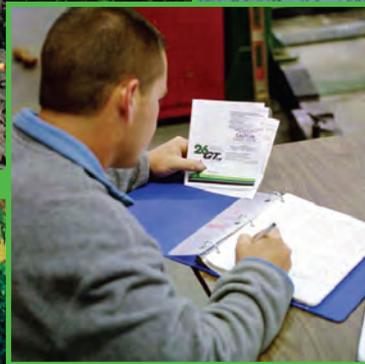


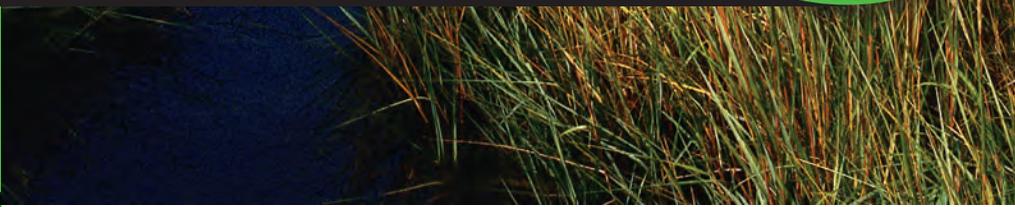
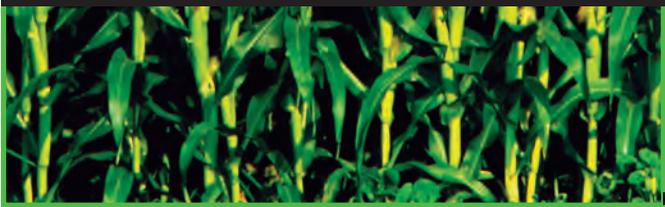
WYOMING PESTICIDE APPLICATOR CERTIFICATION

PRIVATE APPLICATOR WORKBOOK QUESTIONS



The Pesticide Safety Education Program is a cooperative effort between University of Wyoming Extension and the Wyoming Department of Agriculture.

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APPLICATOR NAME: _____

APPLICATOR LICENSE NUMBER (IF AVAILABLE): _____

APPLICATOR SIGNATURE: _____

DATE WORKBOOK COMPLETED: _____

By signing above you are attesting that you are the one who completed the work on the following pages.

Please circle the letter which corresponds to the correct answer.

1. Using barriers to prevent pests from getting into an area is an example of which type of pest management method?
 - A. Biological
 - B. Mechanical
 - C. Genetic

2. Making use of plant varieties that are naturally resistant to insect feeding is an example of which type of pest management method?
 - A. Biological
 - B. Genetic
 - C. Regulatory

3. Which statement about biological control methods is *true*?
 - A. Modifying the environment to enhance natural enemies is recommended in biological control.
 - B. Biological control involves importing exotic pests to control natural enemies.
 - C. Using several cultural practices and a wide variety of pesticides works best in biological control.

4. Sealing cracks and crevices and small openings in buildings is an example of which type of pest management method?
 - A. Physical
 - B. Genetic
 - C. Biological

5. Which statement about cultural control practices is *true*?
 - A. They reduce pest establishment, reproduction, and survival.
 - B. They use naturally derived and/or synthesized chemicals to control pests.
 - C. They involve the release of parasites and predators found in foreign countries.

6. Monitoring pests at airports and ocean ports that pose a serious threat to public health or widespread damage to crops or animals is an example of which type of pest management method?
 - A. Regulatory
 - B. Genetic
 - C. Biological

7. Which statement about pest management strategies in IPM is *true*?
- A. The goal is to prevent pests from reaching damaging levels.
 - B. Eradication is never the goal of an IPM program.
 - C. Nonchemical methods are short-term solutions to control pests.
8. Which would be considered a preventive pest management strategy?
- A. Planting weed- and disease-free seed on an athletic field.
 - B. Releasing natural enemies to help reduce pest populations.
 - C. Removing a pest that is a public health concern from an area.
9. Which statement about the action threshold is true?
- A. The IPM technician needs to implement control measures below the action threshold level.
 - B. The action threshold for a pest may be set at a zero pest population density.
 - C. In an urban landscape, action thresholds are usually more related to economics than aesthetics.
10. Which would increase the likelihood of pesticide resistance?
- A. An insect that has one generation per year.
 - B. Continual use of pesticides from the same chemical class.
 - C. Applying a pesticide that has little or no residual effect.
11. Which statement about FIFRA is *false*?
- A. It provides the overall framework for the federal pesticide regulatory program.
 - B. It prevents states, tribes, and territories from creating pesticide use laws more stringent than federal regulations.
 - C. It allows applicators to deviate from the pesticide label under specific use situations.
12. Under federal law, which statement about trained and certified applicators is *true*?
- A. They may apply and/or supervise the application of restricted-use pesticides.
 - B. They must receive supplemental training before mixing RUPs.
 - C. They are exempt from obtaining county bulletins for the protection of endangered species.

- 13.** What is the purpose of the pesticide registration and reregistration process?
- A.** To control the flow of new pesticide products entering the marketplace.
 - B.** To provide evidence that the pesticide will not cause unreasonable risks to human health or the environment.
 - C.** To make sure the amount of pesticide residue remaining on food and feed crops is zero.
- 14.** Which statement about federal pesticide regulation is *true*?
- A.** To ensure future compliance, civil penalties are typically assessed against first-time violators.
 - B.** Like pesticides, devices used to control pests must also be registered with EPA.
 - C.** Approved pesticide labels have the force of law.
- 15.** Which of the following criteria is used by EPA in establishing pesticide tolerances?
- A.** Research data completely independent of the pesticide manufacturer's.
 - B.** The anticipated volume of product to be sold in any given year.
 - C.** The toxicity of the pesticide and its breakdown products.
- 16.** Under federal law, which of the following actions is unlawful and subject to civil or criminal penalties?
- A.** Allowing a person under the direct supervision of a certified applicator to apply RUPs.
 - B.** Detaching, altering, defacing, or destroying any part of a container or labeling.
 - C.** Keeping inadequate records of employees who received training on the proper use of pesticides.
- 17.** Which federal regulation requires employee training in the use of pesticides?
- A.** Worker Protection Standard.
 - B.** Pesticide Container and Containment Regulation.
 - C.** Food Quality Protection Act.
- 18.** Which group of pesticides is exempt from registration because it poses little or no risk to humans and the environment?
- A.** Restricted use
 - B.** Minimum risk
 - C.** Special local need

19. The active ingredient in Tempo 20WP is listed as β -Cyfluthrin, cyano(4-fluoro-3-phenoxy-phenyl)methyl 3-(2,2-dichloroethenyl)-2,2 dimethylcyclopropanecarboxylate. What does the term "Cyfluthrin" represent?
- A. The brand name.
 - B. The chemical name.
 - C. The common name.
20. Which statement about pesticide label names and ingredients is *true*?
- A. Both the active ingredients and inert ingredients must be listed by chemical name.
 - B. Various manufacturers use different trade names, even though the products may contain the same active ingredient.
 - C. Common names are those officially accepted by the manufacturer.
21. What is the purpose of the signal word?
- A. Indicates the product's relative acute toxicity to humans and animals.
 - B. Informs the user what type of PPE to wear.
 - C. Tells the user what type of first aid treatment to seek in case of exposure.
22. The routes of entry statement, "Extremely hazardous by skin contact—rapidly absorbed through the skin," on a label would most likely carry which signal word?
- A. DANGER
 - B. WARNING
 - C. CAUTION
23. "Do not breathe vapors or spray mist" is an example of a:
- A. Specific action statement.
 - B. Statement of practical treatment.
 - C. Routes of entry statement.
24. Directions for mixing and loading a pesticide are usually found under:
- A. Directions for use.
 - B. Environmental hazards.
 - C. Precautionary statements.

25. "If swallowed, call a doctor" is an example of what kind of statement?
- A. Routes of entry
 - B. Advisory
 - C. Mandatory
26. Who is responsible for developing SDSs for pesticides and providing them on request?
- A. EPA
 - B. OSHA
 - C. The product manufacturer
27. The name "X-Pest 5G" on a pesticide label indicates a:
- A. Granular pesticide with 5% active ingredient.
 - B. Granular pesticide with 5% inert ingredients.
 - C. Gel pesticide with 5% active ingredient.
28. Which is the pesticide formulation process by which solid particles are dispersed in a liquid?
- A. Emulsion
 - B. Solution
 - C. Suspension
29. Which liquid pesticide formulation consists of a small amount of active ingredient (often 1% or less per unit volume)?
- A. Microencapsulated (M)
 - B. Ready-to-use (low-concentrate) solution (RTU)
 - C. Ultra-low volume (ULV)
30. Which liquid pesticide formulation may approach 100% active ingredient?
- A. Aerosol (A)
 - B. Emulsifiable concentrate (EC)
 - C. Ultra-low volume (ULV)
31. Which is a disadvantage of both EC and ULV formulations?
- A. Difficult to handle, transport, and store.
 - B. Require constant agitation to keep in suspension.
 - C. Solvents may cause rubber or plastic hoses, gaskets, pump parts, and other surfaces to deteriorate.

- 32.** Which dry/solid formulation is mixed in water and reduces the risk of inhalation exposure during mixing and loading?
- A.** Soluble powder (SP)
 - B.** Water-dispersible granule (WDG) or dry flowable (DF)
 - C.** Wettable powder (WP)
- 33.** Which type of dry/solid pesticide formulation consists of particles that are the same weight and shape?
- A.** Bait
 - B.** Granule
 - C.** Pellet
- 34.** Which is an advantage of microencapsulated materials?
- A.** Delayed or slow release of the active ingredient prolongs their effectiveness.
 - B.** Their pesticidal activity is independent of weather conditions.
 - C.** They usually require only short restricted-entry intervals.
- 35.** Which type of adjuvant functions as a wetting agent and spreader (i.e., physically altering the surface tension of spray droplets)?
- A.** Buffer
 - B.** Extender
 - C.** Surfactant
- 36.** Which type of adjuvant increases the viscosity of spray mixtures?
- A.** Sticker
 - B.** Extender
 - C.** Thickener
- 37.** The capacity of a pesticide to cause short-term (acute) or long-term (chronic) injury is referred to as its:
- A.** Toxicity
 - B.** Exposure
 - C.** Hazard

- 38.** Which statement about harmful effects of pesticides is *false*?
- A. The most common form of pesticide injury is by inhalation.
 - B. Asthma-like symptoms may be caused by allergies to pesticides.
 - C. Many herbicides and fungicides cause dermatitis (skin reactions).
- 39.** Which signal word is associated with very low oral LD50 values?
- A. DANGER-POISON
 - B. WARNING
 - C. CAUTION
- 40.** Which statement about pesticide toxicity is *true*?
- A. A pesticide with an oral LD50 of 5 mg/kg is more toxic than a pesticide with an LD50 of 250 mg/kg.
 - B. Manufacturers are not required to include chronic toxicity warning statements on product labels.
 - C. The signal word on the product label indicates how likely the product is to cause both acute and chronic toxic effects.
- 41.** For which class(es) of pesticides might cholinesterase monitoring be appropriate?
- A. Organophosphate and carbamate insecticides
 - B. Pyrethroids
 - C. Phenoxy herbicides, such as 2,4-D
- 42.** Which statement about what happens to pesticides inside the body is *true*?
- A. Most pesticides used today are stored in our body fat.
 - B. The kidneys filter pesticides from the blood into the urine.
 - C. Most chemical breakdown of toxic substances takes place wherever the pesticide is first absorbed.
- 43.** Which statement about pesticide exposure routes is *true*?
- A. Studies show that about 97% of all body exposure to pesticides during a spraying operation is by inhalation.
 - B. Eating, drinking, or smoking without first washing your hands after handling pesticides is likely to transfer the product to your mouth.
 - C. The palms and forearms absorb pesticides more quickly than the scalp, ear canal, and forehead.

44. Which statement about first aid response for pesticide exposure to the eye is *false*?
- A. You should hold the eye open and immediately begin gently washing it.
 - B. You should drip water directly into the eye.
 - C. You should flush under the eyelid with water to remove debris.
45. What is the first thing you should do to help a victim of inhalation exposure?
- A. Get the victim to fresh air.
 - B. Administer artificial respiration.
 - C. Have the victim lie down and loosen clothing.
46. Which statement about heat stress is *true*?
- A. Wearing extra PPE prevents heat stress.
 - B. Constricted pupils is a symptom of heatstroke.
 - C. Lack of sweat is a symptom of heatstroke.
47. Which statement about PPE requirements listed on the pesticide label is *true*?
- A. A label may have different PPE requirements for pesticide handlers and early-entry workers.
 - B. You are not required to wear all the PPE listed on the label.
 - C. Wearing the PPE listed on the label eliminates your exposure to pesticides.
48. Which part of the product formulation determines what glove type is needed?
- A. Active ingredient
 - B. Surfactants
 - C. Solvents
49. If there are no manufacturer use recommendations, a pesticide applicator should replace the chemical cartridges of his or her respirator:
- A. At the end of each season.
 - B. After one week of use.
 - C. At the end of each workday.
50. When oil may be present, which particulate filter must be used?
- A. N-series
 - B. P-series
 - C. Dust mask

51. Air-purifying respirators protect applicators from pesticide exposure by:
- A. Filtering and/or absorbing the pesticide.
 - B. Breaking down the pesticide.
 - C. Neutralizing the pesticide.
52. You should do a qualitative fit test of your respirator:
- A. Every five years.
 - B. Semiannually.
 - C. If you have a significant change in weight.
53. Every time you wear any tight-fitting respirator to apply pesticides, you should *first*:
- A. Perform seal check(s).
 - B. Do a qualitative fit test.
 - C. Put Vaseline on the edges of the respirator to enhance the seal.
54. Which statement about washing work clothes soaked with a pesticide concentrate is *true*?
- A. Use cold water and one wash cycle.
 - B. Wash separately from other laundry items.
 - C. Do not attempt to wash it—dispose of it immediately.
55. Work clothes worn to apply pesticides should be laundered with a suitable detergent:
- A. After each day's use.
 - B. After they get wet with spray.
 - C. When they have a strong odor like the pesticide.
56. Which property of a pesticide would make it more likely to move in surface water runoff?
- A. High solubility
 - B. High adsorption
 - C. High volatility
57. Which statement about movement of pesticides from the application site is *true*?
- A. Drift is seldom an issue with indoor applications.
 - B. Runoff and erosion are sources of surface water contamination by pesticides.
 - C. Leaching is the main way that pesticides move great distances.

58. Which is an example of nonpoint-source contamination of groundwater?
- A. Back-siphoning of pesticide spills at a wellhead.
 - B. Leaching from a pesticide mixing area.
 - C. Pesticides that dissolve and leach through soil after it rains.
59. Under which conditions are pesticides more likely to leach through soil?
- A. Heavy clay soil, high in organic matter.
 - B. Sandy soil, high in organic matter.
 - C. Sandy soil, low in organic matter.
60. Which best management practice will help prevent contamination of surface water and groundwater by pesticides?
- A. Using pesticides that are highly water-soluble.
 - B. Following IPM principles.
 - C. Selecting persistent pesticides.
61. Which two factors are most important in avoiding vapor drift?
- A. Droplet size and wind speed.
 - B. Air stability and temperature.
 - C. Temperature and pesticide volatility.
62. Which statement about sensitive areas is *true*?
- A. Do not spray a larger target site if it contains a sensitive area.
 - B. Pesticide labels may list special precautions around sensitive areas.
 - C. Endangered species' habitats are not considered sensitive areas.
63. Which statement about protecting bees from pesticide injury is *true*?
- A. Use foliar applications when possible.
 - B. Spray crops when they are in bloom.
 - C. Apply insecticides in the evening or at night.
64. Which statement about transporting pesticides is *true*?
- A. Carry pesticides in the passenger compartment to prevent unauthorized access.
 - B. Enclosed and lockable cargo boxes offer the greatest protection.
 - C. The operator (driver) is not held responsible if a pesticide spill or accident occurs.

65. Which statement about pesticide storage facilities is *true*?
- A. A ventilation system may reduce noxious vapors by venting air into an adjoining area.
 - B. Carefully consider the terrain when selecting a storage site.
 - C. The floor should remain as bare soil to absorb any spilled material.
66. What is the first thing to do if a pesticide container is leaking?
- A. Put on personal protective equipment.
 - B. Transfer contents into another container.
 - C. C. Clean up any spilled material.
67. Which recommended practice will minimize pesticide storage problems?
- A. Purchase quantities based on previous usage.
 - B. Purchase more than you need to ensure availability of the product.
 - C. Store metal pesticide containers on the higher shelves to prevent rusting.
68. What is the first step a business should take to develop an effective pesticide security program?
- A. Coordinate planned actions with authorities.
 - B. Conduct a risk assessment of business vulnerabilities.
 - C. Train employees on security measures.
69. Which of the following is considered a good security practice?
- A. Instruct employees on pesticide inventory control.
 - B. Allow employees access to inventory.
 - C. Back up confidential data daily and keep it at the facility.
70. Which statement about emergency response planning is *true*?
- A. The main reason to have an emergency response plan is to reduce economic losses.
 - B. The first person to contact in an emergency is an attorney.
 - C. It is important to make a detailed report of what took place before, during, and after the incident.
71. What is the backbone of any emergency response plan?
- A. Outlining the sequence of actions to take in a crisis.
 - B. Knowing where labels and SDSs are kept.
 - C. Having a designated emergency responder.

- 72.** In addition to an emergency response plan, which of the following will further reduce the risk of a pesticide fire?
- A. Store pesticides close to a heat source to prevent freezing.
 - B. Keep a fire-detection system in the storage area.
 - C. Post the storage area with a warning sign.
- 73.** Which is a recommended action to take in the event of a pesticide fire?
- A. Construct berms to contain contaminated runoff water.
 - B. Enter the storage facility and remove as much pesticide as possible.
 - C. Try to extinguish the fire before calling 911.
- 74.** Which is an appropriate action to take in the event of a pesticide spill?
- A. Take a “time out” to read your emergency response plan.
 - B. Call 911 only if the spill has a chance of entering surface water.
 - C. Put on the appropriate PPE before responding to the spill.
- 75.** Determining *when* to apply a pesticide includes considering the:
- A. Life cycle of the pest and weather conditions.
 - B. Percent active ingredient.
 - C. Need for additives or adjuvants.
- 76.** The “Directions for Use” section of a pesticide label indicates the:
- A. Various crops or areas on which the pesticide may be legally used.
 - B. Disposal of pesticide waste.
 - C. Environmental, physical, and chemical hazards.
- 77.** When two or more pesticides mixed together form a putty or paste, separate into layers, or look like cottage cheese, it is an example of:
- A. Limited agitation.
 - B. Chemical incompatibility.
 - C. Physical incompatibility.

- 78.** After filling a tank one-fifth to one-half full with carrier, what is the usual order for tank mixing the remaining products?
- A.** Add suspension products, add emulsion products, add solution products, add surfactants (if needed), add compatibility agent (if needed).
 - B.** Add compatibility agent (if needed), add suspension products, add solution products, add surfactants (if needed), add emulsion products.
 - C.** Add surfactants (if needed), add suspension products, add emulsion products, add solution products, add compatibility agent (if needed).
- 79.** Which statement about the proper technique for opening pesticide containers is *true*?
- A.** Put on the appropriate PPE after the containers have been opened.
 - B.** Use a sharp knife or scissors to open paper or cardboard containers.
 - C.** Leave the container open until you have finished mixing pesticides for the day.
- 80.** Which statement about measuring and/or transferring pesticides is *true*?
- A.** Metal measuring utensils are recommended over plastic.
 - B.** Most dusts, powders, and dry formulations are measured by volume.
 - C.** After adding the pesticide to the partially filled spray tank, rinse the measuring container and pour the rinse solution into the tank.
- 81.** Which statement about cleaning and disposing of pesticide containers is *true*?
- A.** Do not puncture rinsed pesticide containers.
 - B.** Pesticide containers that cannot be recycled or returned to the manufacturer should be reused.
 - C.** Containers must be disposed of in accordance with label directions and current regulations
- 82.** Which statement about triple-rinsing and pressure-rinsing pesticide containers is *true*?
- A.** Triple rinsing is a more effective method than pressure rinsing.
 - B.** All containers must be either triple-rinsed or pressure-rinsed.
 - C.** Rinsate from triple rinsing or pressure rinsing may be stored for later use.
- 83.** Which statement about pesticide rinsates is *true*?
- A.** Rinsates may be applied to labeled target sites at or below labeled rates.
 - B.** Rinsates containing strong cleaning agents may be reused in pesticide mixtures.
 - C.** The amount of pesticide in the rinsate plus the amount of pesticide product in the new mixture may exceed the label rate for the target site.

- 84.** Which statement about pesticide equipment cleanup is *false*?
- A. Sprayers should be thoroughly rinsed with a water-detergent solution for several minutes.
 - B. When getting ready to store your sprayer, add some lightweight oil to the tank before the final flushing.
 - C. Leftover pesticide residue in the spray tank is permitted when changing products.
- 85.** Which application method involves uniformly applying a pesticide to an entire area or field?
- A. Broadcast
 - B. Band
 - C. Directed spray
- 86.** Which type of pesticide application would you use to control cockroaches inside buildings?
- A. Basal
 - B. Band
 - C. Crack and crevice
- 87.** Which statement about containment pads is *true*?
- A. Pads make spill cleanup more difficult.
 - B. Pads should be made of permeable materials.
 - C. Pads should be used where large quantities of pesticides are handled or mixed.
- 88.** Which statement about sprayer nozzles is *true*?
- A. A nozzle that mainly produces fine droplets is likely to minimize off-target drift.
 - B. Coarse-sized droplets provide maximum coverage of the target.
 - C. Nozzles control the amount of material applied and type of pattern created.
- 89.** Which statement about granular applicators is *true*?
- A. Ground speed has no effect on the application rate.
 - B. In a rotary spreader, lighter granules are thrown farther than heavier ones.
 - C. Drop spreaders are superior to rotary spreaders when more precise placement of the pesticide is desired.
- 90.** Which technique would help minimize off-target drift?
- A. Spraying during a temperature inversion.
 - B. Using the largest droplets practical to provide necessary coverage.
 - C. Increasing the height of the nozzles above the target.

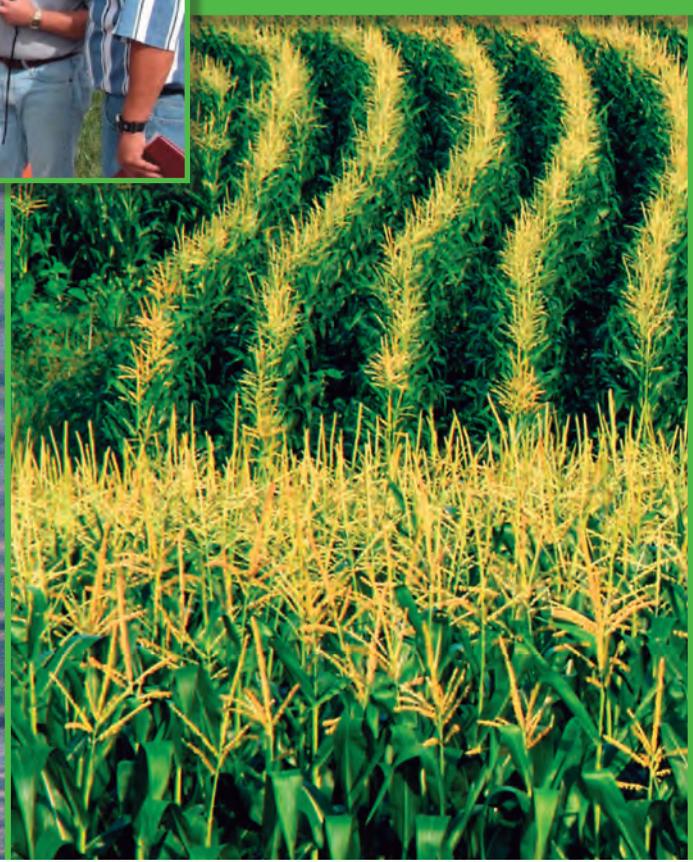
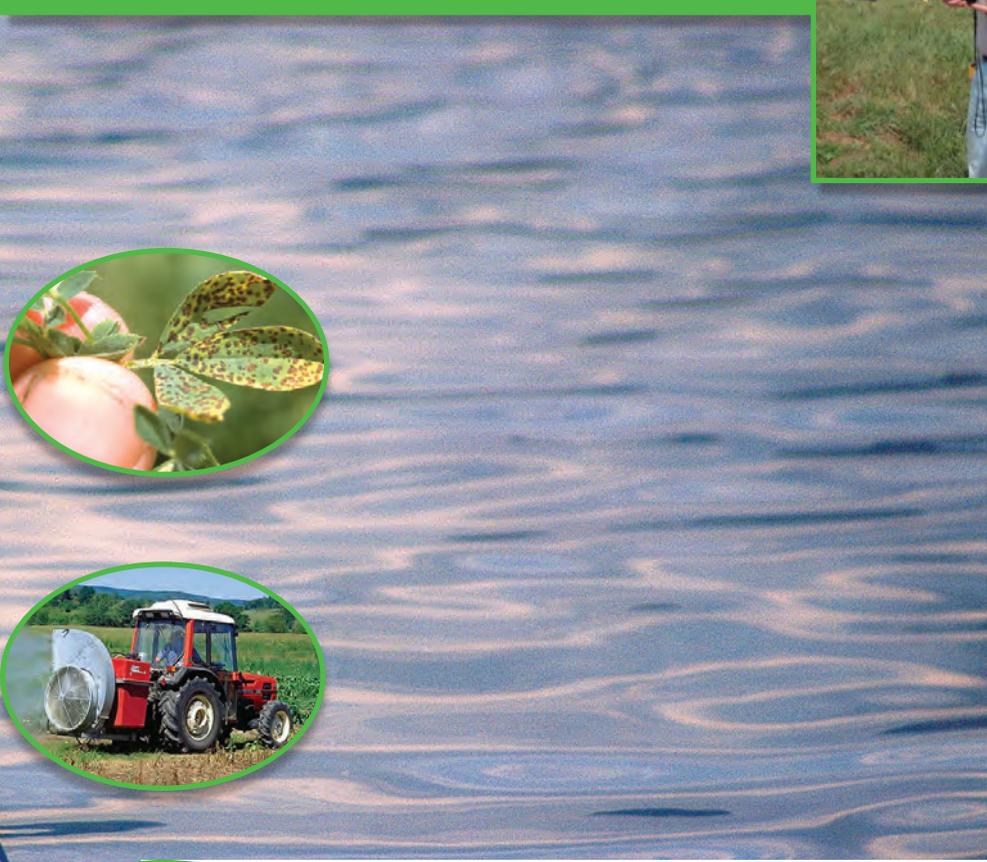
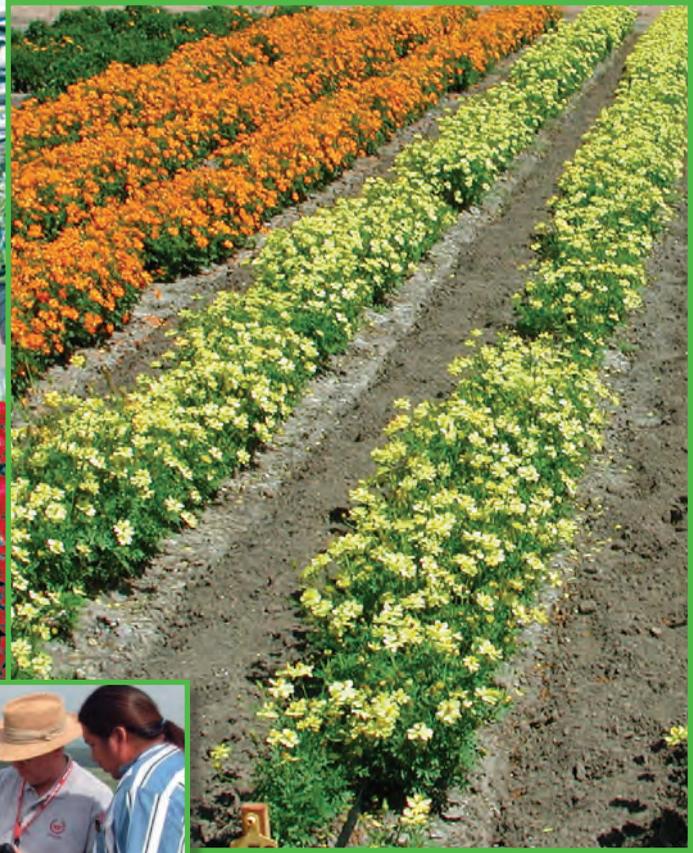
91. You are applying a pesticide to a triangular area that has a base of 60 feet and a height of 30 feet. How many square feet is the area?
- A. 450
 - B. 900
 - C. 1,800
92. You are applying a pesticide to a circular area with a 20-foot diameter. How many square feet is the area?
- A. 128
 - B. 314
 - C. 400
93. You have calibrated your equipment to spray 50 gallons per acre. You need to spray 1 acre. The label calls for 3 pounds of formulation per 100 gallons of water. How many pounds of formulation should you add to the tank to make 50 gallons of finished spray?
- A. 1.5
 - B. 3
 - C. 6
94. You own a lawn care business and apply only general use pesticides. Which type of applicator license do you need?
- A. Private
 - B. Commercial
 - C. Supervisor
95. To purchase and apply a restricted use pesticide, you will need to be certified as a licensed private or commercial applicator?
- A. True
 - B. False
96. A private applicator license allows you to use restricted use pesticides only for the purposes of producing an agricultural commodity.
- A. True
 - B. False

- 97.** Which of the following laws regulate pesticides and their use in Wyoming?
- A.** Federal Farm Bill and the Wyoming Local Food Production Act.
 - B.** Federal Safe and Securities Act and the Wyoming Right to Farm Act.
 - C.** Federal Insecticide, Fungicide and Rodenticide Act and the Wyoming Environmental Pesticide Control Act.
- 98.** Pesticides do not have to be registered with the State of Wyoming before they can be sold and used.
- A.** True
 - B.** False
- 99.** The Wyoming Pesticide Board of Certification has the authority to declare any pesticide as Restricted Use?
- A.** True
 - B.** False
- 100.** The Wyoming Department of Agriculture can immediately refuse registration or suspend use of any pesticide in the state?
- A.** True
 - B.** False
- 101.** The Director of the Wyoming Department of Agriculture has the authority to immediately suspend any reciprocal license based on what?
- A.** Falsification of the license application.
 - B.** Violations related to pesticide use in another state.
 - C.** Both A & B.
- 102.** As a licensed applicator, you can purchase Restricted Use pesticides and make them available for use by any person?
- A.** True
 - B.** False

- 103.** Records of pesticide applications must be kept for a minimum of:
- A. 5 years
 - B. 3 Years
 - C. 2 years
- 104.** Any applicator who receives a violation may contest the violation notice and request a hearing before the Pesticide Board of Certification?
- A. True
 - B. False
- 105.** When a crop has been sprayed using a pesticide under special registration and the seed has been harvested, it is legal to feed the remaining forage to livestock?
- A. True
 - B. False
- 106.** Who can sell restricted use pesticides in Wyoming.
- A. Any retail establishment having locked storage designated only for pesticides.
 - B. Home Improvement stores and farm supply dealers.
 - C. Any business licensed and inspected by the department of agriculture as a pesticide dealer.
- 107.** In Wyoming, which agency regulates the storage, disposal of pesticides and pesticide containers?
- A. Wyoming Dept. of Environmental Quality
 - B. Wyoming Dept. of Agriculture
 - C. Environmental Protection Agency
- 108.** The Wyoming Pesticide Board of Certification has the authority to enact more stringent standards for applicators or for specific pesticides when deemed necessary?
- A. True
 - B. False

- 109.** The Wyoming Department of Agriculture is prohibited to inspect the applicator, or site of application once a person has obtained their commercial license?
- A.** True
 - B.** False

WDA - Private Applicator At-Home Workbook Study Questions



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