

# Pesticide Game Show

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- **A fun and entertaining way to learn new things and to refresh the memories of seasoned applicators**

**Roland Maynard  
Oregon Department of Agriculture**

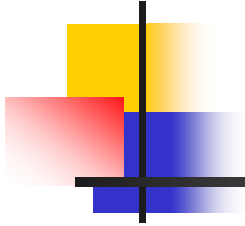


# Rules

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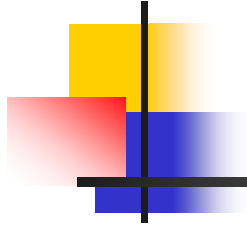
- **Select teams**
- **Raise hand to answer questions**
- **Points subtracted for incorrect answers**

# Question:



- **Name two methods to prevent water source contamination?**

# Answer:



- Back siphon device

- Air gap method



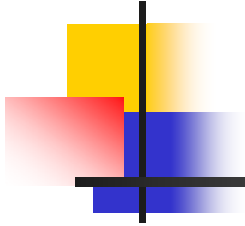


# Question:

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- **What is a pesticide label?**
  - **a. A legal document.**
  - **b. Paperwork that tells the pesticide user how to correctly use the pesticide.**
  - **c. Suggested uses for the pesticide product.**
  - **d. both a and b.**

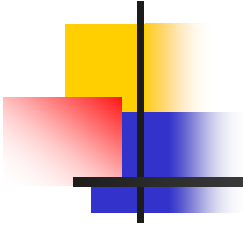
# Answer:



**d. Both a. and b.**

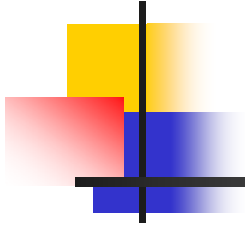
- **a. A legal document.**
- **b. Paperwork that tells the pesticide user how to correctly use the pesticide.**

# Question:



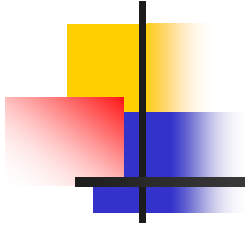
- **Plastic pesticide containers can be burned with:**
  - **a. A permit from DEQ**
  - **b. A permit from ODA**
  - **c. A permit from EPA**
  - **d. Never allowed**

# Answer:



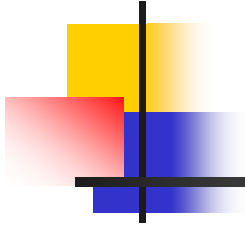
- **d. Never allowed**
- **It is legal to burn cardboard, paper-laminated and paper-laminated foil bags but not plastic containers.**

# Question:



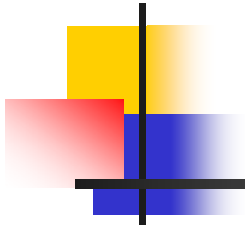
- **What method of application is used to apply pesticides between rows?**
- **a. Broadcast application**
- **b. Band application**
- **c. Crack and crevice application**
- **d. Foliar application**

# Answer:



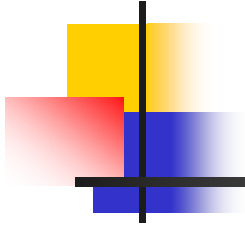
- **b. Band application**

# Question:



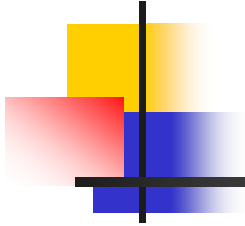
- You spread four 25 lbs. bags of weed'n'feed over a large turf area. The weed'n'feed contains 5% active ingredient by weight. What is the total lbs. of active ingredient applied to the turf area?
- a. 5 lbs.
- b. 25 lbs.
- c. 100lbs.
- d. 400 lbs.

# Answer:



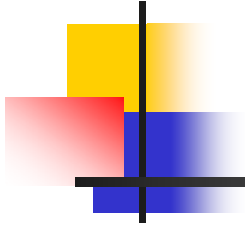
- a. 5 lbs.
- 4 bags x 25 lbs/bag = 100 lbs.
- 100 lbs x 0.05 ai = 5 lbs.

# Question:



- **Which two pesticide activities put a person at greater risk? And why?**

# Answer:



- **Mixing and loading**
- **Because you are handling the pesticide in its concentrated form while pouring, increasing the risk of splash backs**



## Question:

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- **True or False: You only need to report your application information to the Pesticide Use Reporting System if you make a pesticide application in a place where there is public access.**

# Answer:



■ **False**

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- **All pesticide applications made for**
  - **Agricultural**
  - **Forestry**
  - **Government agencies**
  - **Utility companies**
  - **Pest control companies**
  - **Landlords and managers of rental property, motels, hotels, restaurants, and stores must report**

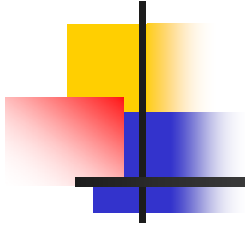


# Question:

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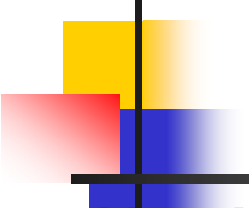
- **If you make an application to a site or at a rate NOT on the product label, you are in violation of?**
  - a. State law
  - b. Federal law
  - c. No laws, but I could be subject to a lawsuit
  - d. a. and b

# Answer:

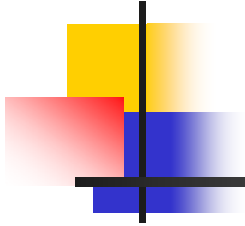


- **d. a. and b.**
  - **a. State law**
  - **b. Federal law**

# Question:

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- You have 5 gallons of Roadwarrior left from 2006 but is not labeled for use on railroads. The 2008 product is labeled for use on railroads but the product is unavailable. What do you do?
    - a. Print a 2008 label from the internet and use it
    - b. Use either label, it doesn't matter
    - c. The product can no longer be used since the label has changed
    - d. Contact the manufacturer and ask them to submit a supplemental label to EPA to allow the old product to be used on railroads.

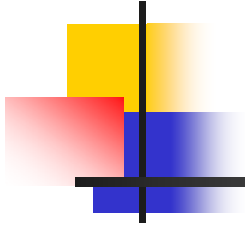
# Answer:



- **d. Contact the manufacturer and ask them to submit a supplemental label to EPA to allow the old product to be used railroads.**

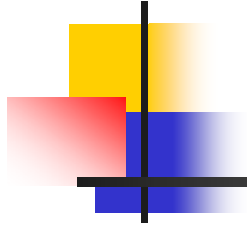
**It is not legal to shop for labels on the internet, to use new labels with old product, or to use old labels with new product to take advantage of use changes.**

# Question:



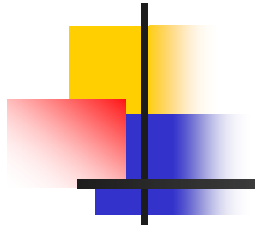
- If you are traveling at 5 feet per second (FPS) what is the speed in miles per hour (MPH)?
- a. 2.2
- b. 3.4
- c. 5.0
- d. 8.7

# Answer:



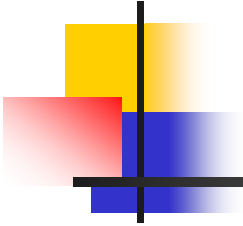
- **B. 3.4 MPH**
- **5 ft/sec. x 60 secs/min. = 300 feet/min.**
- **300 ft/min. x 60 mins./hr = 18,000 ft/hr.**
- **18,000 ft/hr. x 1 mile/5280 ft.**  
**= 3.4 MPH**

# Quesiton:



- Your spreader applies 5 lbs. of material over 1000 sqft., how much material will be spread over 1 acre? (*Hint 1 acre = 43,560 sqft*)
- *a. 21.78 lbs.*
- *b. 217.8 lbs.*
- *c. 2178.0 lbs.*
- *d. 21780.0 lbs.*

# Answer:



- **b. 217.8 lbs/acre**
- **1000 sqft goes into 43,560 sqft/ac = 43.56 times**  
**43.56 x 5 lbs. lbs/test area = 217.8 lbs/ac**



# Question:

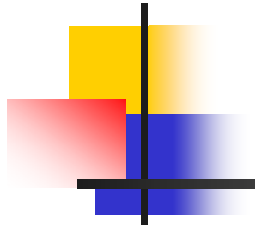
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- **FIFRA requires that all registered pesticides be classified as**

**or**

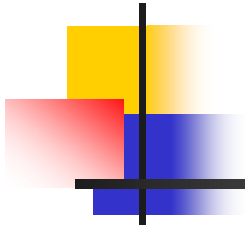
\_\_\_\_\_ **?**

# Answer:



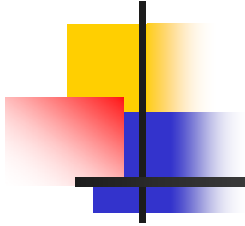
- FIFRA requires that all registered pesticides be classified as General Use or Restricted Use Pesticides?

# Question:



- **The pesticide label states to spray 2.5% solution to the point of glistening. How much product should you mix into a 5 gallon sprayer?**
- **a. 1 fluid oz.**
- **b. 1 pint**
- **c. 1 quart**
- **d. 1 gallon**

# Answer:



- **b. 1 pint**
  
  - **5 gallon sprayer x 0.025 = 0.125 gallons**
  - **0.125 gallons x 8 pints/gallon = 1 pint**
- Or**
- **128 ozs./gal. x .125 gals = 16 ozs.**
  - **16 ozs. is the same as saying 1 pint**

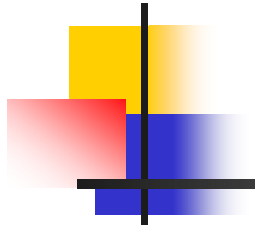
# Question:



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- **Which one of the following is NOT considered a pesticide?**
  - **A. Rat bait**
  - **B. Weed killer**
  - **C. Cleaning agent**
  - **D. Insect repellent**

# Answer:



- **C. Cleaning agent**
- **Products that do not make claims to control, kill, mitigate or repel a pest are generally not considered pesticides.**

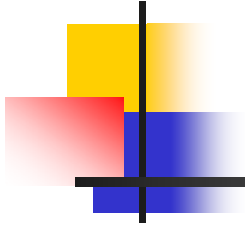
# Question:



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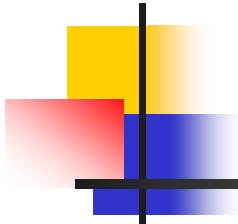
- **What does “REI” on a pesticide label stand for?**
  - **a. Restricted emissions incident**
  - **b. Recreational Equipment Inc.**
  - **c. Restricted Entry Interval**
  - **d. Reporter education information**

# Answer:



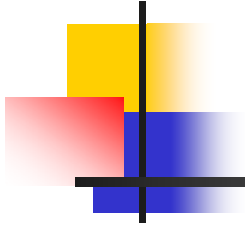
- **c. Restricted Entry Interval**

# Question:



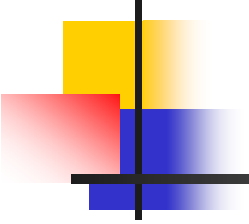
- **What practice(s) should help to prevent groundwater and surface water contamination?**
  
- **a. Take out vegetative buffers between fields and waterways**
- **b. mix pesticides and clean application equipment around abandoned wells**
- **c. Apply pesticides broadly over large areas**
- **d. Select pesticides that adsorb to soil and are not persistent**
- **e. All of the above**

# Answer:

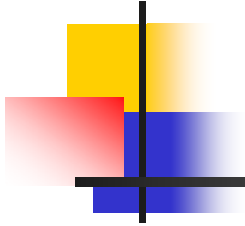


- **d. Select pesticides that adsorb to soil and are not persistent**

# Question:

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- **What type of PPE should you wear if you are likely to get large amounts of pesticides on your clothing over an extended period of time?**
  - **a. Coveralls made of cotton synthetic blend**
  - **b. A chemical-resistant suit made of rubber or plastic**
  - **c. A chemical-resistant rubber apron**
  - **d. Long-sleeved shirt and long pants made of woven cotton fabric**

# Answer:



- **b. A chemical-resistant suit made of rubber or plastic**



# Question:

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- **Which best describes an inversion:**
  - a. Poor air quality warnings
  - b. When the temperature at ground level is lower than the air above.
  - c. When the temperature at ground level is higher than the air above.
  - d. An additive that allows water to remain suspended in oil.

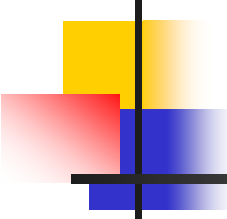
# Answer:



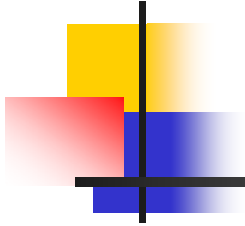
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**b. When the temperature at ground level is lower than the air above.**

# Question:

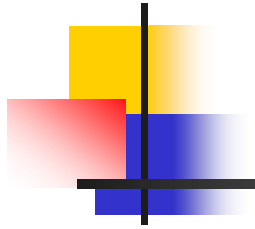
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- Which statement is true about the LD50 and LC50?
    - a. The LD50 and LC50 measure multiple toxic effects
    - b. The LD50 and LC50 translate directly to human toxicity
    - c. The LD50 and LC50 measure the potential buildup of effects due to repeated exposure
    - d. The LD50 and LC50 measure acute toxicity

# Answer:



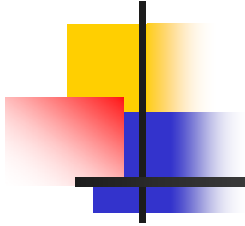
- **d. The LD50 and LC50 measure acute toxicity**

# Question:



- Which section of FIFRA could be used to allow the use of an unregistered pesticide to control a pest problem?
- a. Section 3
- b. Section 18
- c. Section 24c
- d. Section 25b
- e. None of the above

# Answer:



- 
- **b. Section 18**

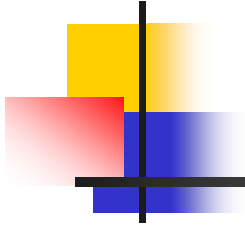


# Question:

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- **What does FIFRA stand for and what does it do?**

# Answer:



- **The Federal Insecticide, Fungicide, and Rodenticide Act. It is the federal law that regulates pesticides in the United States.**

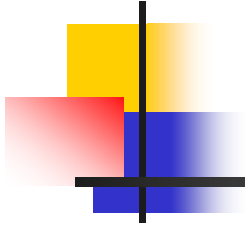
# Question:



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- **As your sprayer ground speed increases your effective rate:**
  - **a. Increases**
  - **b. Decreases**
  - **c. Stays the same**
  - **d. You should keep speed constant**

# Answer:



- **b. Decreases**

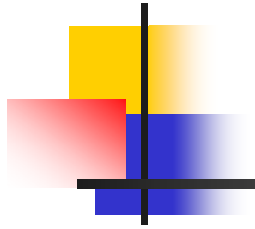


# Question:

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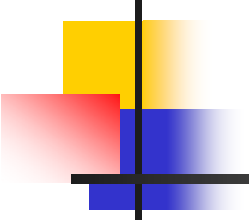
- **True or False: Consultants can advise others on the use of restricted use pesticides.**

# Answer:

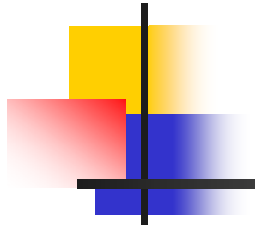


- **True**
- **Unlicensed individuals can make recommendations on general-use pesticides.**

# Question:

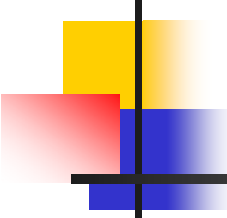
- 
- 
- **True or False: If you have a public or commercial applicator license, you CANNOT advise on the use of Restricted Use Pesticides without obtaining a Consultant license.**

# Answer:

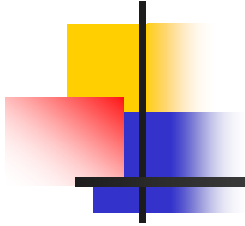


- **b. False**
  - **Public and Commercial Pesticide applicators can give technical advice on restricted use pesticides covered by their license categories.**

# Question:

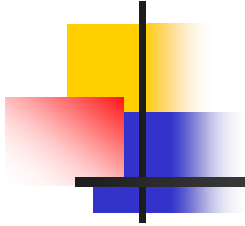
- 
- 
- **Under Oregon recordkeeping requirements, commercial and public applicators are required to maintain their application records for \_\_\_\_\_ ?**
    - a. 30 days
    - b. 1 year
    - c. 3 years
    - d. Until the records are put into PURS

# Answer:



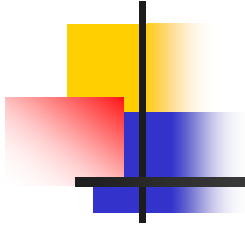
- **c. 3 years**

# Question:



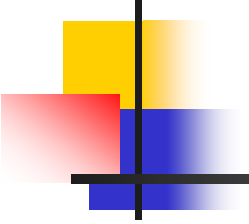
- **To determine the amount of product to mix into the tank, you should:**
  - **a. Divide the tank volume by two**
  - **b. Follow the label directions**
  - **c. Call the rep or dealer**
  - **d. Use the three plug method**

# Answer:

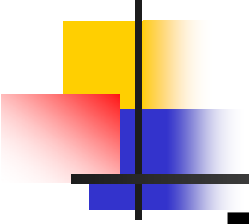


- **b. Follow the label directions**

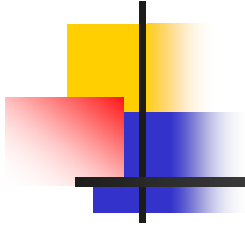
# Question:

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- 
- **True or False: A Pesticide Applicator License is to be displayed to a pesticide dealer to purchase a restricted use pesticide.**

# Answer:

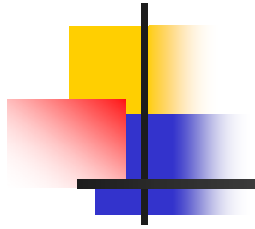
- 
- 
- **True.**
  - **You must present a current valid license at every purchase of an RUP.**
  - **Somebody other than the purchaser may pick up the product.**
  - **Dealers may double check licenses on the ODA website.**

# Question:



- **If your sprayer emits 2 pint per minute and your spray job will take two hours, how many gallons will you spray?**
  - **a. 30 gallons**
  - **b. 60 gallons**
  - **c. 120 gallons**
  - **d. 128 gallons**

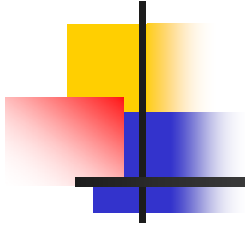
# Answer:



- **a. 30 gallons**

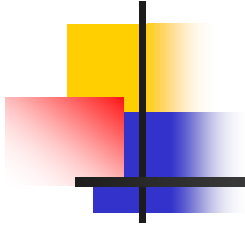
- **2 pint x 120 minutes = 240 pints per 2 hr. period**
- **240 pints divided by 8 pints per gallon = 30 gallons**

# Question:



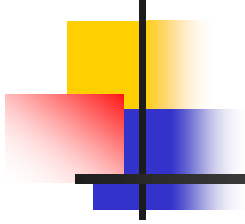
- **What are the three signal words that may appear on a pesticide label in order of toxicity?**
- **Highest to lowest...**

# Answer:



- **Danger - Highest Toxicity**
- **Warning - Moderate Toxicity**
- **Caution - Lowest Toxicity**

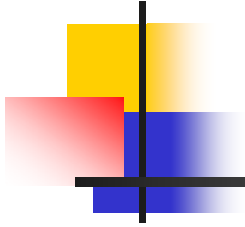
# Question:



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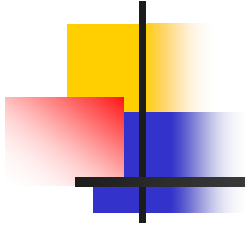
**When is the deadline to report your  
2008 pesticide applications?**

# Answer:



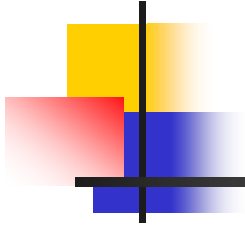
- **January 31, 2009...**
- **It is suggested that you do not procrastinate!**

# Question:



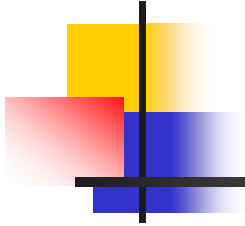
- **What is the difference between a pesticide tolerance and a pesticide residue?**

# Answer:



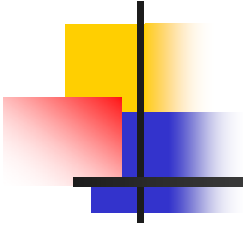
- **A pesticide tolerance is the legally permitted amount of pesticide allowed to remain on the food or feed crop after it has been harvested.**
- **A pesticide residue is the amount of pesticide that remains on the plant, soil, or animal after it has been treated.**

# Question:



- **A boom sprayer has a 10 foot boom with 6 nozzles. What is the nozzle spacing?**
  - **a. 18 inches**
  - **b. 20 inches**
  - **c. 24 inches**
  - **d. 30 inches**

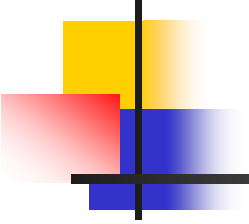
# Answer:



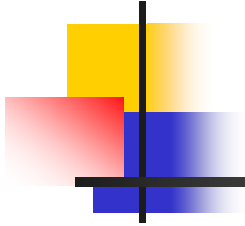
- **c. 24 inches**
  - **Remember to add one on the end!**



# Question:

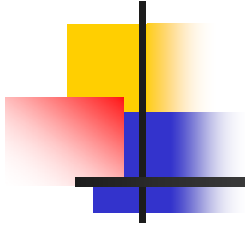
- 
- 
- **Your spray tank holds 100 gallons. Your field is 60 acres. You want to spray 10 gallons per acre. How many times will you need to fill your tank?**
    - **a. Once**
    - **b. Two times**
    - **c. Four times**
    - **d. Six times**

# Answer:



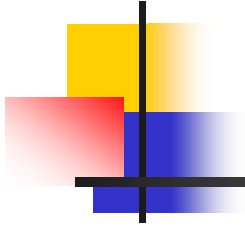
- **d. Six times**
  - **60 acres x 10 gpa = 600 gal.**
  - **600 gal. divided by 100 gal per tank = 6 fills**

# Question:



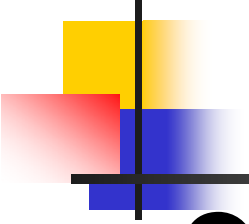
- **What Agency regulates FIFRA?**

# Answer:

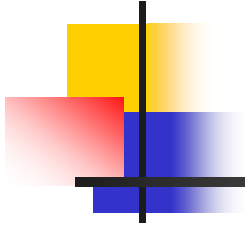


- **What Agency regulates FIFRA?**
  - **The U.S. Environmental Protection Agency (EPA)**

# Question:

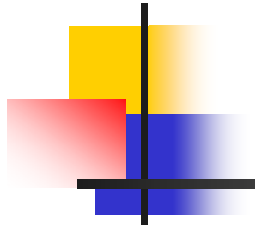
- 
- 
- **Chronic toxicity is:**
    - a. How poisonous a pesticide is after several small repeated doses over a period of time.
    - b. How poisonous a pesticide is after single or limited exposure.
    - c. Severe poisoning that occurs after a single or limited exposure.
    - d. All of the above.

# Answer:



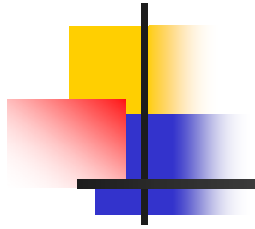
- **a. How poisonous a pesticide is after several small repeated doses over a period of time**

# Question:



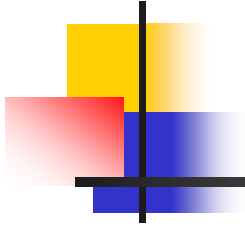
- **What agency regulates aerial application of pesticides?**
  - **a. ODA**
  - **b. FAA**
  - **c. EPA**
  - **d. Both a and b**

# Answer:



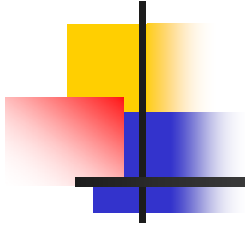
- **d. Both a. ODA and b. FAA**
  - **ODA licenses pesticide applicators and FAA certifies commercial and private aircraft pilots.**

# Question:



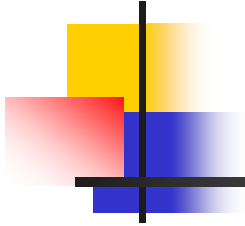
- **Adjustments to an application rate might be made by:**
  - **a. Changing the pressure**
  - **b. Changing the sprayer speed**
  - **c. Changing the nozzles**
  - **d. All of the above**

# Answer:



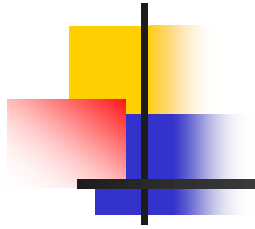
- **d. All of the above**

# Question:



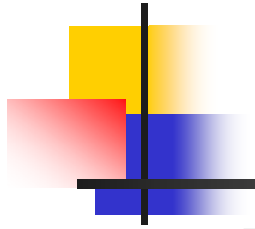
- **What is an adjuvant?**
  - **a. A surfactant**
  - **b. A deposition aid**
  - **c. A buffering agent**
  - **d. All of the above**

# Answer:



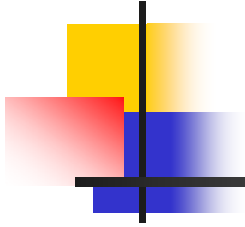
- **D. All of the above**
- **Adjuvants are non pesticide products added to the pesticide to make it work better.**
  - **Surfactants, deposition aids, and buffering agents are examples of adjuvants.**

# Question:



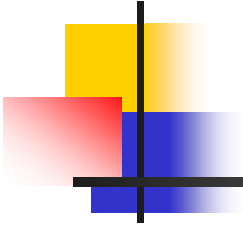
- **Acute toxicity is:**
  - **a. How poisonous a pesticide is after several small repeated doses over a period of time.**
  - **b. How poisonous a pesticide is after single or limited exposure.**
  - **c. A lethal poisoning that occurs after a single or limited exposure.**
  - **d. All of the above.**

# Answer:



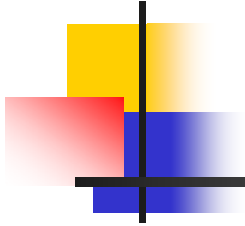
- **b. How poisonous a pesticide is after single or limited exposure.**

# Question:



- **Which pesticide formulation is most toxic to bees?**
  - **a. Granular**
  - **b. Soluble concentrate**
  - **c. Micro-encapsulated**
  - **d. Emulsifiable concentrates**

# Answer:



- **c. Micro-encapsulated**
- **This formulation can easily be carried by honeybees back to the hive. Micro-capsules are similar size to pollen grains and can injure the entire colony.**

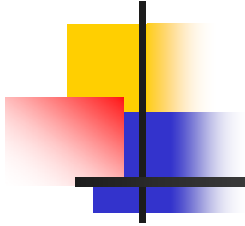
# Question:



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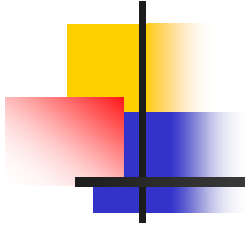
- **Pesticide application information for WPS must stay posted at a central posting location for:**
  - **a. 7 days**
  - **b. Until REI expires**
  - **c. 30 days after REI**
  - **D. What's central posting??**

# Answer:



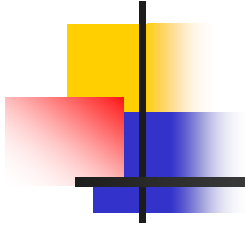
- **c. 30 days after REI**

# True or False:



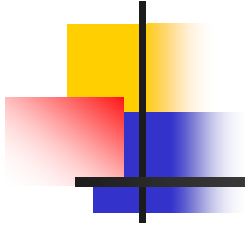
- **Bioaccumulation is the body's ability to break down and excrete pesticides from its system.**

# Answer:



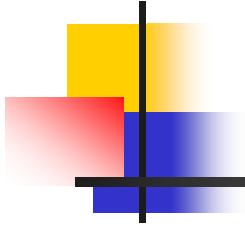
- **False**
- **Bioaccumulation is the ability of organisms to accumulate or store chemicals in their system.**

# Question:



- **What is an EPA Establishment number?**

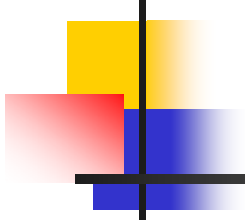
# Answer:



- **A number assigned to a specific pesticide production facility.**
- **The number is found on the product label.**

**Example: EPA Est. No. 2937-OR-01**

# Question:



- **What is an EPA Registration number?**

# Answer:

- A number assigned by EPA to a pesticide product when it is registered.

Example: EPA Reg. No. 2983-291

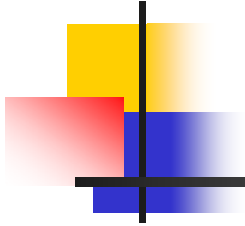
**Primary registrant**

**Product ID**

Example: EPA Reg. No. 2983-291-12937

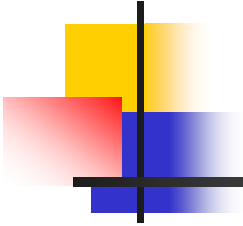
**Distributor No.**

# Question:



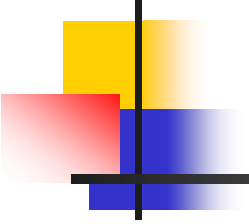
- **The most common way pesticides enter the body is through the:**
  - **a. Mouth**
  - **b. Nose/inhalation**
  - **c. Eyes**
  - **d. Skin**

# Answer:

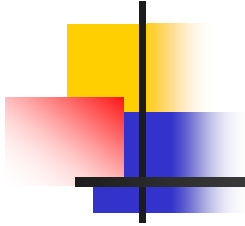


- **d. Skin**

# Question:

- 
- 
- **Regarding “notification” to workers of treated areas...**
    - **a. Employer must provide both oral notification and post warning signs at entrance of treated area**
    - **b. Employer must provide either oral notification or post warning signs**
    - **c. Employees don’t need notification**
    - **d. The pesticide label tells you how to notify your workers**

# Answer:



- **d. The pesticide label tells you how to notify your workers**

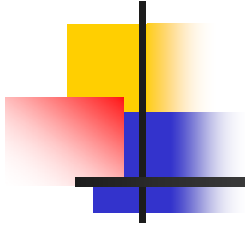
# Question:



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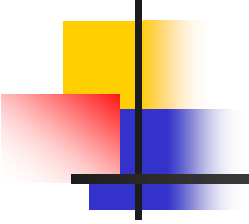
- **If your effective swath width is 10 feet, how far must you travel to cover one acre of ground (1 acre = 43560 square feet)?**
  - **a. 1842 feet**
  - **b. 2400 feet**
  - **c. 4356 feet**
  - **d. 21482 feet**

# Answer:

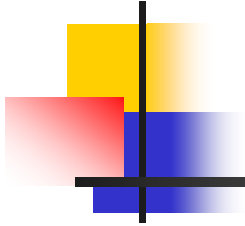


- **c. 4356 feet**
  - **43560 sqft/ac divided by 10 ft.  
swath = 4356 ft.**

# Question:

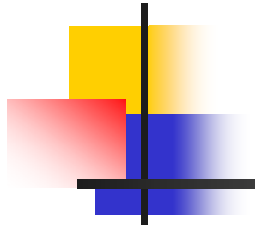
- 
- 
- **Cholinesterase is:**
    - a. A type of insect
    - b. A nerve enzyme
    - c. A type of active ingredient
    - d. A disease of the colon

# Answer:



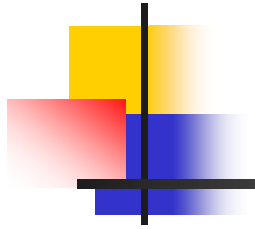
- **b. A nerve enzyme**

# Question:



- **Which pesticide classes can affect human cholinesterase levels?**

# Answer:



- **Organophosphates and carbamates.**
- **Examples: Azinphos-methyl, parathion, chlorpyrifos, carbofuran, diazinon, malathion, etc.**

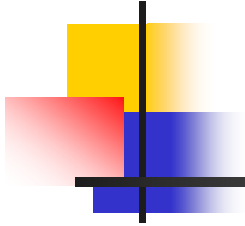
# Question:



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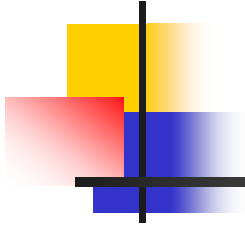
- **The two most common pesticide violations are:**
  - **A. Have no license or an invalid license**
  - **B. Make false or misleading claims about pesticides**
  - **C. Apply pesticides in a faulty, careless, or negligent manner.**
  - **D. Refuse or neglect to maintain records.**

# Answer:



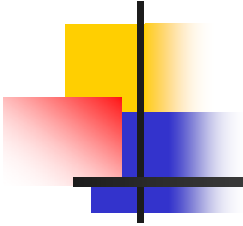
- **Both A. and D.**
  - **Licensing and recordkeeping always top the violation list.**

# True or False:



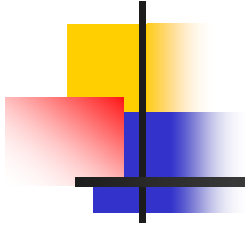
- **Licensed Private Pesticide Applicators are responsible for keeping their own pesticide application records.**

# Answer:



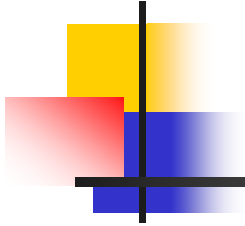
- **True**
  - **However they can designate someone else to maintain the records for them. Just remember, if that person does not maintain them, it is the licensed applicator who will be cited.**

# Question:



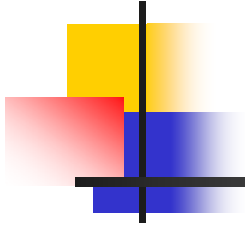
- **Pesticide Dealers are required to keep sales records of:**
  - **a. All pesticide sales**
  - **b. Sales of restricted use pesticides**
  - **c. Sales of fertilizers**
  - **d. All of the above**

# Answer:



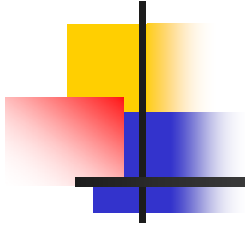
- **b. Sales of restricted use pesticides**

# Question:



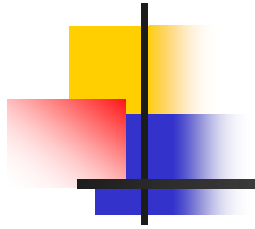
■ Risk = \_\_\_\_\_ x  
\_\_\_\_\_

# Answer:



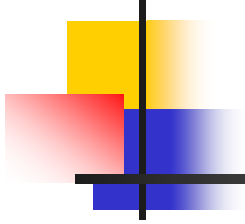
- **Risk = toxicity x exposure**

# Question:



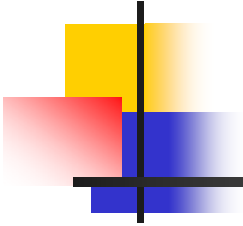
- **Fungicides are used to control?**
  - **a. Vegetation**
  - **b. Insects**
  - **c. Diseases**
  - **d. Slugs**

# Answer:



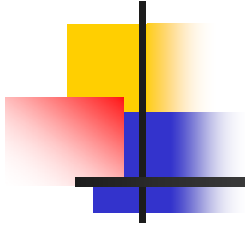
- **c. Diseases**

# Question:



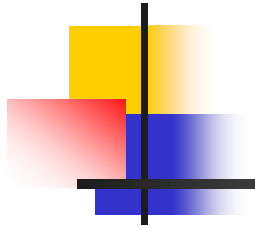
- **Name the 4 times you should read the pesticide label (must be in order).**

# Answer:



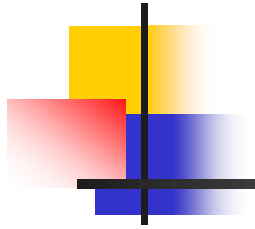
- **Before you buy the pesticide.**
- **Before you mix the pesticide.**
- **Before you apply the pesticide.**
- **Before you store or dispose of the pesticide.**

# Question:



- **You have some questions about some label language. Who should you call for an interpretation of the label statements?**
  - **a. EPA**
  - **b. ODA**
  - **c. Your neighbor**
  - **d. The retail location where it was purchased.**

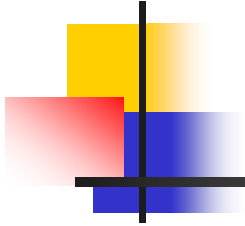
# Answer:



## ■ b. ODA

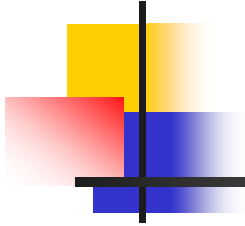
- It is best to call the State lead agency to see how they would interpret the label statement(s) if they were to take enforcement action.
- ODA may contact EPA for input.

# Question:



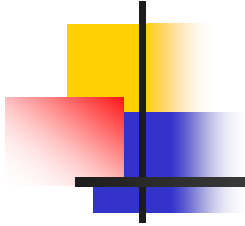
- **What is the difference between a general use pesticide and a restricted use pesticide?**

# Answer:



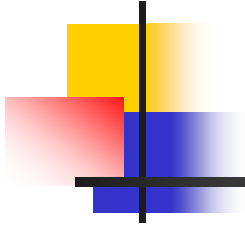
- **Anyone can purchase a general use pesticide.**
- **People who use or supervise the use of restricted use pesticides must be certified and licensed due to either the high toxicity or environmental hazards associated with that pesticide**

# Question:



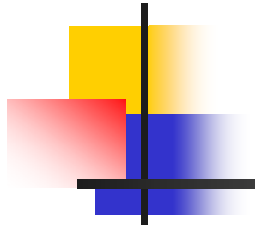
- **What federal agency sets pesticide tolerances?**
  - **a. EPA**
  - **b. DEQ**
  - **c. FDA**
  - **d. ODA**
  - **e. All of the above**

# Answer:



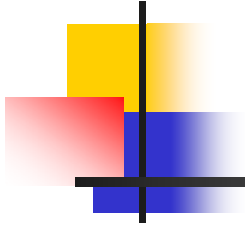
- **a. EPA sets tolerances,**
  - **However the Food and Drug Administration is responsible for enforcement of tolerances.**

# Question:



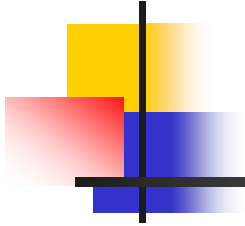
- **Absorption is the:**
  - **a. The entrance of the pesticide into the plant, animal, or insect.**
  - **b. The binding of the pesticide to the soil, plant, or animal.**
  - **c. The plants ability to metabolize a pesticide into non-harmful effects.**
  - **d. All of the above.**

# Answer:



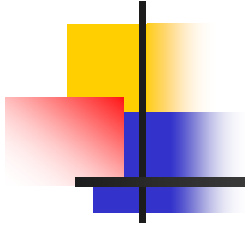
- **a. The entrance of the pesticide into the plant, animal, or insect.**

# Question:



- **A product bearing the signal word of caution would include products in which toxicity category?**
  - **a. Highly toxic**
  - **b. slightly toxic**
  - **c. Moderately toxic**
  - **d. Safe for the environment**

# Answer:



- 
- **b. slightly toxic**