



# Case Two: An Ounce of Prevention!

Grades 3-7

Level 4: Junior Detective

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## Play "Who wants to be an IPM Super Sleuth"

Directions: Answer the following questions. Write the letter of the correct answer in the space provided. When you're finished you can find the answer key at <http://www.ipminstitute.org/pdfquizzesanswers.pdf>.

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1. What do plants need to survive and thrive? \_\_\_\_\_

- A. Air, sunlight and water
- B. Good soil with plenty of nutrients
- C. A lot or a little attention and care, depending on the plant
- D. A location that meets the plant's special needs for light, temperature, moisture, etc.
- E. All of the above

HINT: Nearly all plants share some basic needs, and many also have special needs.

2. Which of the following is NOT true about plants and pests? \_\_\_\_\_

- A. Most pests "specialize," that is they attack only a few kinds of plants
- B. Most plants have ways of defending themselves against pests
- C. Healthy plants can stand up to pests better
- D. All plants get the same pests
- E. A plant can get "sick" from too much or too little water, sunlight and nutrients

HINT: Plants are similar to people in many ways. Does everyone you know get the same sicknesses?

3. What is a key plant? \_\_\_\_\_

- A. A yellow plant the same color as a key
- B. A 'fussy' plant that can have lots of pest problems
- C. A plant on the front steps that you put your housekey under
- D. A plant that grows keys
- E. A plant that's bigger than the rest

HINT: In this case, key means "important to pay attention to."

Level 4 Quiz (continued)

4. A plant might become a key plant: \_\_\_\_\_

- A. By putting it in a spot that's not right for it, e.g., on top of a radiator where it gets too hot
- B. By planting it in a climate that's too hot, too cold, too wet or too dry
- C. In one location or climate but not in another climate or location
- D. By placing it where even little pest problems get noticed
- E. All of the above

HINT: There are many reasons why plants can become key plants.

5. What's the best approach to take towards key plants? \_\_\_\_\_

- A. Plant as many as you can so you'll keep yourself busy taking care of them
- B. Learn about key plants before you buy or plant to save yourself time and work
- C. Avoid key plants and you'll need fewer or no pesticides
- D. A and B
- E. B and C

HINT: Do you really want to spend all your spare time taking care of fussy plants?

6. What are some examples of key plants? \_\_\_\_\_

- A. Grass lawn that needs lots of water in a hot, dry desert climate
- B. Birches, crabapples, dogwoods, euonymus, junipers, maples, oaks, pines, roses, flowering plums
- C. A plant that needs lots of light planted in the shade
- D. A fussy plant that's important to you because you're favorite relative gave it to you
- E. All of the above

HINT: Bet you can think of even more examples.

7. In a garden, rotating annuals (annuals are plants such as tomatoes or petunias that need to be replanted every year) means: \_\_\_\_\_

- A. Turning plants every day so they get even sun
- B. Turning the leaves upside down
- C. Not planting the same kind of plants in the same spot every year
- D. Spinning around and around until you get dizzy and fall on the plants
- E. All of the above

HINT: Do you really think you can turn a plant that's already planted in the ground?

Level 4 Quiz (continued)

8. Rotating annuals from year to year is a good idea because: \_\_\_\_\_

- A. You get a nice surprise when you forget where you planted them
- B. No reason
- C. You can never remember where you put them last year anyway
- D. Variety is the spice of life
- E. Some insect, disease and weed pests get worse if you plant year after year in the same spot

HINT: What might make it easier for pests to find a plant?

9. Applying pesticides to your lawn, garden or houseplants every month to kill insects, weeds and diseases is: \_\_\_\_\_

- A. Not IPM
- B. Like burning money
- C. Not smart, pesticides should be used as a last resort only
- D. Not effective, pest problems should be carefully identified before taking any action
- E. All of the above

HINT: Do you take medicine every day even when you're healthy?

10. If you have house or garden plants that have pest problems that frequently require pesticide applications to fix: \_\_\_\_\_

- A. Buy a big bag of pesticide to save money
- B. Think about replacing that plant with one that has fewer problems
- C. Give it to your neighbor
- D. Hire someone else to apply the pesticide
- E. All of the above

HINT: What's the safest and easiest over the long term?

11. What's NOT a good solution to protect plants from feeding by deer or rabbits? \_\_\_\_\_

- A. Spread black plastic netting over the plants
- B. Choose plants that deer and rabbits don't like to eat
- C. Spray a pesticide on the plants and hope it makes the animals sick
- D. Build a fence to keep rabbits out
- E. Put your dog out in the yard in early morning and evening

HINT: Pesticides should never be used for pests not listed on the pesticide label.

Level 4 Quiz (continued)

12. What's NOT a good solution for problems caused by moles digging in the yard or garden? \_\_\_\_\_

- A. Spread poison bait all around
- B. Apply castor oil-based repellents for moles
- C. Find out for sure if it is a mole, gopher or groundhog that is causing the problem
- D. Just press the grass back down over mole tunnels and water well
- E. All of the above

HINT: Are there other animals that might eat poison bait and get sick?

13. What is biological control? \_\_\_\_\_

- A. Using living organisms, or the products of living organisms, to manage pests
- B. Using a biology text book to squash insect pests
- C. Studying biology to learn about pests
- D. Using mind control on your biology teacher
- E. All of the above

HINT: Biological control is one way to manage pest problems.

14. Biological control includes: \_\_\_\_\_

- A. Letting natural enemies of pests (e.g., lady beetles, lacewings) do their job
- B. Adding natural enemies to your yard or garden
- C. Creating conditions that encourage natural enemies, e.g., putting up a bird house so the birds will stay and eat mosquitoes
- D. Being sure products or practices you use don't harm the good bugs
- E. All of the above

HINT: Which practices help keep natural enemies on the job in your yard or garden?