

**Chapter Test B**

**Classifying and Exploring Life**

**Multiple Choice**

**Directions:** On the line before each question, write the letter of the correct answer.

- \_\_\_\_\_ 1. Which term describes the changes that occur in an organism during its lifetime?
  - A. stimuli
  - B. homeostasis
  - C. organization
  - D. development
  
- \_\_\_\_\_ 2. Which term is a scientific name?
  - A. *Canis*
  - B. *Carnivora*
  - C. *Canis familiaris*
  - D. *German shepherd*
  
- \_\_\_\_\_ 3. Which microscope could be used to study the movement of protists in water?
  - A. SEM
  - B. TEM
  - C. electron
  - D. compound

**Matching**

**Directions:** On the line before each example or definition, write the letter of the term that matches it correctly. Not all terms are used.

**Matching Set 1**

- |                    |                    |
|--------------------|--------------------|
| _____ 4. trees     | <b>A.</b> Archaea  |
| _____ 5. squirrels | <b>B.</b> Animalia |
| _____ 6. mushrooms | <b>C.</b> Fungi    |
|                    | <b>D.</b> Plantae  |

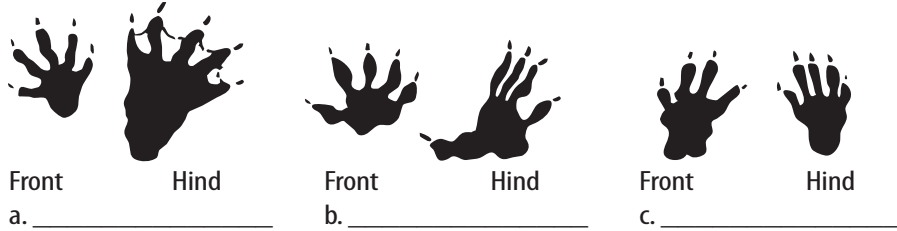
**Matching Set 2**

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|-----------------------------------------------------------|---------------------------------|
| _____ 7. a series of questions used to identify organisms | <b>E.</b> binomial nomenclature |
| _____ 8. shows the relationships among organisms          | <b>F.</b> cladogram             |
| _____ 9. gives each organism a two-word scientific name   | <b>G.</b> dichotomous key       |
|                                                           | <b>H.</b> protist               |

**Chapter Test B continued**

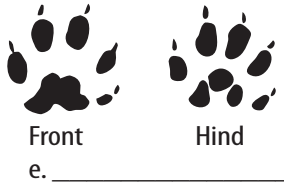
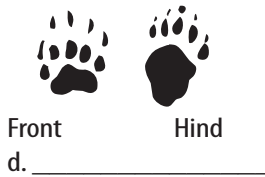
**Interpreting a Diagram**

**Directions:** Use the diagram to respond to each statement.



**Dichotomous Key to Animal Tracks**

1. a. toe print separate from sole print, go to 2  
b. toe print attached to sole print, go to 3
2. a. toes with long claws, *Mephitis mephitis* (skunk)  
b. toes with short claws, *Mustela vison* (mink)
3. a. regular-shaped toes, go to 4  
b. irregular-shaped toes, *Didelphis virginiana* (opossum)
4. a. hind toes webbed, *Castor canadensis* (beaver)  
b. hind toes not webbed, *Marmota monax* (woodchuck)



**10.** Use the dichotomous key to identify each animal track. **Write** the scientific name of each animal on the lines provided.

**11. Write** an example of how the shape of an animal's toe print can be used to identify the animal.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**12. State** whether the front or hind tracks of the animals shown are more useful for identifying the animal. Give an example to support your conclusion.

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# Chapter 1

## Chapter Test B continued

### Short Answer

**Directions:** Respond to each statement on the lines provided.

**13. List** six characteristics of all living things.

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**14. Write** two examples of how the invention of electron microscopes changed people's understanding of living things.

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### Concept Application

**Directions:** Respond to each statement on the lines provided. Use complete sentences.

**15. Explain** the effect that molecular analysis of the DNA of organisms might have on the classification of living things and the use of binomial nomenclature.

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**16. Apply** Use the characteristics of living things to distinguish between a robot and a human.

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**17. Determine** whether the discovery of a new phylum or the discovery of a new species would have a greater impact on our understanding of the relationships between organisms.

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