SECTION 4 Reinforcement

How are living things classified?

Directions: *Answer the following questions using information from the textbook.*

1. Why don't scientists use common names to identify organisms?

_____

_____

2. Why are scientific names important? Give four functions for scientific names.

a. _____

b. _____

c. _____

d. _____

Directions: *Use the key to species of birch trees below to answer the questions that follow.*

Key to Species of Birch Trees

1. **a.** bark dark, reddish-brown, yellowish-brown to black, go to 2
   b. bark creamy white, pinkish, or gray, go to 6
2. **a.** bark and twigs with wintergreen fragrance when cut, go to 3
   b. bark and twigs without a fragrance when cut, go to 5
3. **a.** leaves with 8-12 pairs of veins, go to 4
   b. leaves with 4-6 pairs of veins, *Betula uber*
4. **a.** bark dark red to almost black; scales smooth, 6-12 mm long, *Betula lenta*
   b. bark reddish brown, peeling in loose, ragged sheets, scales hairy, 5-7 mm, *Betula alleghaniensis*
5. **a.** branchlets covered near tip with many small glands, Rocky Mountains or Western Canada, *Betula occidentalis*
   b. branchlets smooth, shiny, no glands present, eastern U.S., *Betula nigra*
6. **a.** leaves hairy on lower surface, go to 7
   b. leaves smooth, hairless underside, go to 8
7. **a.** leaves 5-13 cm long, pointed tip, *Betula papyrifer*
   b. leaves 3-7 cm long, pointed tip, winter buds shiny, *Betula pendula*
8. **a.** bark dull gray to grayish-white, smooth and not peeling, *Betula populifolia*
   b. bark white to pinkish-white, peeling, go to 9
9. **a.** leaves 6-10 cm, round base, *Betula caerulea*
   b. leaves 3-5 cm, squared base, *Betula pubescens*

3. Are the leaves of *Betula populifolia* hairy or smooth on the lower surface? _____

4. How many pairs of veins are on the leaves of *Betula lenta*? _____

5. What is a characteristic of the bark of *Betula alleghaniensis*? _____

_____

6. When a twig of *Betula nigra* is broken, does it give off a wintergreen fragrance? _____