Name _____ Class _____ Date _____

Skills Worksheet

Section Review

Tools and Models in Science

VOCABULARY

1. Use *volume*, *density*, and *mass* in separate sentences.

2. Write an original definition for the term *model*.

UNDERSTANDING CONCEPTS

3. Identifying Which SI unit would you use to express the height of your desk?

4. Summarizing Explain the relationship between mass and density.

5. Listing What is normal body temperature in degrees Fahrenheit and degrees Celsius?

Section Review *continued*

6. Applying What kind of model would you use to represent the human heart?

7. Comparing Explain the difference between a theory and a law.

CRITICAL THINKING

8. Analyzing Methods Both a globe and a flat world map can model features of Earth. Give an example of when you would use each of these models.

INTERPRETING GRAPHICS

Use the image in the book showing water temperature variations to answer the next three questions.

9. Applying Concepts These models were created with data from satellite images. What are some possible uses for these models?

10. Evaluating Sources How accurately could you predict water temperature for a specific location on the California coast?

11. Analyzing Processes What is a possible limitation of these models?

MATH SKILLS

12. Using Equations What is the density of an object whose mass is 36 g and whose volume is 12 cm^3? Show your work below.

CHALLENGE

13. Identifying Relationships For a science fair, you want to make a model of the moon orbiting Earth by using two different balls. The diameter of the ball that will represent Earth will be about 62 cm. You want your model to be to scale. If Earth is about four times wider than the moon is, what should the diameter of the ball that represents the moon be?