

CHAPTER 2
SCIENCE INQUIRY

Exploring the Different Ways that Cells Divide

Goal • Use this page to explore the concepts around cell division.

What to Do

• Answer the questions below in full sentences. For assistance, refer to pages 53–55 of *SCIENCEPOWER™ 8*.

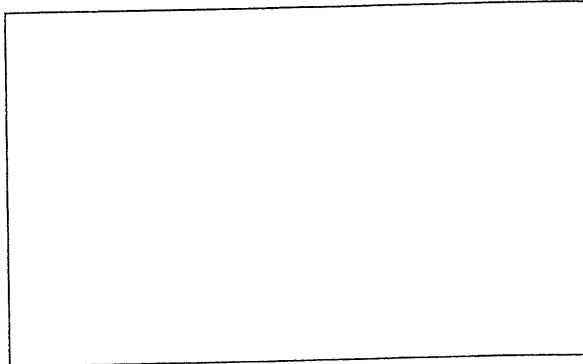
1. Why do you think cells divide? _____

2. What is regeneration? _____

3. What is mitosis? _____

4. Complete the following number pattern: 1 2 4 8 16 _____

5. Describe how the pond organism called hydra is able to “grow” more body parts. Include a diagram beside your description, in the empty box.



6. Which cells in your body are replaced after a few days or weeks? _____

7. Which cells in your body last the longest? _____

8. How long do they last? _____

9. Give three examples of how organisms use regeneration to grow new body parts:

- _____
- _____
- _____

10. How can a flower shop use a plant’s ability to regenerate to make more profit?

Investigating Cancer and its Causes

Goal • Use this page to review your understanding of cancer, its causes, and treatment.

What to Do

- Answer the questions below in full sentences. Refer to pages 58–59 of *SCIENCEPOWER™ 8* for assistance.

1. What is cancer?

2. What do you think is meant by the expression “cancer is mitosis gone wild”?

3. What is a carcinogen?

4. What are some examples of carcinogens?

5. How might someone become exposed to carcinogens?

6. What is one strong link to getting lung cancer?

7. What is one form of cancer commonly diagnosed in Canada?

8. What are some recommendations to prevent this type of cancer?

9. What is chemotherapy?

10. Why do you think it is important to visit your doctor regularly?

11. Why is research so important for cancer patients?

12. What are some research techniques that might become popular in the future?
