Name Date Class

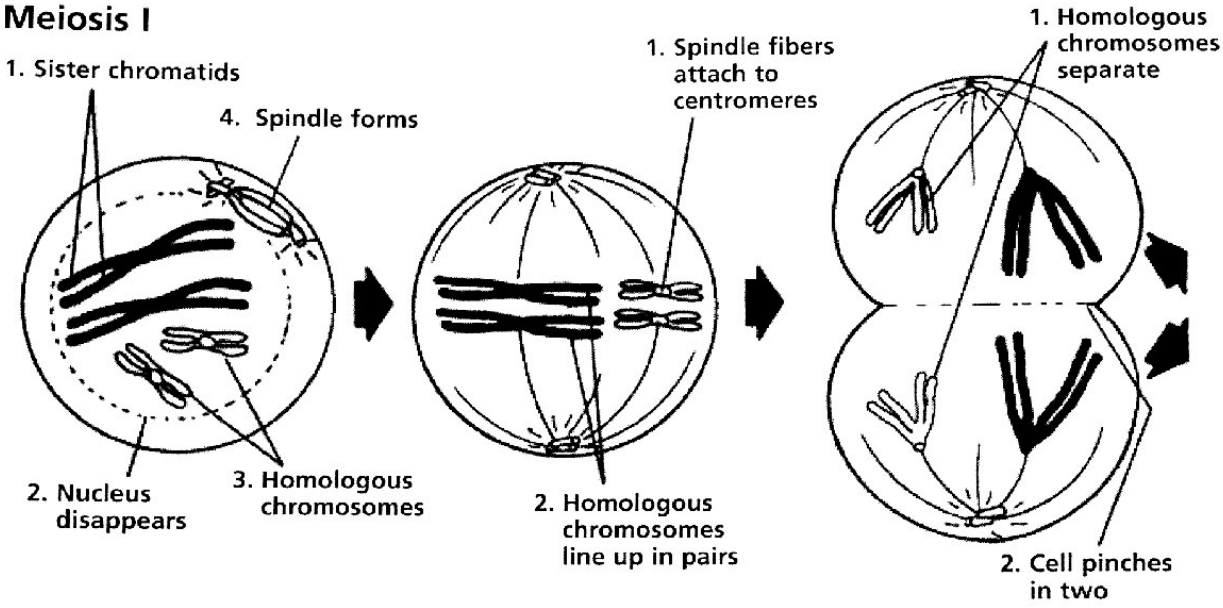
Master 15

Meiosis

Basic Concepts

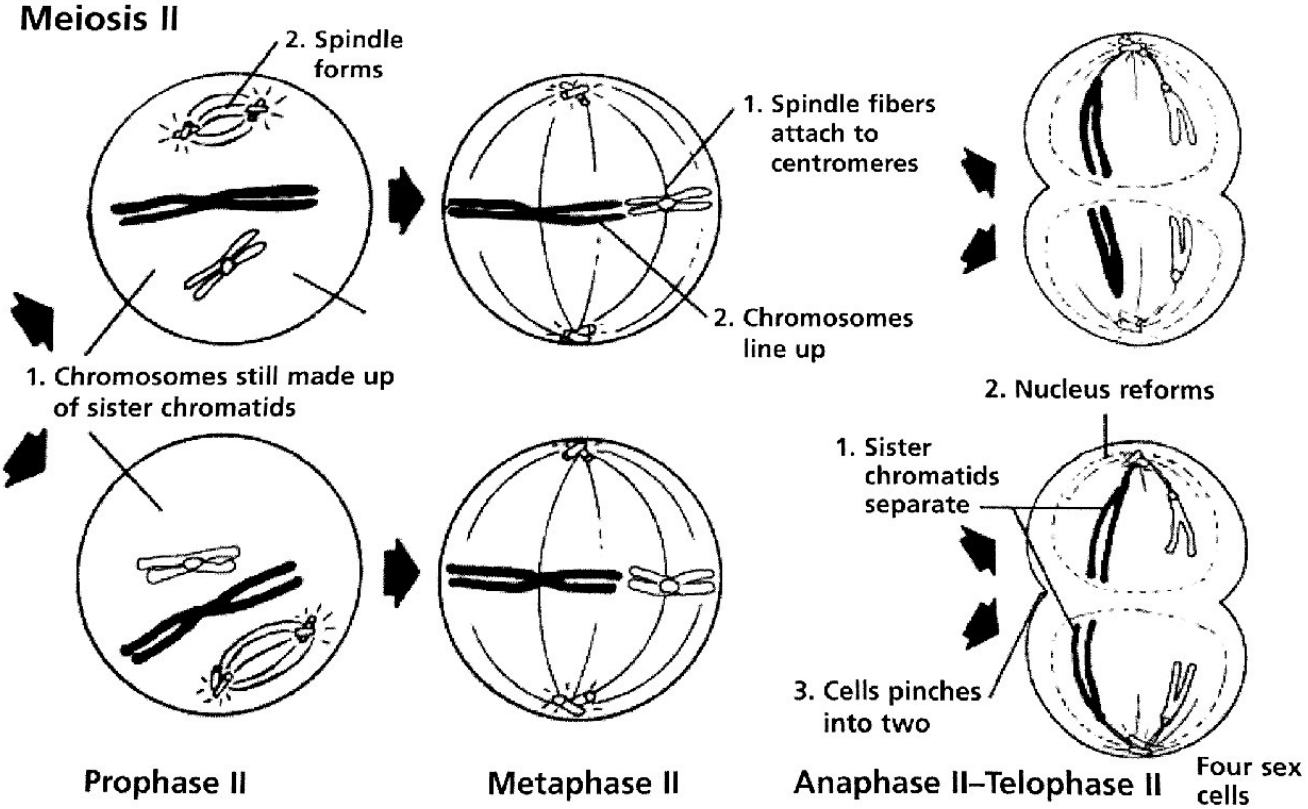
Use with Chapter 10, Section 10.2

Meiosis I



Prophase I Metaphase I Anaphase I–Telophase I

Meiosis II



Prophase II Metaphase II Anaphase II–Telophase II

Worksheet 15

Meiosis

Basic Concepts

Use with Chapter 10, Section 10.2

1. How does the number of chromosomes in a sex cell compare with that in the parent cell?

2. If the number of chromosomes in the skin cells of an organism is 28, what is the number of chromosomes in the organism's egg cells?

3. How many cells are produced at the end of meiosis II?

4. In which phase of meiosis does crossing over occur? What results from this process?

5. Describe the activity of chromosomes in metaphase I of meiosis. How does this activity differ from the activity of chromosomes in metaphase of mitosis?

6. In which phase of meiosis II does the cytoplasm divide?

7. Explain why mitosis could not provide for the sexual reproduction of offspring that contain the same number of chromosomes as the parents.