

SECTION
6.2

PROCESS OF MEIOSIS
Study Guide

KEY CONCEPT

During meiosis, diploid cells undergo two cell divisions that result in haploid cells.

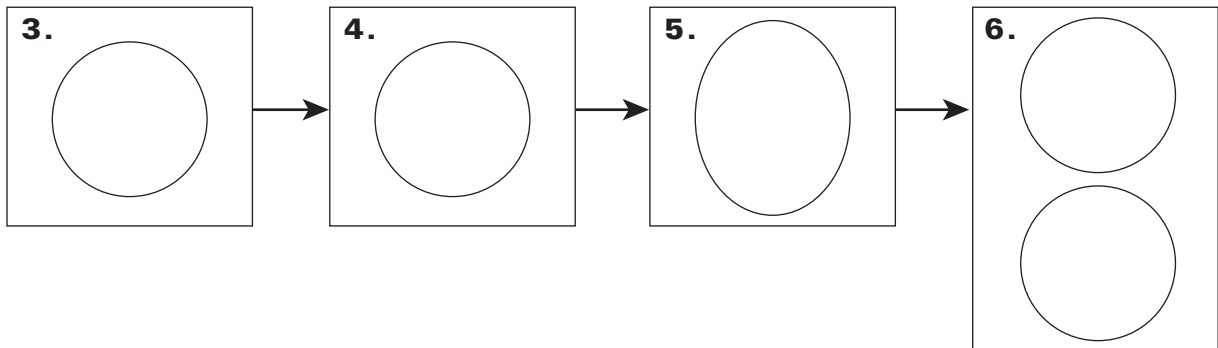
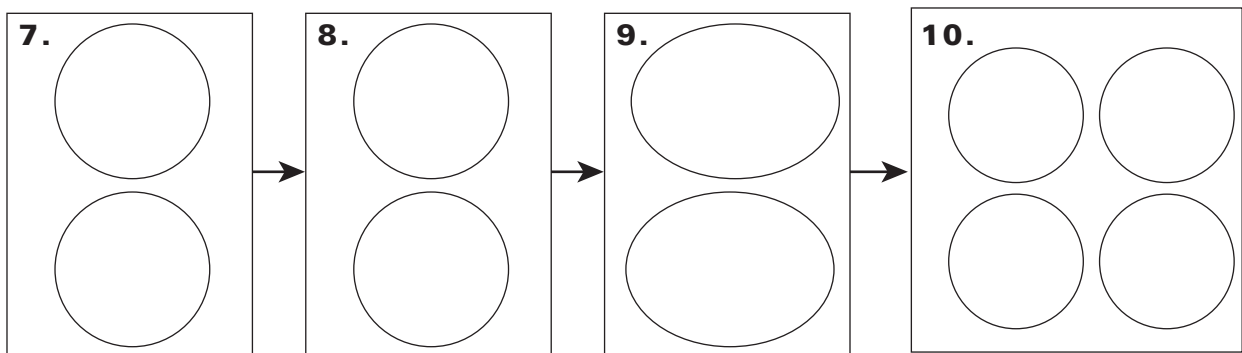
VOCABULARY

gametogenesis	egg
sperm	polar body

MAIN IDEA: Cells go through two rounds of division in meiosis.

1. After a chromosome is replicated, each half is called a _____.
2. Two chromosomes that are very similar and carry the same genes are called _____.

In the space below, sketch the phases of meiosis I and II and write the name of each phase below it. Use Figure 6.5 to help you.

Meiosis I**Meiosis II**

11. During which phase do homologous chromosomes separate?

12. During which phase do sister chromatids separate?

Section 6.2 STUDY GUIDE CONTINUED

MAIN IDEA: Haploid cells develop into mature gametes.

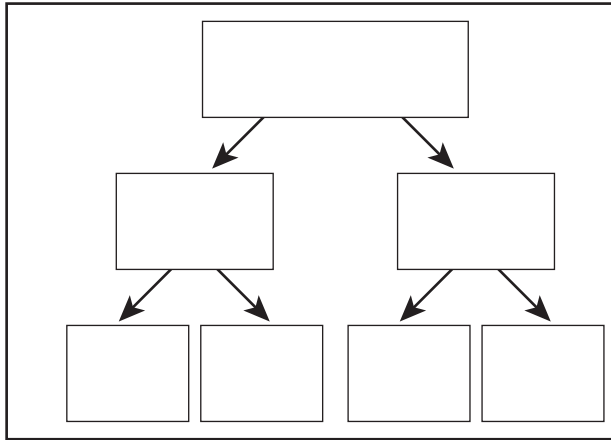
13. What does a sperm cell contribute to an embryo?

14. What does an egg contribute to an embryo?

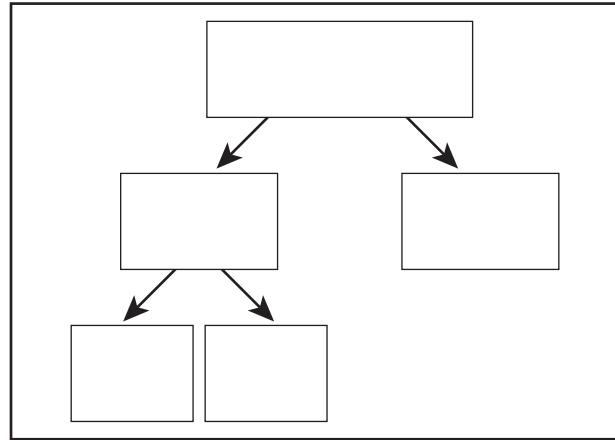
15. Where are polar bodies made, in the male or in the female?

Complete the diagram of gametogenesis in the boxes below. Use Figure 6.6 to help you.

Sperm Formation



Egg Formation



Vocabulary Check

16. *Genesis* comes from a Greek word that means “to be born.” How does this relate to the meaning of gametogenesis?

17. What is a polar body?
