

Name \_\_\_\_\_

Period \_\_\_\_\_

Date \_\_\_\_\_

SECTION

6.2

PROCESS OF MEIOSIS

## Reading Guide

## KEY CONCEPT

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

## VOCABULARY

gametogenesis

egg

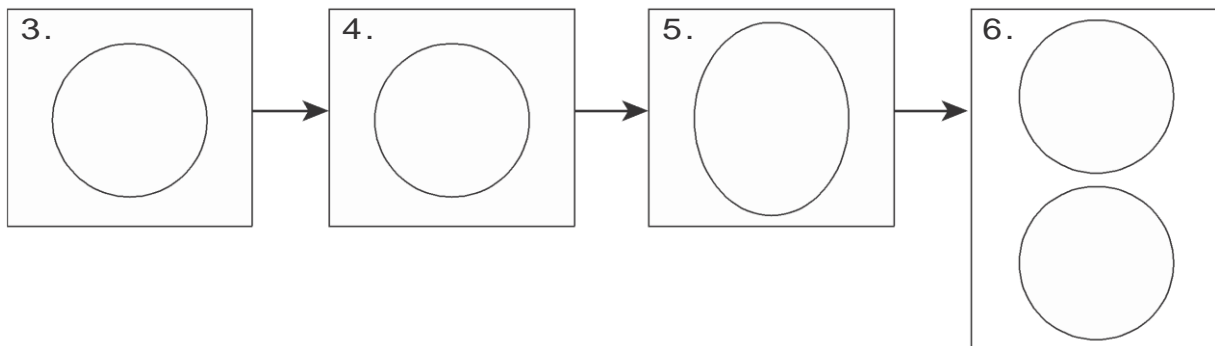
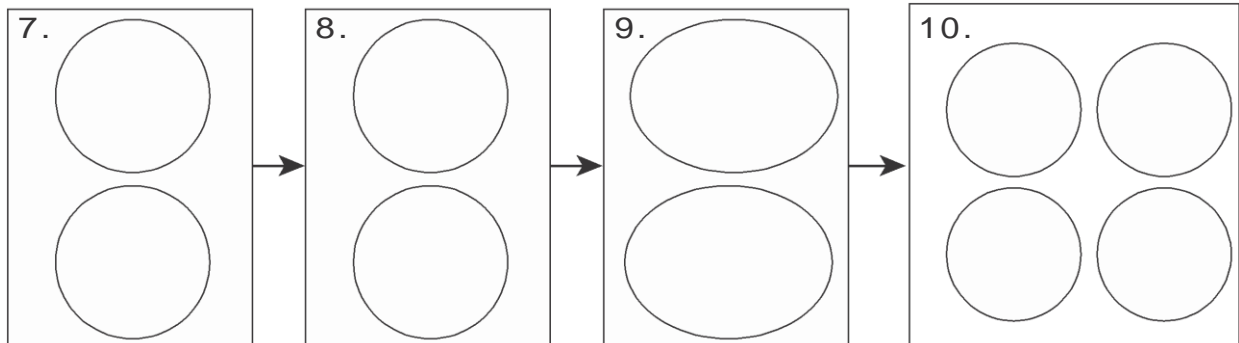
sperm

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?

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12. During which phase do sister chromatids separate?

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## READING GUIDE, CONTINUED

**MAIN IDEA: Haploid cells develop into mature gametes.**

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

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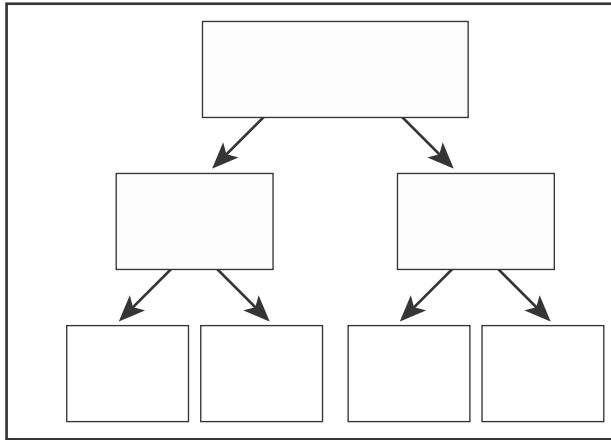
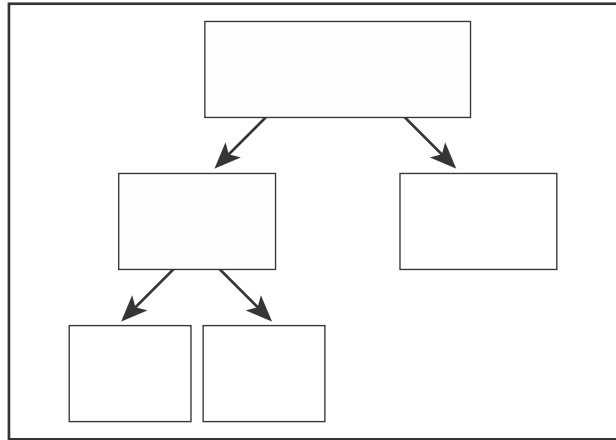
14. What does an egg contribute to an embryo?

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

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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?

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17. What is a polar body?

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