

Skills Worksheet

Active Reading

Section: Multicellular Life Cycles

Read the passage below. Then answer the questions that follow.

Most animals, such as humans, have a diploid life cycle. Most of the life cycle is spent as a diploid organism. For example, humans have 46 chromosomes in their diploid cells. We produce gametes (eggs or sperm) with 23 chromosomes that are haploid through the process of meiosis. Two gametes fuse during fertilization to form the diploid zygote. The zygote then undergoes mitosis to produce a multicellular offspring.

The haploid life cycle is common in fungi and some protists. Most of the life cycle is spent as a haploid organism. Before meiosis, the organism is a diploid zygote. After the zygote goes through meiosis, it develops into four haploid cells. The four cells then go through mitosis and each becomes a multicellular haploid individual. The individual can produce gametes through mitosis. The gametes then fuse to become the diploid zygote. The process repeats again.

SKILL: READING EFFECTIVELY

In the space provided, match each statement with the life cycle it describes. Write *d* if the statement describes a diploid life cycle, write *h* if it describes a haploid life cycle, or write *b* if it describes both.

- _____ 1. The haploid stage is most predominant.
- _____ 2. Diploid and haploid stages are present.
- _____ 3. Diploid cells divide by mitosis.
- _____ 4. Haploid cells divide by mitosis.
- _____ 5. The diploid stage is common.
- _____ 6. Most animals have this life cycle.

An analogy is a comparison. In the space provided, write the letter of the term or phrase that best completes the analogy.

- _____ 7. Haploid cell is to diploid cell plate as egg is to
 - a. gamete.
 - b. individual.
 - c. zygote.
 - d. Both (a) and (b)