

Cell Biology

Name: _____

Life of a Eukaryotic Cell

Period: _____

Use Chapter 5, Section 2 of your textbook to answer the questions below. The word banks can be used to fill out the sentences below them.

chromosomes daughter cells DNA many mitosis

Section 2: The Cell Cycle

1. [review from p.152] DNA of a cell is organized into structures called _____ .

Eukaryotic Cells and Their DNA (p.153)

2. Unlike prokaryotic cells, eukaryotic cells have _____ chromosomes.

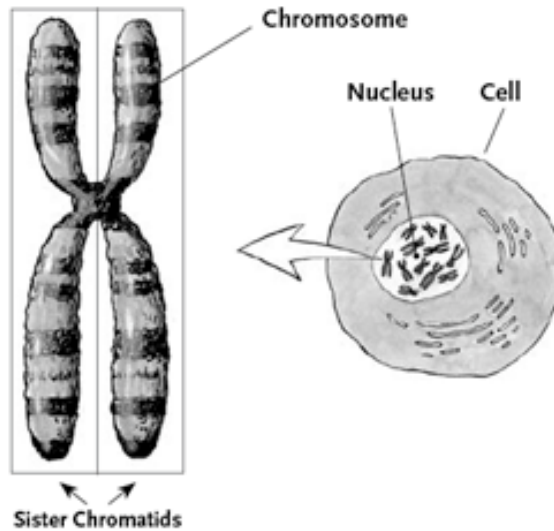
3. Eukaryotes have more _____ than prokaryotes.

4. How many chromosomes do humans have? _____

5. Look at Figure 2. How many sets (pairs) of chromosomes do humans have? _____

_____ 6. What are pairs of similar chromosomes called?

- a. prokaryotic pairs
- b. homologous chromosomes
- c. DNA chromosomes
- d. eukaryotic pairs



Making More Eukaryotic Cells (p.153)

Match the stage of the eukaryotic cell cycle to what happens.

_____ 7. first stage

a. cell splits into two daughter cells

_____ 8. second stage

b. cell grows and copies its organelles and chromosomes

_____ 9. third stage

c. chromatids separate

10. When cells are copied, the two copies are called _____ .

11. The process of separating chromosomes is called _____ .

12. A fruit fly has 8 chromosomes. How many chromosomes will a fruit fly daughter cell have? _____