

# Cell Reproduction Test

Name \_\_\_\_\_

Date \_\_\_\_\_

1. The process of the cell cycle where the nucleus divides to create two identical nuclei is called \_\_\_\_\_.
  - a. mitosis
  - b. meiosis
  - c. mutation
  - d. interphase
  
2. Somatic cells reproduce by \_\_\_\_\_, while sex cells reproduce by \_\_\_\_\_.
  - a. meiosis; mitosis
  - b. mitosis; mitosis
  - c. mitosis; meiosis
  - d. meiosis; meiosis
  
3. The final step in the mitosis process for animal cells is \_\_\_\_\_.
  - a. interphase
  - b. chromosome
  - c. centriole
  - d. telophase
  
4. Which of these is the part of the cell that contains hereditary material?
  - a. centriole
  - b. chromosome
  - c. centromere
  - d. cytoplasm
  
5. Cellular reproduction is involved in ALL of the following processes EXCEPT which?
  - a. development
  - b. cell maintenance
  - c. sexual reproduction
  - d. protein degradation
6. What is the cell cycle? Answer in 2-3 sentences.

7. Match the following mitoses phases with important events which occur during that phase:  
HINT: A word bank is provided. Words may be used ONCE or TWICE, but ALL words will be used.

\_\_\_\_ Nuclear membranes disappear.  
\_\_\_\_ Chromosomes condense from chromatin.  
\_\_\_\_ Centromeres break.  
\_\_\_\_ New nuclear membranes form.  
\_\_\_\_ G<sub>1</sub>, S & G<sub>2</sub> phases occur here.  
\_\_\_\_ Chromosomes align along metaphase plate.

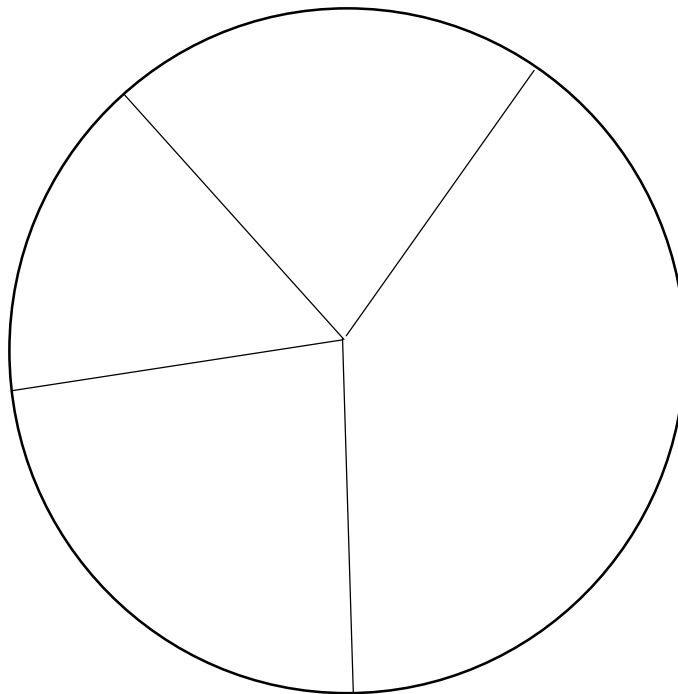
Word Bank:

A. interphase  
B. telophase  
C. prophase  
D. anaphase  
E. metaphase

8. Label the phases of the cell cycle and their associated processes on the following diagram.  
HINTS: The wedges are approximately proportional to the length of each phase. A word bank is provided and words may be used ONCE, TWICE, or NOT AT ALL.

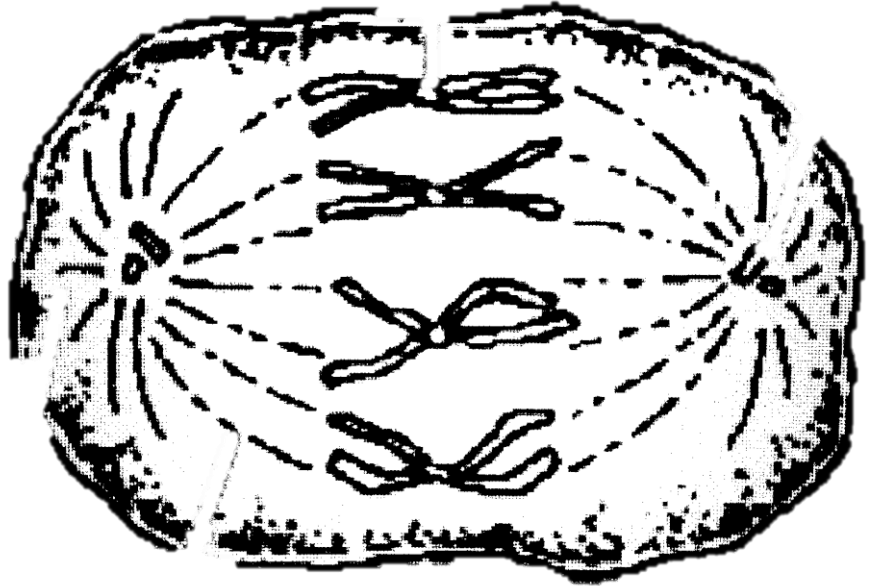
Word Bank

G<sub>2</sub> phase  
S phase  
G<sub>1</sub> phase  
mitosis  
meiosis  
cell growth  
DNA replication  
cell division



9. Color in the following parts of the cell:

Spindle fibers – red  
Chromosomes – blue  
Centrioles – green  
Cytoplasm – yellow  
Cell membrane - orange



10. Sketch the stages of mitosis and label them. Include what the chromosomes are doing in each stage using drawings and captions for each stage. You may use the space below and the back side of this page.

HINT: There are FIVE stages total.