

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Hour: \_\_\_\_\_

1. Make sure you know the order, phases and events of the cell cycle.
2. Be able to recognize different phases of the cell cycle if given a drawing of the cell.
3. What is the goal of cell division (that is, what is the end result)? \_\_\_\_\_  
\_\_\_\_\_
4. What are the cells produced by cell division used for? \_\_\_\_\_  
\_\_\_\_\_
5. What are the three main parts of the cell cycle? \_\_\_\_\_  
\_\_\_\_\_
6. Sketch the cell cycle diagram.
  
  
  
  
  
  
  
  
  
  
7. During which phase of the cell cycle do individual chromosomes become visible? \_\_\_\_\_
8. Draw a pair of homologous chromosomes. Label the centromeres.

9. What are homologous chromosomes? (This is an important concept!) Fill in the blanks below.
- They are chromosomes that come in \_\_\_\_\_.
  - For the chromosomes in each pair, you get one from your \_\_\_\_\_ and one from your \_\_\_\_\_.
  - They have the same \_\_\_\_\_, \_\_\_\_\_, and carry genes for the same \_\_\_\_\_ at the same location.

10. What are sister chromatids? \_\_\_\_\_

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11. How many **total** chromosomes do humans have? \_\_\_\_\_