

# Biology 1

## 6.2 Guided Reading

Please read pages 173-176 and answer the questions below on your own paper using complete sentences.

1. How many haploid cells are created from one diploid cell during meiosis?
2. Meiosis reduces chromosome number and creates \_\_\_\_\_.
3. From where are homologous chromosomes inherited?
4. What is a sister chromatid?
5. What is the main difference between meiosis I and meiosis II?
6. How many haploid cells are produced as a result of meiosis I?

*Please study Figure 6.5, it is very critical to understanding meiosis.*

7. How many chromosomes line up along each side of the cell equator during metaphase I?
8. How many possible combinations of chromosomes can meiosis result in?
9. What is the major difference between metaphase I and II?
10. What is divided in meiosis II?

11. Name two key differences between meiosis and mitosis?
  
12. What is the name for the process where cells mature to form gametes?
  
13. What does a sperm cell contribute to an embryo?
  
14. Briefly explain how a sperm cell's structure is related to its function?
  
15. What does an egg contribute to an embryo?
  
16. How many eggs are produced as a result of one round of meiosis?