Study Guide – Chapter 12 Cell Cycle

1. Contrast the organization of genetic material in an interphase and a mitotic cell.
2. Describe the differences in the structure of a monad and a dyad.
3. What distinguishes a sister chromatid from a non-sister chromatid?
4. Why is the cell cycle called a "cycle?"
5. Outline the major events of prophase, metaphase, anaphase and telophase.
6. What are the three parts of interphase and how do they differ?
7. How does a spindle fiber move chromatids to opposite poles of the cell?
8. Contrasts cytokinesis in animal and plant cells?
9. Explain how binary fission insures that both daughter cells receive a copy of the chromosome.
10. What are the roles of the cyclins and the cyclin dependent kinases in controlling the cell cycle?
11. Where do oncogenes come from?
12. How do benign tumors differ from malignant tumors.

Complete the following concept questions from chapter 12
12.1(1,2,3) 12.2(1,2,3,4,5) 12.3 (1,2,3,4,5,6)

Complete the self quiz at the end of chapter 12 (questions 1-10).

Complete the activities quiz on the web site (questions 1-18)

Complete the chapter review on the web site (questions 1-40)