

Biology 003 Tutorial Worksheets

Tutorial #25: “Mitosis/Cell Cycle Regulation”

1.) Define the following terms

anaphase

cell cycle

centromere

chromatid

interphase

M phase

metaphase

metaphase plate

mitosis

prometaphase

prophase

S phase

telophase

2.) What is the cell cycle? What are the different phases? Is mitosis regulated by a common signal in all cells?

3.) What occurs during the mitotic phase?

4.) What occurs during interphase? How is interphase broken up? What happens in each of these stages?

5.) When does DNA replication occur in the cell cycle?

6.) What are the five stages of mitosis? How can one determine which stage of mitosis a cell is in?

7.) What are chromatids? Draw an example and label the different features.

8.) What are the end products of mitosis? How is this different than meiosis?