**Chap 12: Cell cycle and Mitosis**

**Vocabulary:**

Cell division

Cell cycle

Genome

Chromosome

Chromatid (Sister)

Chromatin

Somatic

Gamete

Centrosome

Centromere

Kinetochore

Mitosis

Interphase (G1, G0, S, G2)

Mitosis (PMAT)

Cytokinesis

Spindle/Spindle Fiber

Centrioles

Aster

Binary fission

Cyclin

CDKs

MPF

Inhibition (Density, Anchoring)

Benign

Malignant

Metastasis

**Chap 12**

What is the main purpose of cell division?

Why are different terms used to describe the same DNA?

What process leads to the creation of the sister chromatids?

How are somatic cells different from gametic cells?

Describe what is happening in the stages of Interphase. …in the stages of Mitosis.

Why is G0 special?

What is S phase so important?

What is the difference between centromere and centrosome?

What is the purpose of the kinetochore?

Know the order and processes of the stage/substages of the cell cycle.

What is different about animal cell division vs plant cell division?

How is prokaryotic DNA different than eukaryotic DNA?

What are cytoplasmic signals?

List 2 cytoplasmic signals used in the cell cycle.

Explain the process of the cell cycle clock.

How do CDK, Cyclin and MPF work together?

Describe the kinds of inhibition.