

TEST DATE: _____

Grade 10 Academic Science

Cells and Cell Division Test Review

Important Terms to know/understand/be able to describe

Prokaryote

Eukaryote

Different organelles found in animal and plant cells and their functions (eg: cytoplasm, mitochondria, chloroplast, golgi bodies, endoplasmic reticulum, vacuoles, nucleus, cell membrane, cell wall etc.)

Cell Theory

The purpose/importance of cell division

The Cell Cycle (Interphase, Mitosis (PMAT), Cytokinesis and the important stages/events that happen within each)

Cancer (Benign vs. Malignant tumours)

Diffusion vs. Osmosis (how are they similar, how are they different)

Specialized Cells

Chapter 1

Differences and similarities between plant and animal cells

Function of all organelles

Use and function of all microscope parts

3 types of microscopes and advantages/disadvantages of each

Stages in the life of a cell

Stages of mitosis

How do cancer cells differ from regular cells? How can cancer be treated?

Cell specialization, regeneration, and the use of stem cells

Four types of tissue in plants and animal cells, and the structure and function of each type

Important Questions

How does cell division promote repair in our bodies?

What is DNA and why is it important in the cell division process?

How do the organelles of a cell work? How would they impact how our bodies respond to certain situations (rest vs. activity)?

What is the different between sexual and asexual reproduction?

What are the functions of the different organelles in plants and animals? If provided a scenario, would you be able to figure out what organelle has been affected?

Can you describe the stages and sub-stages of the cell cycle in detail? Do you know the correct order in which things take place?

What are specialized cells and why are they important? How do they work together?

What is something that is true about all normal cells within a multicellular organism? What do they all have in common?