

Name _____ Date _____ period _____

Unit 5b: The Cell Cell Division Study Guide

Objective	Standard	
DNA	Explain the difference between Chromatin and Chromosomes	HS.1
Reproduction	Compare sexual and asexual reproduction	HS.1
Mitosis	Name the stages of the cell cycle (G ₁ , S, G ₂ , M Phase)	HS.2
	Name the order of the four phases of mitosis	HS.2
	Describe the four phases of mitosis	HS.2
	Explain the purpose of mitosis	HS.2
	Explain the relationship between cancer and the cell cycle. <ul style="list-style-type: none"> • Identify a factor that can stop cells from growing • Describe how the cell cycle is regulated • Explain how cancer cells are different from other cells 	HS.2
	Explain how the cell cycle is regulated	HS.2
Meiosis	Name the stages of meiosis	HS.4
	Name the order of the phases in meiosis	HS.4
	Explain the purpose of meiosis. Explain how crossing over helps increase genetic diversity	HS.4
Mitosis and Meiosis Comparison	Compare and contrast mitosis and meiosis <ul style="list-style-type: none"> • Contrast the chromosome number of body cells and gametes. • Contrast the chromosome number of body cells and gametes 	HS.1-HS.3, HS.4
Human Reproduction	Explain how and where gametes are produced	HS.4

Handwriting

Mitosis

Cytokinesis

Chromatin

Centrioles

Interphase

Cell Cycle

Prophase

Centriole

Spindle/Fiber/Flare

Metaphase

Anaphase

Telophase

Chromosomes

Cancer

Cell Division

Cycle

DNA

Chromatin

G₁/G₂ Phase

Synthesis Phase