

Name _____ Date _____ Section _____

Life Science 7 Cells Unit – Activities 10, 11 & 12 Study Guide

Homeostasis and Cell Processes

1. Homeostasis in Cells

Explain why homeostasis is important for survival

Identify the needs of cells

Describe how cells can get energy by photosynthesis and cellular respiration

Explain that homeostasis is maintained at the cellular level and at higher levels (organism level)

Explain why cells divide. Describe the cell cycle

Discuss why material exchange is important for cells

Compare passive transport to active transport

Compare endocytosis and exocytosis

2. Homeostasis in Organisms

Explain how organisms can respond to changes in their environment

Chemistry of Life

1. Atoms and Molecules

Explain that atoms join together to form the molecules found in living things

List the six elements most commonly found in living things

Define *compound*

2. Molecules for Life Processes

Explain why nutrients are important to all organisms

Identify the four main types of molecules in cells

Illustrate the role of water in cells

Levels of Cellular Organization

1. Cells to Organisms

Define *organism*

Identify that living things are unicellular and multicellular, and list characteristics of multicellular organisms

List levels of structural organization

Define *specialization*

Define *tissue*, *organ*, and *organ system*

2. Cell Structure and Function

Define *structure* and *function*

Explain the basic relationship between the structure and function of tissues, organs, and organ systems

3. Systems Work Together

Describe how various organs and tissues serve the needs of cells for nutrient and oxygen delivery and waste removal