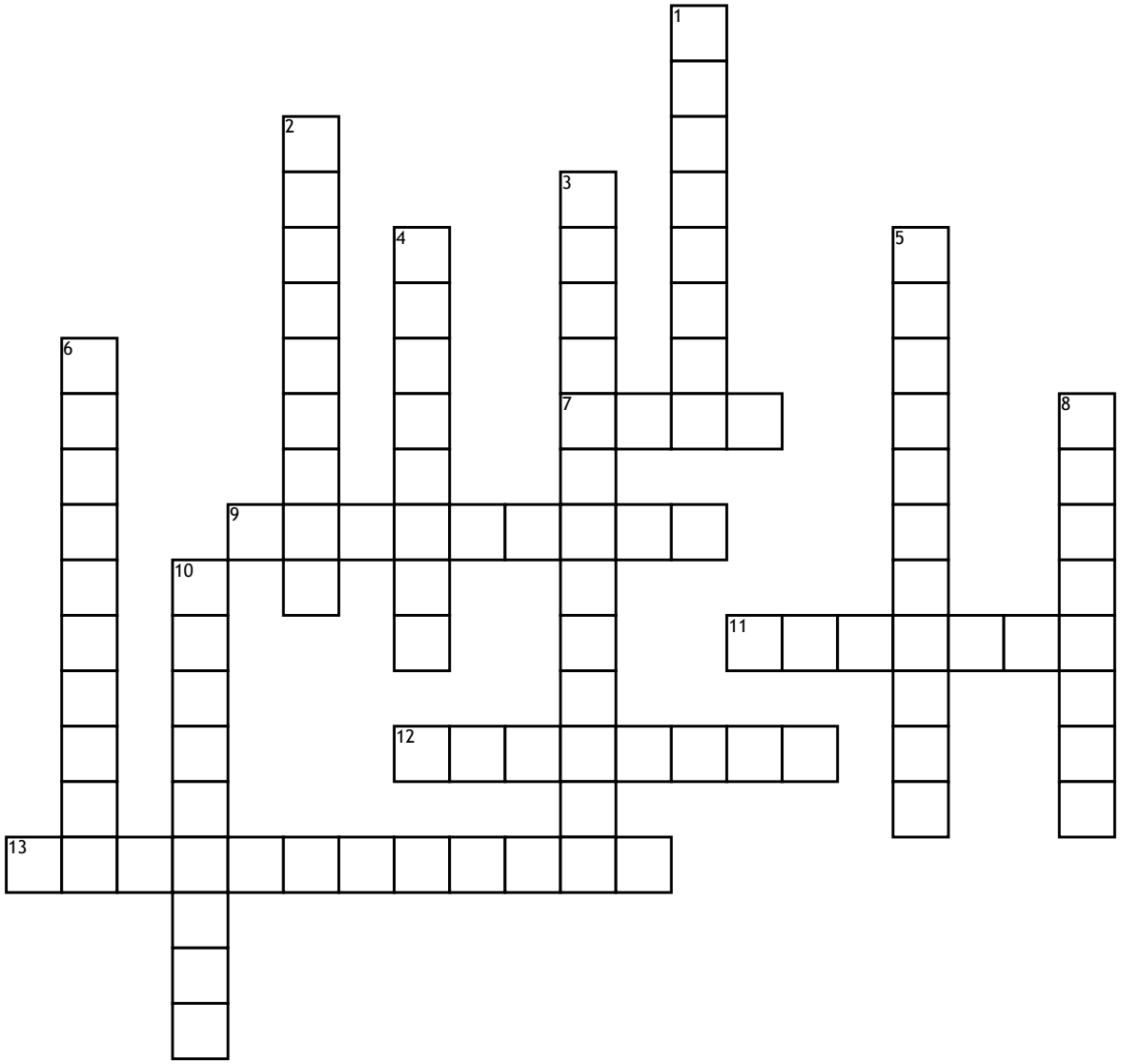
Name: _____ Date: _____

Cells and Organelles



Across

7. The basic structure of all known living organisms. The human body is made up of trillions of these. They contain organelles and can range from 0.8-100 micrometers in diameter. (4)

9. An organism consisting of a cell or cells in which the genetic material is DNA in the form of chromosomes contained within a distinct nucleus. (9)

11. A membrane-enclosed organelle found in eukaryotic cells. Contains the genetic material (DNA) and controls all the activity (chemical reactions) that takes place in the cell. (7)

12. A plant tissue responsible for growth, whose cells divide and differentiate to form the tissues and organs of the plant. They occur in the stem, leaves and roots of plants. (8)

13. This separates the interior of all cells from the outside environment (extracellular space). a.k.a. plasma membrane or cytoplasmic membrane. (12)

Down

1. An undifferentiated cell which is capable of specialising and becoming any type of cell. (8)

2. A slender thread-like structure that allows a cell to move. It looks similar to cilia but moves in a corkscrew motion. (10)

3. An organelle found in large numbers in most cells. It releases energy through aerobic respiration. It has a diameter of roughly 1 micron. (13)

4. A rigid wall (consisting mostly of cellulose) that keeps a cell rigid. It is found in plant cells but not animal cells, and is the outermost part of the cell. (8)

5. A plastid in green plant cells which contains chlorophyll and in which photosynthesis takes place. (11)

6. A unicellular organism that lacks a membrane-bound nucleus, mitochondria or any other membrane-bound organelles. (10)

8. A sphere-shaped organelle within the cytoplasm of a cell. It is the site of protein synthesis. It exists in both eukaryotic and prokaryotic cells and is often attached to the endoplasmic reticulum. (8)

10. The material within a living cell, excluding the nucleus. All the activity in the cell happens here. It also contains the organelles. (9)