

### **Cells: Practice Activity**

**Directions:** Read and answer the following questions to assess your knowledge of cells.

1. Who concluded that plants were made of cells?
2. What do cells come from?
3. What is the main difference between a bacteria and a virus?
4. What category of cells do not have organelles?
5. What is the job of the golgi bodies?
6. What organelles do animal cells have that plant cells do not?
7. What process do chloroplasts allow to occur?
8. In which cell substructure is water in the equilibrium?
9. What two parts is the phospholipid bilayer made out of?
10. What is the job of open channel proteins in the phospholipid bilayer?
11. In what organelle/s is the phospholipid bilayer present?
12. What is the most common example of passive transport in regards to movement of water?
13. What phase of mitosis allows chromosomes to line up in the middle of the cell?
14. What is the difference between mitosis and meiosis?
15. All \_\_\_\_\_ things are made of cells.
16. What material is a plant cell wall made out of?
17. What organelle is called “the powerhouse of the cell?”

18. What is an example of a hypertonic solution?
19. What two factors is a phospholipid made out of?
20. What is the energy called in a cell?

## **Sample Answers**

1. Matthias Schleiden
2. Pre-existing cells
3. Bacteria is alive and a virus is not
4. Prokaryote
5. Receives proteins or other materials from the ER, packages them, and redistributes them
6. Lysosomes
7. Photosynthesis
8. Isotonic
9. Phospholipids and proteins
10. Allow molecules that cannot pass through the phospholipid bilayer into the cell
11. Cell membrane
12. Osmosis
13. Metaphase
14. Meiosis occurs in another cycle after mitosis resulting in four daughter cells instead of two
15. Living
16. Cellulose
17. Mitochondria
18. Saltwater
19. Phosphate head and two tails made out of fatty acids
20. ATP (adenosine triphosphate)