

## Let's Test

### Part 1

A. Identify the following items. Write the letter of the correct answer before each number.

- a. Cell Membrane
- b. Chloroplast
- c. Cytoplasm
- d. Golgi apparatus
- e. Lysosome
- f. Mitochondria
- g. Nucleus
- h. Rough ER
- i. Smooth ER

1. Which part of the cell controls cell activities and transmits hereditary information?
2. Which is the membranous part that transports substance and serves as a site of lipid synthesis?
3. Which part of the cell serves as venue for cellular respiration and is known as the powerhouse of the cell?
4. What is the structure that separates the cell contents from its environment?
5. Which part contains digestive enzyme that helps break down larger molecules in the cell?
6. Which part functions for the photosynthetic activities of a plant cell?
7. What is the structure that contains ions, substances, and suspended organelles?

B. For numbers 8-10, write TRUE if the statement is correct and FALSE if otherwise.

8. Ribosomes, the main organelle involved in protein synthesis, are composed of subunits that are produced by the Golgi apparatus.
9. Eukaryotic cells have membrane-bound organelles and true nucleus; whereas, prokaryotic cells have no nucleus and organelles.
10. Microfilaments, microtubules, and intermediate filaments keep the whole cell and its organelles intact.

## **Part 2**

1. Organelles work together to sustain the overall function of the cell and maintain homeostasis (state of balance). Predict what would happen if one of the organelles was removed. How would that affect the survival and efficiency of the cell?

2. Among the cellular structures described in the activity, which organelles are parts of the endomembrane system?

3. What distinct organelles perform energy transformations?

4. What are the other organisms that were not included in the activity? Specify their function.