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Sincerely,

Kent  
REAL Science Challenge Founder  
Science Department Head (Burnaby South Secondary)

# Sample: Standards Based Grading Test

Mr. Lui

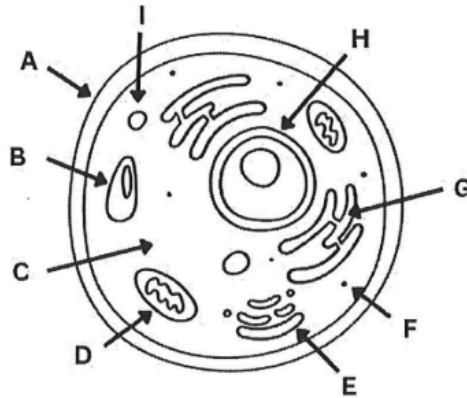
Name: \_\_\_\_\_  
Block: \_\_\_\_\_

## Quiz – Living Things, Cells, Organelles, and Microscopes

Curricular Competency	Questions	Emerging	Developing	Proficient	Extending
Processing & Analyzing	1-4				

### CC: PROCESSING & ANALYZING

Consider the following diagram of a cell below.



1. Which organelle(s) (provide the letter)...

a) Provides energy to the cell?

b) Provides instructions to the cell?

c) Helps with protein synthesis?

d) Digests food?

e) Separates the outside from the inside?

2. Is the cell pictured above a plant cell or animal cell? How do you know?

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3. Is the cell picture above a prokaryote or eukaryote? How do you know?

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4. Red blood cells are special cells in our blood that carry oxygen to the organs and tissues of our body. The purpose of red blood cell is to carry as much oxygen as possible. Thus, mature (ie. fully formed) red blood cells lack (ie. do not have) some of the organelles you see in the diagram above. Which organelles do you think red blood cells do NOT have? Explain why.

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# Sample: Traditional Grading Test

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Name: \_\_\_\_\_

Block: \_\_\_\_\_

## Quiz - Organelles, Diffusion, and Osmosis

### True/False

Indicate whether the statement is true or false.

- \_\_\_ 1. Each cell structure or organelle carries out a specific task to support the life functions of the cell.  
\_\_\_\_\_
- \_\_\_ 2. Bacteria can be classified by their shape.  
\_\_\_\_\_
- \_\_\_ 3. All organisms get their energy from the food they eat.  
\_\_\_\_\_
- \_\_\_ 4. Cellular respiration takes place in animal cells but not in plant cells.  
\_\_\_\_\_
- \_\_\_ 5. Viruses are very small living organisms.  
\_\_\_\_\_

### Multiple Choice

Identify the choice that best completes the statement or answers the question.

- \_\_\_ 6. Which of the following statements about a cell is *not* true?
  - a. All organisms consist of many cells.
  - b. Cells vary in size and shape.
  - c. All cells have a membrane.
  - d. All cells contain cytoplasm.
- \_\_\_ 7. Which of the structures in the cell is responsible for storing waste for the cell?
  - a. vacuole
  - b. mitochondrion
  - c. Golgi body
  - d. chloroplast
- \_\_\_ 8. Which cell structure is responsible for the energy provided to the cell?
  - a. nucleus
  - b. mitochondria
  - c. ribosome
  - d. cell membrane
- \_\_\_ 9. When cell parts such as organelles break down, they are recycled by the ...
  - a. ribosomes.
  - b. lysosomes.
  - c. vacuoles.
  - d. Golgi bodies.
- \_\_\_ 10. The process that allows you to smell supper cooking in the kitchen when you walk into the house is called ...
  - a. osmosis.
  - b. diffusion.
  - c. evaporation.
  - d. permeation.

- \_\_\_\_\_ 11. Plant cells can be distinguished from animal cells because only plant cells have ...  
a. a cell wall. c. a cell membrane.  
b. vacuoles. d. cytoplasm.
- \_\_\_\_\_ 12. Diffusion happens ...  
a. only in plant cells. c. only outside of cells.  
b. only in animal cells. d. in all living cells.
- \_\_\_\_\_ 13. Stem cells from a human embryo can become ...  
a. any type of body cell.  
b. only a few very specialized types of cells.  
c. certain types of body tissues.  
d. only disease-treating cells.

**Short Answer**

14. State three parts of the cell theory.

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15. Write a word equation for the process of cellular respiration.