

# 8<sup>th</sup> Grade Science Exit Test – Part 2

## CELLULAR COMPOSITION & RESPIRATION

1. What makes Chlorophyll?

Sunlight  
Photosynthesis  
Water

2. What color is Chlorophyll?

White  
Green  
Red

3. What is needed for photosynthesis to take place quickly?

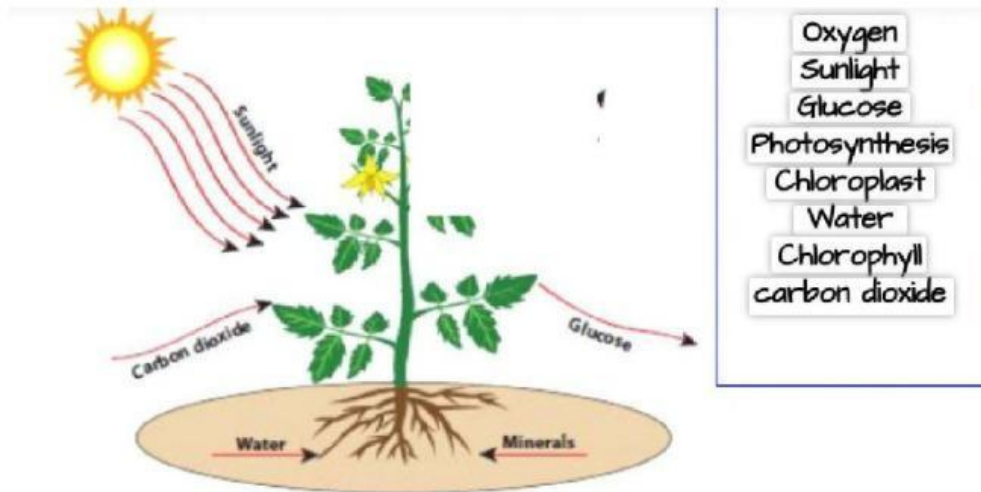
Snow  
Rain  
Warmth

4. Plants get food from the \_\_\_\_\_.

5. A plant needs \_\_\_\_\_ to make food.

6. The speed of photosynthesis depends on the \_\_\_\_\_.

7.



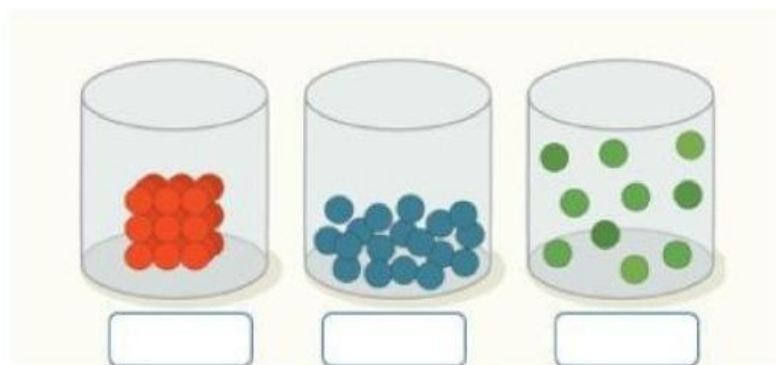
\_\_\_\_\_ is the process by which plants produce their own food in the presence of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_. Photosynthesis occurs in the organelle called \_\_\_\_\_ that's only found in plants. Plants contain a green pigment called \_\_\_\_\_ that absorbs sunlight. Energy from the sun, carbon dioxide from the atmosphere and water absorbed by the roots react to produce \_\_\_\_\_ that plants need to survive. \_\_\_\_\_ is a gas that is released into the environment for animals and humans to breathe.

8. What is a membrane bound cell that has a true nucleus, cell wall, and chloroplasts that absorb sunlight energy to make food for plants?  
Animal Cell  
Plant\_Cell  
Cell Membrane
9. What is the watery gel-like substance made of salt and water that provides structure for the cell parts so they can move freely within the cell membrane?  
Cytoplasm  
Chloroplast  
Chlorophyll
10. What controls the functions of a cell?  
Vacuole  
Nucleus  
Ribosome
11. What part of the cell is used for storage of water, food, and waste?  
Vacuole  
Neuron  
Cell Membrane
12. What is made of carbon, hydrogen, and oxygen at a ratio of 1:2:1?  
Lactose  
Carbohydrates  
Lipids
13. What is referred to as the "building blocks of life"  
Lipids  
Proteins  
Acids
14. What does it mean to be "lactose intolerant"?  
Stomach cannot digest milk of any kind  
The body absorbs lactose  
Stomach\_cannot\_break\_down\_lactose

## CHEMISTRY

1. What are the three states of matter?  
Oxygen, Hydrogen, and Nitrogen  
Gas, liquid, and solid  
Rain, smoke, fire
2. Particles in liquids are close together but not as close as solids.
3. When particles get more energy they expand.
- 4.

**Label the diagram below with the correct state of matter**



Gas

Liquid

Solid

5. What is the fourth state of matter?

Plasma

Fire

Steam

6. What is it called when particles have enough energy to break free of their bonds and turn solids to liquid?

Boiling Point

Melting Point

Evaporating Point

7.

### Solid, Liquid, Gas, or Plasma?

Oxygen -

Bricks -

Stars -

Water -

Ice -

Helium -

Milk -

8.

### Has a chemical reaction taken place?

1. Water solidifies into ice on a cold day.

Yes

No

2. A glow stick emits light when it is broken.

Yes

No

3. When two liquids are mixed, a blue solid forms at the bottom

Yes

No

4. Condensation forms on a glass on a hot day.

Yes

No

5. Bubbles form when vinegar and baking soda are mixed together.

Yes

No

9. What is the term that is used to describe turning a gas back into a liquid?

- Condensation
- Evaporation
- Melting

10. What is an example of evaporation?

- Melting ice
- A puddle of water drying up
- Rain

11. What is the movement of substance from a high concentration called?

- Osmosis
- Diffusion
- Evaporation

12. Do the following statements refer to DIFFUSION or OSMOSIS?

- a. Shaun's plant looked dead but when he watered it, it sprang right back up.
- b. The girl sitting two rows ahead of you put on too much perfume this morning.
- c. Yum! Something smells good. The neighbours are cooking on the grill!
- d. You put raisins in a glass of water, and they plump up.
- e. Ronald has his stinky shoes off again, and you can tell from the next room.