The Amazing Plant Cell Factory: Chloroplasts and Photosynthesis

Name: ANSWER KEY Date: _____

Vocabulary Words: Match the definition to each word.

The tiny "factories" inside plant cells are called chloroplasts.
Plants take in carbon dioxide from the air and water from the water.
Chloroplasts use photosynthesis to make sugars for the plant.
As a waste product, chloroplasts release oxygen, which humans and animals need to breathe.
The green color of leaves is caused by chlorophyll.

Word Bank: water, sugars, chlorophyll, oxygen, chloroplasts, air

---

Multiple Choice: Choose the correct answer from the choices for each question.

1. Which gas do plants take in to help with photosynthesis?
   a) Oxygen
   b) Nitrogen
   c) Carbon dioxide
   d) Hydrogen
2. What is released by plants during photosynthesis that is important for humans?
   a) Food
   b) Water
   c) Oxygen
   d) Carbon dioxide
3. What makes leaves and grass look green?
   a) Sunlight
   b) Chlorophyll
   c) Water
   d) Sugar
4. Why does every living thing on Earth depend on photosynthesis?
   a) It makes soil richer
   b) It produces oxygen and food
   c) It creates rain
   d) It helps animals run faster

Discussion & Reflection: Answer the following questions in complete sentences

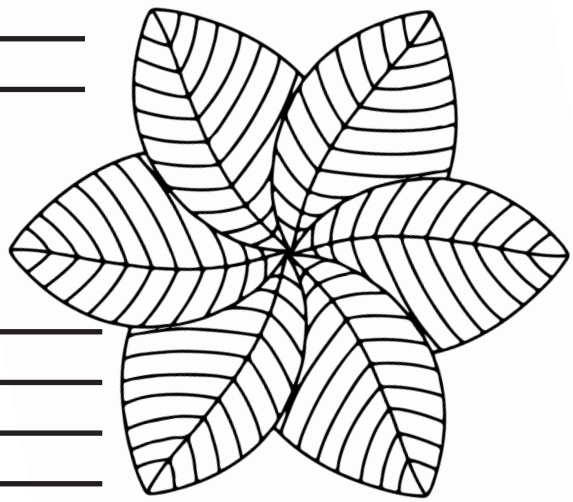
1. Describe what would happen if plants stopped making oxygen.

If plants stopped making oxygen, humans and animals would not be able to breathe and would not survive.

2. Why do you think scientists call chloroplasts "factories" inside plant cells?

Scientists call chloroplasts "factories" because they take in raw materials and make useful things like food and oxygen for the plant and other living things.

3. This shows me that God is (Circle the word):

Wise Powerful Caring Creative All of the above

Explain your choice: