**Producers**

Multiple Choice

1. State what two things are moved through ecosystems and recycled within ecosystems.
2. Kittens and rainbows
3. Matter and energy
4. Animals and plants
5. Fire and water
6. State what do we call an organism that makes its own food.
7. Gertrude
8. Herbivore
9. Parasite
10. Producer
11. In order for photosynthesis to take place, some energy is required.

State where does that energy comes from.

1. Water
2. Soil
3. Air
4. The Sun
5. Define the term photosynthesis.
6. A symbiotic relationship between three different species.
7. The process by which animals extract food from plants.
8. The process by which producers use sunlight to make food.
9. The process by which seeds germinate and grow into new plants.
10. Photosynthesis combines water and carbon dioxide to make new forms of matter - glucose and oxygen.

Describe how these molecules are made useful by life.

1. They provide organisms with energy.
2. They provide plants with a hobby.
3. They are good electrical conductors.
4. They work well in insulation.
5. Identify which of these materials are absorbed by plants.

(Hint: What are the reactants in the photosynthesis equation?)

Select ALL correct options

1. Carbon dioxide
2. Glucose
3. Water
4. Oxygen
5. Identify which of these materials are produced by plants.

(Hint: What are the products in the photosynthesis equation?)

Select ALL correct options

1. Oxygen
2. Glucose
3. Rainbow
4. Water
5. Here is the incomplete chemical equation showing how photosynthesis works:



Identify the missing part of the equation.

1. Carbon dioxide
2. Light
3. Glucose
4. Oxygen

Short Answer

1. **Explain how producers gain their energy.**

**Be sure to include an example of a producer.**

1. **Why is photosynthesis important for life on Earth?**

**In your answer, explain the following:**

**1) What materials are used up and produced during photosynthesis;**

**2) How the products are useful to other organisms.**

1. **Some places on Earth receive very little sunlight. However, ecosystems in these areas are still thriving with life!**

**If producers are not able to use sunlight to power photosynthesis, propose how else might they generate energy for themselves and the other organisms within the ecosystem.**