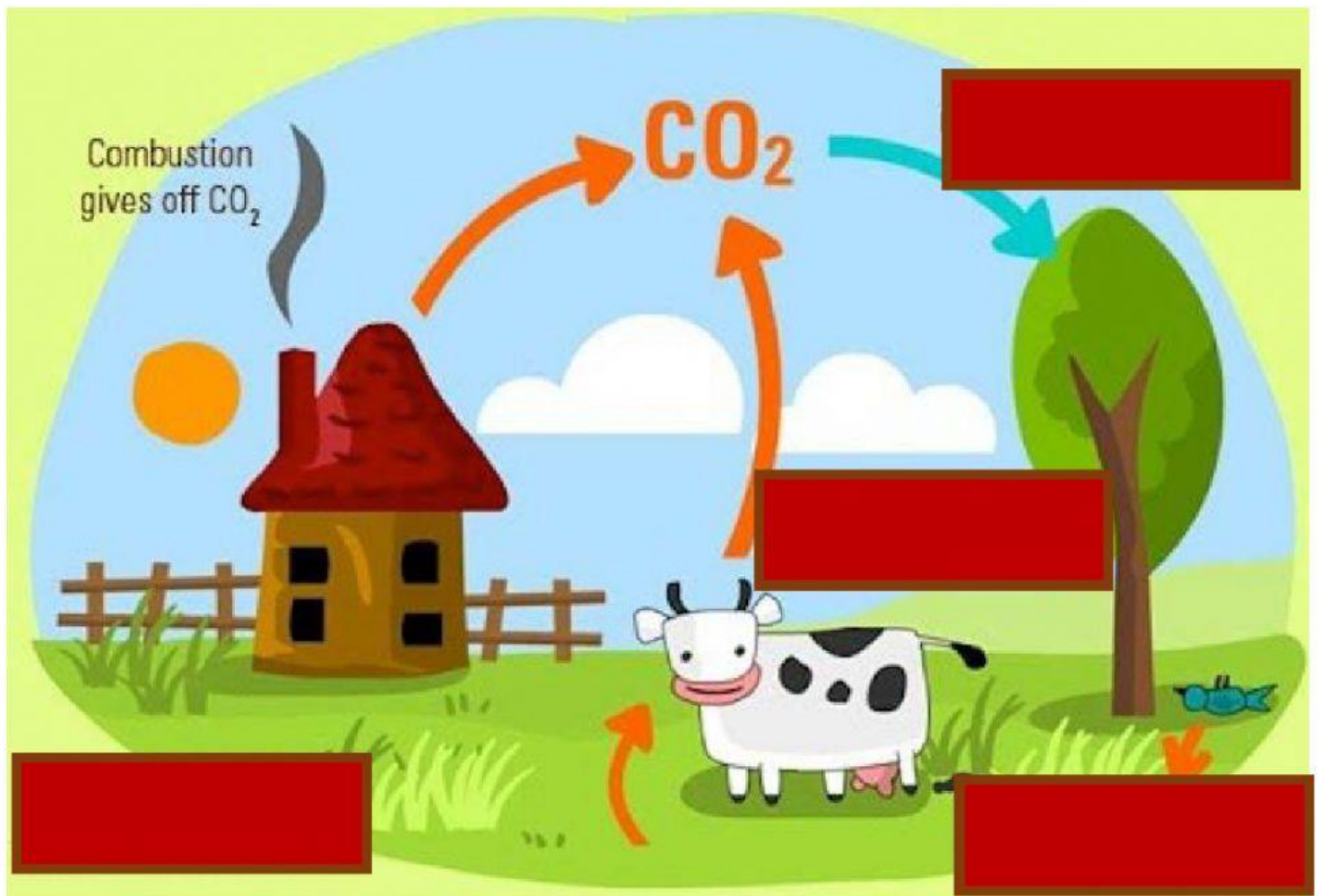




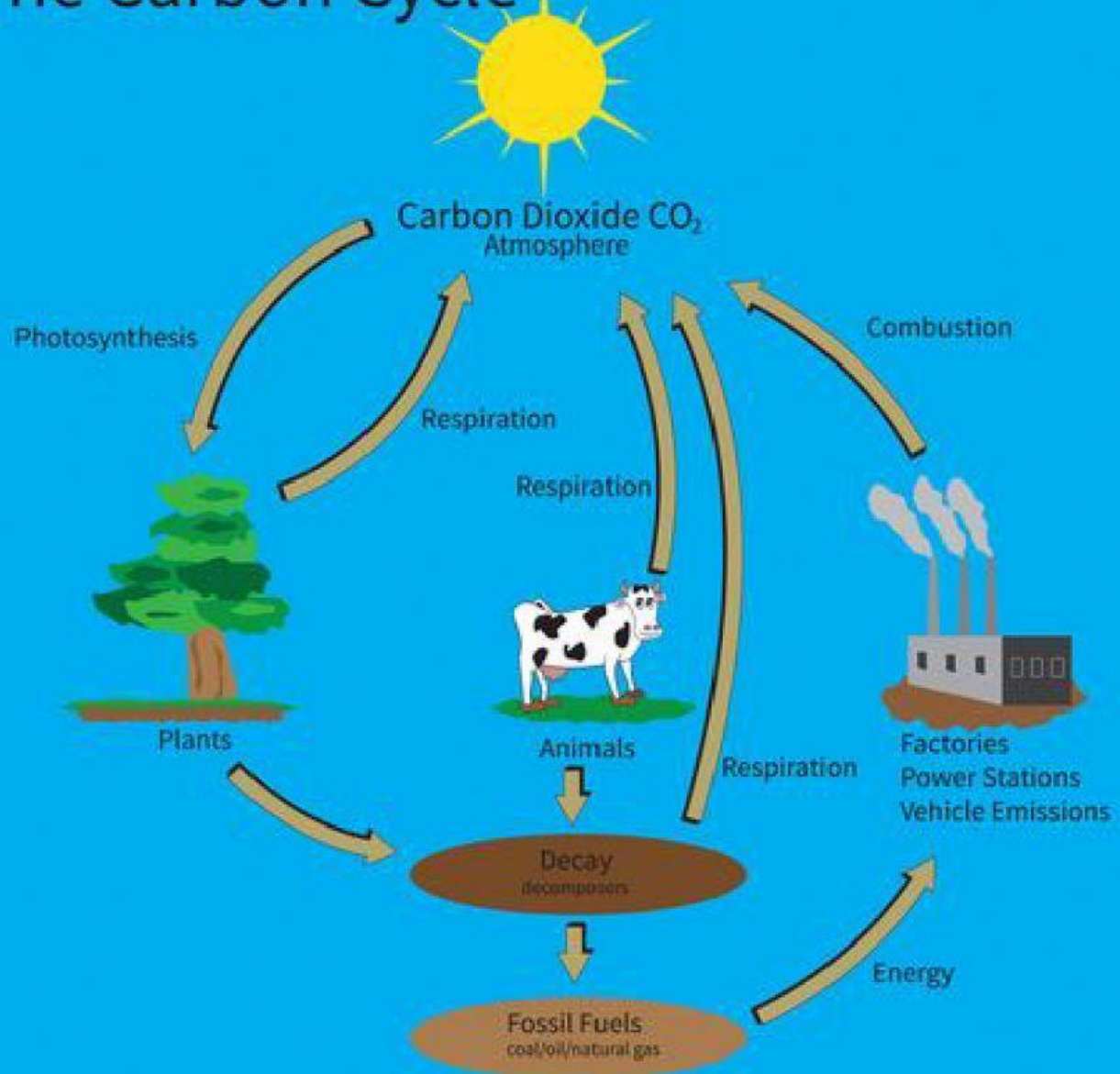
**Decomposing matter  
gives off  $\text{CO}_2$**

**Animals eat plants  
that contain carbon**

**Animals respire and  
give off carbon**

**Green plants absorb  
carbon dioxide**

# The Carbon Cycle



**Carbon** is in the Earth's atmosphere in the form of **carbon dioxide**. Plants *remove* carbon dioxide from the atmosphere and use it in a process called **photosynthesis** to make their food. When plants and animals die, they **decay** (decompose, break down) in the soil. This process occurs by microorganisms called **decomposers**. This *adds* carbon to the soil. The decomposed bodies of plants and animals become **fossil fuels** after millions of years. Fossil fuels are **coal, crude oil** and **natural gas**. They are substances made from carbon and hydrogen. Fossil fuels are burned in factories, vehicles and homes (generally used by humans) to provide energy. The process of burning is called **combustion** and it *adds* carbon dioxide and **carbon monoxide** to the atmosphere. Finally, plants, animals and decomposers **respire**. **Respiration** is a process that uses oxygen from the atmosphere and glucose from food, so living organisms can make the energy they need to survive. Respiration releases carbon dioxide and further *adds* carbon to the atmosphere.

| <b>carbon</b>          | <b>photosynthesis</b> |
|------------------------|-----------------------|
| <b>carbon dioxide.</b> | <b>respiration</b>    |
| <b>carbon monoxide</b> | <b>combustion</b>     |
| <b>fossil fuels</b>    | <b>natural gas</b>    |
| <b>decomposers.</b>    |                       |