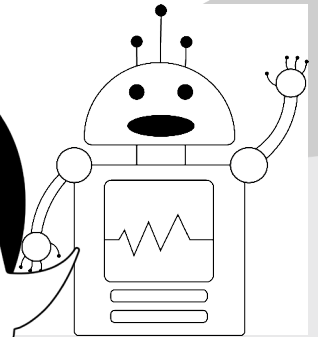Date: _____   Name: _____

Program the Organism

Photosynthesis is how plants make their own food, and cellular respiration is the way that animals and humans gain energy from molecules!

Below is a set of "code" in boxes that you must write in the correct order. The plant code and animal code are both mixed up, so make sure you sort them into the correct category.

Chlorophyll is a pigment present in the leaves of plants that allows carbon dioxide to be converted into oxygen.

Matter is recycled between ecosystems. Plants produce something that animals need, and animals produce something that plants need.

This is similar to a coding method done on a device called drag and drop programming, where someone selects text and moves it to a different area.

Control	Events	Motion
Repeat forever. Repeat forever. If chlorophyll is present, convert carbon dioxide into oxygen. If there is sugar present, then break it down into water and carbon dioxide. Else, eat food. If I receive sunlight for energy, then convert carbon dioxide into glucose.	When I feel there is carbon dioxide in the air. When I receive oxygen. When I feel there is water in the soil.	Breathe in. Open leaf pores. Absorb water with roots. Release oxygen. Breathe in. Use the energy. Breathe out to release carbon dioxide.

This activity continues on the next page!

Date: _____   Name: _____

Using the Control, Events and Motion from the previous page, write the code for the plant and animal boxes below. Start with the control. You can shorten the words in the code if you need to!

Plant code:

Animal code: