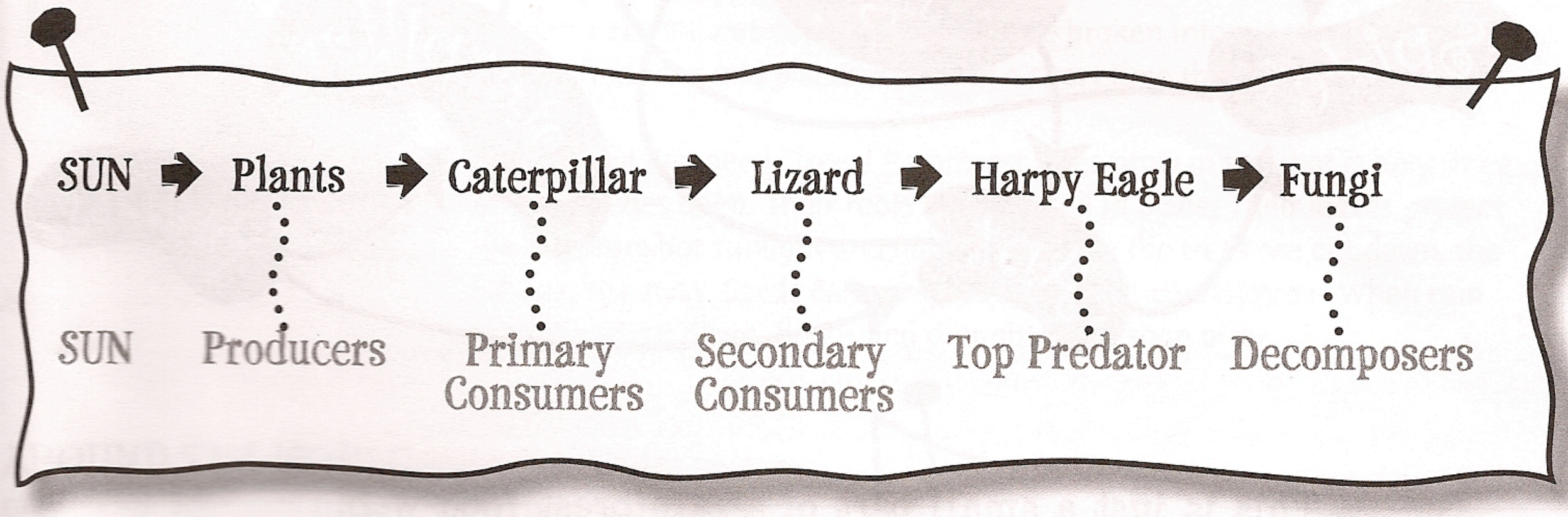
FOOD CHAINS: RECYCLING ENERGY

Did you know that when you eat, you are recycling energy? Food is stored energy. Energy moves through an ecosystem in a **FOOD CHAIN**. All the links in the chain depend on each other. If one animal or plant population is out of balance or becomes extinct, the chain of life is disrupted.

The energy of the food chain comes first of all from the **SUN**. Trees, grasses, flowers and other plants make food from sunlight in the process called "photosynthesis." Because they make their own food, they are called **PRODUCERS**. The food chain begins with plant producers.

CONSUMERS come next. Animals that eat plants are called herbivores. They are **PRIMARY CONSUMERS**. Ecosystems usually have many primary consumers--for example, a blue morpho caterpillar that eats leaves all day long.

A SECONDARY CONSUMER eats primary consumers. Animals that eat other animals are called carnivores. A lizard might eat a blue morpho caterpillar for dinner. Some consumers are omnivores. They eat both plants and animals.



Many chains include a fourth kind of consumer, a **TOP PREDATOR**. A top predator eats smaller consumers. Usually an ecosystem will include only a few top predators. A harpy eagle might eat the lizard that ate the caterpillar!

The food chain ends with **DECOMPOSERS**. They clean everything up by eating wastes like shed fur, dung, and dead plants and animals. Fungi, bacteria, and worms are decomposers. They recycle the stored energy back to the soil. In rainforests, the decomposers recycle fast. High temperatures and humidity help them do their important job. Producers use recycled energy in the soil as they grow and photosynthesize. The energy in a food chain goes round and round in a never-ending cycle.