



LEARNING ACTIVITY

Butterfly Feeder

Create a Butterfly Feeder and Attract Butterflies





Students will engage in a fun art activity and learn how easy it could be to reuse an item before recycling it.

Activity Challenge

Create a butterfly feeder out of a plastic bottle.

Preparation

Note: Adult supervision is required.

- 1. Review the Materials Needed and gather materials.
- 2. Remove the cap and the label from the plastic bottle.
- 3. Make nectar by mixing 1 cup of warm water with 1/3 cup of sugar until sugar is dissolved.

To Do

- 1. Place a rubber band tightly around the plastic bottle. The rubber band should be hugging the bottle.
- 2. Tie the piece of yarn to the rubber band on both sides of the bottle.
- 3. Place three rubber bands on the bottle. Rubber bands should be about 1-inch apart.
- 4. Gently place flower stems under the rubber bands on all sides of the bottle.
- 5. Pour nectar into bottle. Gently place two cotton balls at the top of the bottle. Make sure that the cotton balls are tight in the hole.
- 6. Hang butterfly feeder on a branch and wait for butterflies to visit!

Observations

When outside, look about for butterflies and other insects. Are they searching for food? Are they around flowers? Can you observe how they eat?

Extensions

- Research the energy used to make plastic bottles. Think about ways to reuse and reduce the usage of plastic bottles. List benefits of reusing plastic bottles.
- Contact local utility company to find out how the electricity used is generated (coal-fired, wind power, gas-fired power plants, geothermal power) and research the impacts of these energy sources.
- List out other things that people throw away that can be reused. Commit to reusing other items.

Materials Needed

- $\,\circ\,$ Plastic bottle with lid
- \odot 2 cotton balls
- 5 rubber bands
- $\,\circ\,$ Flowers
- $\,\circ\,$ 24 inch piece of yarn
- $\,\circ\,$ 1 cup of warm water
- $\,\circ\,$ 1/3 cup of sugar

Grade Range

Pre-K K-2

Topics/Skills

Science: The 4Rs: Reduction, Reduce, Reuse, Recycle Art: Design

Learning Standards

NGSS: <u>Earth and Human</u> <u>Activity</u> CA Visual Arts: <u>Creating</u>

Duration 20 – 30 minutes

Prep Time

5 – 10 minutes



The Science behind the Activity

Reuse and recycling are quite different, but are often considered the same practice. **Recycling** is the process of taking material, dismantling it and using the materials to remanufacture a new product. Material or items that get recycled may not always get remanufactured into the same product again. Recycling materials saves the resources and energy used during the early steps of the manufacturing process, however, the process of remanufacturing recycled products requires energy and resources. **Reuse** involves the process of taking material in its current form and using it for the same or different purpose without changing its original form. The practice of reuse reduces solid waste, conserves even more nonrenewable resources, and reduces emissions such as carbon dioxide released during the manufacturing process.

LEARNING

ACTIVITY

Most butterflies eat (drink) various types of plant nectar through a straw-like appendage called a **proboscis** (see graphic below). Nectar is a sugar-rich fluid produced either in flowers or other parts of plants. Butterflies are not very particular as adults when it comes to types of nectars, but young butterfly caterpillars eat plants exclusively. Some butterflies prefer to sustain themselves by eating rotting fruit, dead animal flesh, and even dung (animal poop)! The feeder made in this activity provides a simple means of attracting butterflies using a common sugar solution, homemade "nectar."

