### Earth Day Activities

# Earth Day STEM Choice Board for Middle School



#### Why Do Sea Turtles Eat Plastic?

Learn a lesson about environmental destruction as you read this article. Make a list of different ways to keep plastic out of the ocean and away from sea turtles and other creatures living in the sea. Create an action plan for implementation.

#### Make a Water Filter

Celebrate Earth day by making your own water filter. You only need a few inexpensive and simple materials to complete this project.

This video will provide a comparison between two water filters. You will learn which one is better for cleaning polluted water. After watching the video, create your own water filtering device.

#### Oil Spill Simulation Challenge

Recognize the impact humans have on the environment by researching information and pictures about actual oil spill events. Create a simulated oil spill with vegetable oil, water, feathers, cotton balls, sponges, and Dawn dish soap. Find out about how to clean up after the oil spill disaster.

#### **Bird Feeder Recycling Project**

Create your own bird feeder with recyclable materials using these instructions. You can use milk containers, juice cartons or pie trays depending on which type you choose to make. Your bird feeder will need an opening, a perch for the bird and a way to hang it.

#### Map and Compare Hurricanes

You will need a copy of the Atlantic
Basin Hurricane Tracking Chart as
well as the coordinates for
Hurricane Katrina and Hurricane
Rita. Plot the coordinates on the
tracking chart and then compare
the different paths of the
hurricanes.

#### **Plant Mini Gardens in Eggshells**

Plant different seeds in eggshells and place them in a variety of different areas. Make close observations as the seeds grow. Determine which seeds grow best, and what is the best environment for growing certain seed types.

Compare the results.

#### **Recycling Collage**

Recycle magazines, newspapers, cardboard boxes, bottles, and other recyclable items. Use these items to create artwork. Have an art exhibit showcasing the creative art projects.

#### **Regrow Food**

Create renewable food sources from kitchen leftovers and learn about asexual reproduction.
Collect scraps of onions, leaf lettuces, garlic, ginger root, celery, and potatoes to regrow items.
Research what types of plants can be regrown, create a growing environment, and observe and nurture the plants until they are ready to harvest.

#### I Breathe What?

Learn how much dust, pollen, and other particles are present in the air by creating pollution detectors and placing them in various locations for 24 hours. Examine the captured air particles. Brainstorm ways to remove the particles from the air.



## **Recycled Bird Feeders**

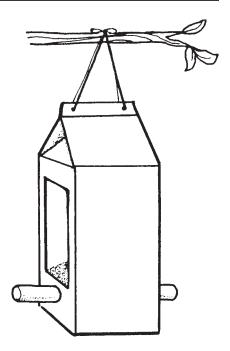
In some cities there aren't enough trees or grasses for all the birds to build their nests. Help protect these fine-feathered friends by building a bird feeder. Not only will you be providing housing for birds, you'll be recycling too! That's called "killing two birds with one stone" (you may need an adult to help you with the meaning of this saying).

#### Milk Carton Birdhouse

**Materials:** Empty, clean half-gallon milk carton; scissors; wood dowels or tree branches; string or yarn; birdseed

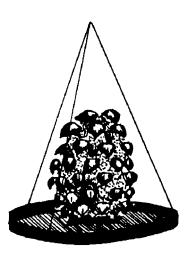
#### **Directions:**

- With the scissors cut a window in one or two sides of the carton.
- Cut a hole on each side of the carton about <sup>3</sup>/<sub>4</sub> of the way down.
- Slide a dowel or tree branch through the holes.
- Punch two holes through the top roof of the carton.
- Thread string or yarn through the holes; tie a knot.
- Put bird seed in the bottom of the feeder and hang it up outdoors.



#### **Pine Cone Bird Feeders**

**Materials:** Pine cones; peanut butter; bird seed; plastic lids from margarine cups; foam meat trays or aluminum pie plates; clay; string or twine; scissors



#### **Directions:**

- Use the scissors to punch three evenly spaced holes in the plastic lids or pie plates (punch four holes in the foam tray).
- Attach a piece of string to each hole. Gather the strings at the top and tie a knot.
- Flatten a piece of clay and place it on the lid, pie plate or meat tray.
- Roll a pine cone in peanut butter and bird seed until it is wellcovered.
- Press the pine cone onto the clay.
- Hang up the bird feeder from a tree branch outdoors.