



In an outdoor space, find three living and three non-living objects. Think: How do you know they are living or non-living?

The Meteorologist in Me by Brittney Shipp

Watch meteorologist Brittney Shipp read her book, The Meteorologist in Me.

You are a botanist, a scientist who studies plants, and you need help planting seeds. Design a device to help you plant seeds.

You are an environmental scientist, a scientist who studies environmental problems. Design a device to help people sort their recycling.

Measure out a liter (1000 mL) of water to represent all the water on Earth. From that liter, subtract 30 mL to represent all the fresh water on Earth. Subtract another 6 mL to represent the non-frozen fresh water. Using an eye dropper or your finger, take out a single drop of water to represent the clean, fresh water that is available for use (only 0.003% of the total!).

PBS Learning Media: Earth Day.

Watch and learn about the history of Earth Day.

You are a meteorologist, a scientist who studies the weather, and you broke your rain gauge! Design a device to measure the amount of rainfall.

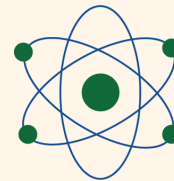
Using a ruler, measure the height of a plant as it grows.

Using data from your trash survey, create a scaled bar graph to represent your data.

Fold a piece of paper into eighths. Label the boxes amphibians, fungi, reptiles, arachnids, birds, insects, mollusks, and mammals. Find an outdoor space and record what you observe in each category. Did you observe more vertebrates or invertebrates?

You are a pedologist, a scientist who studies soil, and you forgot your shovel! Design a device to help you collect soil samples.

Look up the weather data for the past week (i.e., temperature, precipitation, and sky conditions). Organize and represent it so that you can answer questions about it (i.e., How many days was the temperature over 70°F? How many days did it rain?)



Free Space

Put 1/3 cup of water into a plastic bag. Close the bag and tape it at a slight angle in a sunny window. Over the next few days, what parts of the water cycle were you able to observe?

Seek by iNaturalist

Use this free app to identify and learn about the wildlife, plants, and fungi all around you. Earn badges for your observations and participate in monthly challenges.

In an outdoor space, find two plants with a measurable attribute in common to compare (i.e., branches, flowers, leaves, etc.) Describe the difference.

Investigate the life cycle of a plant by growing a plant from a seed. Observe and record the changes as it grows.

Get or create a map of an outdoor space, like your backyard or a park. Then, do a trash survey by walking around and recording where you find trash (pick up the trash as you go). Think: What types of trash did you see? How did it get there? What are the effects of this trash on the environment?

What's a Watershed?

Watch and complete the Simple Science Activity at www.GYSTC.org.

You are an entomologist, a scientist who studies insects, and you need a way to capture insects without them being harmed. Design a device to safely collect insects.

Observe the current weather conditions and record the temperature, precipitation, and sky conditions. How does this information help us to identify weather patterns?

The Life Cycle Song

Listen to the Life Cycle Song to review how living things change and grow.

Your Plan, Your Planet

Use this free, interactive, online tool created by Google in partnership with the California Academy of Sciences and the Ellen MacArthur Foundation to learn about sustainability and the kinds of changes you can make at the individual and family level to help ensure a healthy planet today and tomorrow.

You are a hydrologist, a scientist who studies water, and you need a way to clean water. Design a device to help you filter water.

Calculate the biodiversity of any area:

$$\frac{\text{Total Number of Species}}{\text{Total Number of Living Things}} = \text{Biodiversity}$$