



Nature Watch Activity Kit

Rain Stick

(Nature Watch Kit #173)

Kit Contents

<u>Item:</u>	<u>Kit Size</u>	
	25	100
Rain Stick Tube	25	100
Rain Stick Caps	50	200
Wood grain sheet	25	100
Yarn (2 Colors)	50	200
Feathers	75	300
Chenille Stem	50	200
Rice Bags	1	2
Plastic Spoon	2	5
Glue	1	2
Instructor Manual	1	1

This page includes the Next Generation Science Standards (NGSS) mapping for this kit and Science, Technology, Engineering, and Math (STEM) extensions (on back) to use in adapting and extending this activity to other subject areas.

Next Generation Science Standards Alignment

K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

1-PS4-1. Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.

2-PS1-2. Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.

2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.

3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

MS-PS2-4. Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects.

**See Back for
STEM Extensions**

This Nature Watch Activity Kit contains an Instructor Manual and materials to implement the curriculum. The kit was designed to be used with adult supervision only. Unsupervised use is not recommended.



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STEM Extensions

Science

Just as rain sticks were traditionally made from natural materials, Native Americans and other cultures used (and in some cases, still use) a variety of plants for ceremonies, medicine, cooking, and other purposes. Create a field guide that includes pictures of some of these plants, details their uses by Native Americans, and tells by which groups they were/are used.

Make a matching game about the layers of the rainforest. Create pairs of cards so that one of the cards displays a rainforest plant or animal and the other card tells the layer of the rainforest where that plant or animal resides. Repeat for additional plants/animals until you have eight pairs of cards. Turn them all over and mix them up. Take turns picking a card and trying to find a match.

Technology

When we think of technology today, we usually think of electronic devices and other gadgets. In the history of Native American cultures, though, technology consisted of materials found in the environment. Find out what kinds of technologies some of the groups used. Do we have any similar tools that we still use today?

Engineering

Look around outdoors for other objects that can be used to make musical instruments, and create your own new instruments. How can you change the sound by changing the materials? See how many different kinds of instruments you can make as a group, then play them together as a band.

Math

As much as 240 inches of rain can fall per year in a tropical rainforest. What is the average annual rainfall for where you live? Make a bar graph to show the average annual rainfall for a tropical rainforest, your location, and three other interesting locations on Earth. How do they compare?

Learn a new dance. You'd be surprised how much math appears in the act of dancing. While you're learning, pay attention to the rhythm and count of the steps. How do they compare between the two dances? Also while you're learning, have someone mark the floor where your feet touch with each step. What kinds of shapes are you making with your dance moves? How far are you moving when you dance one full round of each dance? What examples of symmetry can you find in the dance moves?