Nature-Watch Activity Kit

Shell Instrument

(Nature Watch Kit #130)

Kit Contents

Item:	Kit Size 25	Kit Size 100
Clam Shell Pairs	25	100
Popcorn	6 oz.	24 oz.
Glue	1	2
Native Amer. Music CD	1	1
Yarn	50 ft.	200 ft.
Bag of Small Feathers	1	2
Bag of Sequins	1	1
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.

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-LS2-1. Construct an argument that some animals form groups that help members survive.

MS-LS2-2. Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.

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
Choose one of the Native American groups described in the activity kit. Draw or make a 3-D representation of the ecosystem where they lived, including plants, animals, and a landscape that shows the climate there.

Native Americans 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.

Notice how many Native Americans depended on buffalo for multiple purposes. They even used their waste to fuel their fires! Make a diagram of buffalo uses by labeling the parts of a buffalo with all the different ways that Native Americans used them. What are some characteristics of the buffalo that made them so useful?

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?

Use editing software to make a modern remix of the music on the CD. Think of parts of some current hits that would go well with the music on the CD, and mix up bits and pieces from both to make a new track.

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.

Research the types of homes mentioned in the activity kit manual (tipi, earth lodge, dome-shaped houses) to learn about the materials and methods used to build them. Choose one and build a replica. What kinds of materials work well? How do the shape, size, and structure of the home match with the type of environment that it was used in?

Math
Using the information provided in the activity kit about the various Native American tribes, compile a timeline that includes all of the dates cited. Add artwork to decorate the events of the timeline, and add any other dates that you think are important to research and include.

Pick one of the dances mentioned in the activity kit and learn to do it. 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?