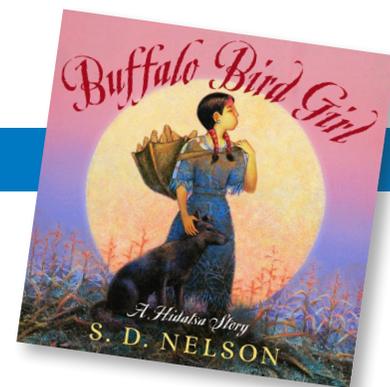


# Buffalo Bird Girl A HIDATSA STORY



## RIF EXTENSION ACTIVITIES FOR EDUCATORS

STEAM-THEMED: SCIENCE, TECHNOLOGY, ENGINEERING, ART, MATH

### SCIENCE

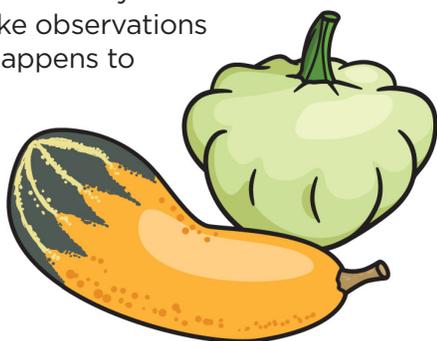
#### ALL DRIED UP

Materials: squash, skewers, shoe box

Dried food was very important to the Hidatsa. Slice a squash and thread it onto skewers as seen on p. 26 in the book. Place the skewers across an open shoe box near a sunny window.

Have students make observations and record what happens to the squash as it dries and how it changes in appearance.

What process is happening to cause these physical changes?



### TECHNOLOGY, SCIENCE

#### CREATIVE COMMUNICATION

Visit <http://hidatsa.org/alphabet> to hear the Hidatsa alphabet! How is it different from the English alphabet? Today, the Hidatsa language is in danger of dying out, as are many other American Indian languages. With a partner or small group, think of ways you could use modern technology like the internet and smartphones to help save endangered languages and teach new speakers. Create a plan to address the problem that has at least five ideas. Include an explanation of each idea.

### ENGINEERING

#### MULTIPLE USES

Materials: pencil, spoon, tongue depressor

The Hidatsa made hoes from buffalo bone. Students should come up with at least three different practical ways to use each of the materials provided other than its intended purpose. Students should provide an illustration and description for each new use.

### ART

#### PERSONAL PICTOGRAPHS

Materials: paper bags, crayons

Before developing written language, many American Indian tribes used *pictographs*. Have students rip a side of the paper bag to use as the pictograph base. This bag represents the animal skin that would have been cured and used for such purposes by American Indians. Have students use crayons to create pictographs that represent items from their own environment. The items should have a personal connection to each student.

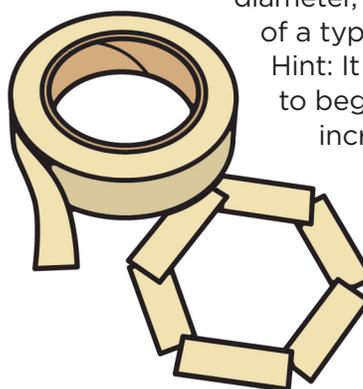
### MATH

#### DIAMETER DETECTIVES

Materials: chalk, measuring tape, string

Help students get a visual of how large Waheenee's home was while teaching about diameter, radius, and circumference. Using forty feet as the measuring point, have students use tape measures to measure out the length and find the midpoint. Use string to create the radius (20 feet). Have one student hold one end on the midpoint or center while others take turns measuring out the circumference by walking around in a circle. When finished, students should be able to tell the radius, diameter, and circumference of a typical Hidatsa lodge.

Hint: It may be easier to begin with smaller increments of measurement and build up.



Reading Is Fundamental