

The Truth About Sagebrush Activity

Name: Judene Presley	Time Required: 45 minutes
Subject: Science	Grade Level: 4+

Overview	Students determine whether statements about sagebrush are true or false, then unscramble words based on their decision.
Goal(s) & Objective(s)	Students will categorize statements about sagebrush as true or false.
Materials	Copies of Sagebrush T/F cards (1 per group of 3 or 4 students)
Teaching Activities: <i>Instructional Approaches/Strategies</i>	<p>Introduction:</p> <p>Choose one or both of the following to lead into the lesson:</p> <ol style="list-style-type: none"> 1. Cut a small fresh branch off a sagebrush plant. Have students pass it around and make observations about how it is similar and different to other plants they are familiar with. 2. Have students write in their journals/notebooks everything they know about sagebrush. Discuss some responses as a class. 3. If time allows, complete the K and W of a KWL (Know, Want to know, Learned) activity about sagebrush to discuss in closing. <p>Procedures:</p> <ol style="list-style-type: none"> 1. Tell the students they are going to learn some important facts about sagebrush, an important plant to Idaho rangelands. They must decide which statements written on the cards are true and which are false. The false statements must be changed to true on their own paper. One student may be the recorder with the others helping them decide what word or words need to be changed to make it true. 2. The other side of the card will have a letter. After the groups have finished, they need to unscramble the letters. If they have correctly found all the true statements, the cards will spell a word about where sagebrush is important. The false statements will also spell a word that describes sagebrush. 3. Have recorders fold their papers into top and bottom halves. The top half should be labeled “Letters for true statements” and the bottom “Letters for false statements”. 4. Give students time to work on their true/false statements. If they are having trouble, let them know that there are only six false statements, or give them the Background information. <p>Closure:</p> <p>Have students bring up things they learned about sagebrush that they did not know</p>

	before the lesson. Finish the “L” of the KWL if started in the opening activity.
Assessment:	Students check their answers – the false statements should unscramble to spell “SHRUBS” and the true statements should unscramble to spell “RANGELAND”

Background: Sagebrush is a valuable food source for wildlife.

- Sagebrush is an evergreen shrub native to North America.
- Its deep taproot brings up water far beneath the surface.
- Sagebrush adds important nutrients and plant matter to enhance the rangeland soil.
- Sagebrush can live with less than 7” of rainfall a year, harsh winters, and hot summers in all types of soil.
- There are many different species of sagebrush on rangelands but the most common in Idaho are the Big Sagebrush and Low sagebrush.
- Sagebrush, a main plant found in some rangeland biomes, is home to the sage-grouse, Brewer’s sparrow, sage thrasher, sage sparrow, pygmy rabbit, sagebrush lizard, sagebrush vole, and the pronghorn antelope.
- Sagebrush provides shade, shelter, and protective cover for wildlife and their young. Sagebrush plants break up hard crusts of snow during the winter so animals can graze. Birds make nests in or under the sagebrush and eat the seeds it produces.
- Many different kinds of insects hibernate inside rounded growths that grow on the big sagebrush.
- Sagebrush with its strong sage odor was used by the Native Americans as a healing tea, applied to wounds as a disinfectant, and its bark was stripped, soaked, and pounded to make strings used to make footwear and clothes. The wood was used for firewood, thatch, and burned during ceremonies

Expansions and Modifications:

Using the backpack guide to rangeland plants, have groups of students create their own True/False statements with a word to unscramble. After a teacher check, share with other students.

Answer key:

Card

- | | | | |
|-------|---|-------|---|
| 1: T | L | 13. T | E |
| 2: F | B | 14. F | U |
| 3: F | S | 15. T | A |
| 4. T | N | | |
| 5. F | S | | |
| 6. T | R | | |
| 7. T | G | | |
| 8. T | N | | |
| 9. F | H | | |
| 10. T | D | | |
| 11. F | R | | |
| 12. T | A | | |

Resources:

Explore Sagebrush Prairie. The Watercourse, 2004
 Hankins, Juley. Backpack Guide to Idaho Range Plants, 6th ed. Idaho Rangeland Resource Commission, & the University of Idaho, 2005

Sagebrush True/False Cards

1. Sagebrush is a valuable food source for wildlife.

L

2. Sagebrush's taproot takes all available water so that other plants cannot live close to it.

B

3. There are only four species of sagebrush in the rangeland and the two which are the hardest to find are the Big Sagebrush and Low Sagebrush.

S

4. Sagebrush, a main plant found in rangelands, is home to the sage-grouse, Brewer's sparrow, sage thrasher, and sage sparrow.

N

5. Sagebrush takes away important nutrients and plant matter which makes for poor soil wherever it grows

S

6. Many different kinds of insects hibernate inside rounded growths that grow on the big sagebrush.

R

7. Sagebrush provides shade, shelter, and protective cover for wildlife and their young.

G

8. Sagebrush with its strong odor was used by Native Americans as a tea and a disinfectant for wounds.

N

9. Sagebrush must have more than 10" of rainfall a year, mild winters, and hot summers to grow.

H

10. Sagebrush plants break up hard crusts of snow during the winter so animals can graze.

D

11. Sagebrush is rarely seen on rangelands in the west, but is abundant in heavily forested areas.

R

12. Native Americans even used the bark of the sagebrush to make footwear and clothes.

A

13. You may find pronghorn antelope, pygmy rabbits, lizards, and voles where sagebrush grows.

E

14. Sagebrush is a deciduous shrub that produces flowers and seeds the birds enjoy.

U

15. Sagebrush was a good source of firewood and burned during Native American ceremonies.

A