

Secret Message Activity

Lesson Plan & Instructions

Summary:

This is a hands-on activity to prepare your students for their upcoming field trip to the Sandia Mountain Natural History Center.

Objective:

To build content area vocabulary by reviewing and introducing keywords and basic concepts taught at the SMNHC. Please make sure all the contents are in the tub before returning it to the APS Resource Library.

Standards:

NMSS: NM II- Life Science, BM I.1 & I.2 (ecosystems)
NM II- Earth & Space, BM II.3 (Earth's water)

NGSS:

Disciplinary Core Idea: Life Science 2.A & 2.B; Earth & Space Science 2.C
Crosscutting Concepts: Cause & Effect; Energy & Matter; Structure & Function

CCSS: RI.5.4 Academic & domain-specific words
L.5.4 Determine word meaning

Time:

15 minutes for teacher preparation
30 minutes for activity

Materials:

Per group or individual:

Copy of Secret Message student sheet
Pencil

Kit contents:

- Lesson Plan/Instructions, Secret Message student sheet, and Answer Key
- 1 Tree cookie
- 1 Mount with needles & leaves
- 1 Coyote skull (replica)
- 1 Rabbit skull (replica)
- 1 Bone (replica)
- 3 Laminated pictures
- 1 Rubber bear scat
- 1 Feather in mount
- 1 Ponderosa pine cone
- 1 Rabbit fur

Procedure:

Prep

1. Make copies of the Secret Message sheet.
2. Place each specimen around the room.

Activity

1. Students may work in groups or individually.
2. Hand out the question sheet.
3. Station your students around the room with the 12 objects.
4. They will visit each station, circling the correct answer **and** the corresponding bold word.
5. When students have answered every question, they will write the bold words, in order, in the side box. The secret message will be "An ecosystem is a place where living and non-living parts are connected."

Key:

Question #	Specimen #	Specimen	Answer	Bold Word
1	1	Tree Cookie	b	An
2	2	Ponderosa needles & oak leaves mount	a	ecosystem
3	3	Coyote skull (replica)	b	is
4	4	Bone (replica)	b	a
5	5	Picture of bear at Mud Spring	d	place
6	6	Picture of mountain lion & skunk at Paradise Spring	b	where
7	7	Life zone map	b	living
8	8	Bear scat (rubber)	a	and
9	9	Feather	b	non-living
10	10	Ponderosa pine cone	c	parts
11	11	Rabbit fur	c	are
12	12	Rabbit skull (replica)	c	connected.

Extensions:

If you would like to further prepare your students for some of the vocabulary used at the SMNHC, you can use the enclosed “Ecosystems Crossword” activity. Also recommend are the “Eco Word Puzzle” or “ECONnections” activities on-line. These, as well as more advanced activities and lessons, can be found at our website:

<https://www.aps.edu/sandia-mountain-natural-history-center/curriculum-activities>

Click on “SMNHC Mini Curriculum” for the above activities.

****Please remind your students to be careful with the specimens****



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