

Whose Scat Is That?

THEME

Scat is more than just smelly waste.

SUB THEMES

1. Scat has many beneficial uses.
2. Scientists can unlock many secrets from studying poop.
3. Anyone can learn how to identify different types of scat.

VOCABULARY

Scat, carnivore, herbivore

ACTIVITY MATERIALS

Scat props (journal, light bulb, walkie-talkie, Slice, stop sign, valentine, plate, fork, knife, recycling bin, house, fan, camouflage, mask, trophy, canned tomato, coffee, coprolite), scat replicas, scat ID cards, “Scat-venger Hunt” worksheets, clipboards, pencils, scat book for reference

METHODS

INTRODUCTION

Introduce yourself and state the title of the activity. Preview the main points of the activity and give students an idea of what they will be doing. Conversationally state the theme and sub themes. Without showing the students any of the artifacts and materials from the lesson, ask: **Can anyone tell me what scat is and from where it comes?** Explain that scat is a fancy word for something that all animals do, poop. Pass out the props to demonstrate the different beneficial uses of scat. Make sure that each student has at least one prop. Go through the group and have each student stand and describe their prop. Explain the beneficial use corresponding to each prop. Use the book/pictures to illustrate the different points.

- Journal: made out of elephant waste.
- Light bulb: company in CA using dog dropping for energy.
- Walkie-talkie: communicate (sex, age, healthy, direction).
- Can of Slice: poop from a bird-of-prey is called ‘slice’.
- Stop sign: coyotes, wolves, and foxes will poop to mark their territory and tell other animals to stay away! The fresher it is, the stronger the warning.
- Valentine: some dung beetles roll up some fresh poop into a ball to attract a mate.
- Dinner plate, fork, and knife: gulls, arctic foxes, jackals, hyenas, and vultures eat other animals’ waste when needed.

Teacher’s Corner

Grade Level(s)

3rd, 4th and 5th

State Performance Indicators

SPI 0307

-3.1: Identify the basic needs of plants and animals.

-3.2: Recognize that animals obtain their food by eating plants and other animals.

SPI 0407

-3.1: Determine how different organisms function within an environment in terms of their location on an energy pyramid.

-5.1: Determine how a physical or behavioral adaptation can enhance the changes of survival.

SPI 0507

-5.1: Identify physical and behavioral adaptations that enable animals such as amphibians, reptiles, birds, fish, and mammals to survive in a particular environment.

Whose Scat Is That?

INTRODUCTION (cont.)

- Recycling bin: rabbits recycle by eating their poop again to get more nutrition.
- House: some termites build homes using their poop.
- Fan: some animals use poop to cool off. One type of stork will poop on its legs to keep cool.
- Camouflage: some animals try to look like poop to hide from predators. Examples include the Viceroy caterpillar and the Calabar burrowing python.
- Halloween mask: garter snakes poop on themselves to scare away predators.
- Trophy: in S. Africa, people have contests to see how far they can spit a dried antelope turd. In the Midwest, there are cow patty throwing contests.
- Canned tomato: poop from cows and other livestock is used to fertilize our food.
- Coffee: there is a type of coffee that is produced from the coffee beans digested by an animal called the Luwak. The animal eats the beans and the digested material is taken from its poop.
- Coprolite: fossilized dinosaur dung can tell us what they ate and their bones cannot.

ACTIVITY

Explain that studying scat is very useful to scientists. Ask: **What can scientists learn from studying scat** (tells what an animal has eaten, identifies the area in which an animal lives, identifies the type of animal, indicates the health of the animal, etc.)? Explain that the science of studying poop is called Scatology. By collecting the poop and pulling it apart, scientists can determine the animal's role in the food web. If they find chunks of fur and pieces of bone, this informs them that the animal is a carnivore (meat-eater). If they find grass in the poop, this would indicate that it is an herbivore (plant-eater). Ask: **What type of animal would have both bones and plant material in its poop** (an omnivore, such as a black bear, which eats both plant and animal material)?

Break the students up into teams of two or three. Explain that they are going to use their investigation skills to search for scats along a trail and try to identify what they find with the identification cards. Provide each student with a "Scat-venger Hunt" worksheet, clipboard, and pencil. Give each group identification cards. Allow them 15-20 minutes to find the scats and identify them. When they are finished or time has expired, walk back through with the group and have the groups explain their findings.

Bring the group back together for the discussion.

DISCUSSION

If there is time, begin a discussion with the students about how they identified the scat. Have them explain some of the characteristics they noticed. Ask: **What similarities were there among the different types of scat?**

WRAP-UP

Let the group know that the activity is coming to an end. Conversationally review the theme and sub themes. Collect the datasheets. Give the teachers any of the materials that students are able to take home with them.

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- Activity developed by Melissa Squirlock; February 2008.