What's for Dinner

Fast Facts

Curriculum Area: Science
Grade Level: Grade 1
Suggested Duration: 120 Minutes

Stage 1 Desired Results

Established Goals

Science Content Standard 3: Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.
Benchmark 4.2: Identify, measure, and describe basic requirements of energy and nutritional needs for an organism.

Essential Understanding 3: The ideologies of Native traditional beliefs and spirituality persist into modern day life as tribal cultures, traditions, and languages are still practiced by many American Indian people and are incorporated into how tribes govern and manage their affairs. Additionally, each tribe has its own oral histories, which are as valid as written histories. These histories predate the "discovery" of North America.

Understandings

- The basic needs for all animals are food, water, and shelter.
- **Interactions** are part of this natural system between predator and prey.
- **Carnivores** are the creatures which must catch and kill their food to survive. They are meat eaters.
- **Herbivores** are the plant eaters in the environment.

Essential Questions

- Key terms: interactions, carnivores, herbivores, and omnivores.
- What are the basic needs of all animals?
- How do animals fulfill basic needs?
- How do different animals interact with each other?
- How can we group animals by what they eat?
- What are the differences and similarities of a carnivore, herbivore, and omnivore?

Students will be able to…

- identify the basic needs of animals as food, water and shelter.
- tell how the basic needs are met in different ways by different animals in native stories.

- introduce Blackfeet names of eight Montana animals.
- identify herbivores, carnivores, and omnivores.
- create a story line for an animal relationship in a class discussion.
- create a Montana animal from the class list, label it with its Blackfeet name, and identify its group (herbivore, carnivore, or omnivore).

Students will know…

- Key Terms: basic needs, carnivore, herbivore, omnivore, interactions.
- herbivores eat plants, carnivores eat meat, and omnivores eat both plants and meat.
- the relationship between carnivores, herbivores, and omnivores.

Stage 2 Assessment Evidence

Performance Tasks

1. Students will compare and contrast the roles of animals in American Indian stories through discussion of animal eating behaviors.

    - Students will sort pictures of animals into herbivores, carnivores and omnivores groups.
    - Each student will be able to name an herbivore, carnivore and omnivore through classroom discussion.
    - Students will create a Montana animal which they make from clay. Each animal will be labeled with its Blackfoot name and classification: herbivore, omnivore, or carnivore.
    - Students will present their clay animals to other classrooms of the same age or younger, explaining what the animal eats and why it is classified as a herbivore, carnivore, or omnivore.

Other Evidence

- Students will be observed as they organize the classification groups of herbivores, carnivores, and omnivores.
- Participation in class.
- Individual questioning of students.

Stage 3 Learning Plan

Learning Activities

Through ongoing class discussions and activities students will develop an understanding of the basic needs and the different roles that the animals play in the food chain. Students will identify animals in American Indian stories as herbivore, carnivore, or omnivore.

Day 1

Teacher will lead students in a brainstorming activity, thinking of different animals in their local area. Students will discuss the basic needs animals for shelter, food, and water. Using this information,

students will predict how their selected animals meet those needs based on what they know about the animals' habitats. All ideas and information will be recorded on chart paper.

Ask the question, "What are an herbivore, a carnivore, and an omnivore?" Clarify any misconceptions and provide a correct definition. Return to the chart of information and ask students what foods each animal eats. Using this feedback, students will classify the animals listed as carnivore, herbivore, or omnivore.

As students listen to selected American Indian stories they will identify what different animals are eating. Using this information, students will classify each animal as an herbivore, carnivore, or omnivore, and discuss how they know.

Display and sound out Venn Diagram cards then place them on the ground. Use hula hoops to create a Venn diagram on the floor. Place the titles: herbivores on one inside, carnivores on the other inside, and omnivores in the center where the circles overlap.

Using the map of Montana Indian Reservations students will locate the Blackfeet Indian Reservation. Place the eight Animal Cards and/or photos on the floor outside of the hula hoops. Explain that each animal is known to live on or near the Blackfeet Indian Reservation. Students will select a card, sound out the English and view the Blackfoot name of the animal, then discuss if the animal has the characteristics of an herbivore, omnivore, or carnivore. Students will then select a location in the Hula Hoops determining if the animal is an herbivore, carnivore or omnivore and place the card inside the hula hoops. Teacher will provide students with the pronunciations of the Blackfeet words.

Look again at the Venn diagram created by the hula hoops and discuss the characteristics of the different groups. Check for any animals that have been placed in the wrong group and make adjustments, if any changes of animal location should be made. Locate and discuss, as a class, what group man should belong to on the diagram.

Students will create in groups, a story line for how one animal in one part of the diagram has a relationship with another animal in a different section. (How would the rabbit's life be connected to the wolf?) Students may role-play how the animal maintains its place on the diagram. (I am a wolf; I have sharp teeth for ripping and sharp claws for catching my food. I eat meat.)

Allow time to review concepts of the lesson as follows: Students will divide up into sets of two and give a quick sentence report to the classroom on "what I learned today."

Day 2

Students will be instructed to create a clay sculpture modeled after one of the animals from the Venn diagram. Recipe for clay follows.

Students will place an amount of clay, about the size of a baseball, on a cardboard base for sculpting. Allow students to create sculptures with a partner if preferred.

Day 3

Students will paint sculptures when they have dried; color choices are up to the student.
Student clay sculptures will include the animal's Blackfeet name, English name, and classification name (herbivore, carnivore, or omnivore).

Students will practice then share their information in a short oral presentation stating the classification of his/her animal and the qualifications for placement in a classification. Students will present their clay animals to their own class and other classrooms. (Same age or younger aged class is best for first grade.)

Bring in ZooMontana educational traveling trunks of mammals for enrichment.

The pace of the lesson and time allotment will vary according to class.

Materials/Resources Needed

Animal pictures from Montana Fish Wildlife and Parks Field Guides for black bear, badger, mule deer, red fox, red squirrel, mountain cottontail, gray wolf, and mountain lion, all animals known to live in the area of the Blackfeet Indian Reservation.

Animal cards and photos (badger and black bear provided courtesy of Bernie Smith) and Venn Diagram cards (all attached).

Stories

Thomason, Dovie (Lakota/Kiowa-Apache). *The Animals' Wishes*. color illustrations, Iroquois. Rigby, 2000,

Savageau, Cheryl (Abenaki). *Muskrat Will Be Swimming*. color illustrations, Seneca. Tilbury House Publishers, 1996,

Sockabasin, Allen (Passamaquoddy). *Thanks to the Animals***.** color illustrations by Rebekah Raye. Tilbury house Publishers, 2005.

Classroom map of Montana Indian Reservations

Hula Hoops - 2

Modeling clay (Magic Modeling Goop works well – recipe)

2 cups table salt
2/3 cup water
1 cup cornstarch (loose)
2/3 cup water
Mix salt and 2/3 cup of water in saucepan, stirring until mixture is well heated, 3 or 4 minutes. Remove from heat and add cornstarch which has been mixed with 2/3 cup water. Stir quickly. If it does not thicken, return to low heat and stir until thick. It is hard to stir but undercooking leaves it

sticky. It should form a soft, pliable mass. It can be kept in a jar or plastic bag-does not need refrigeration.

5” x 5” cardboard squares for sculpture base

Paint and brushes for finished sculptures

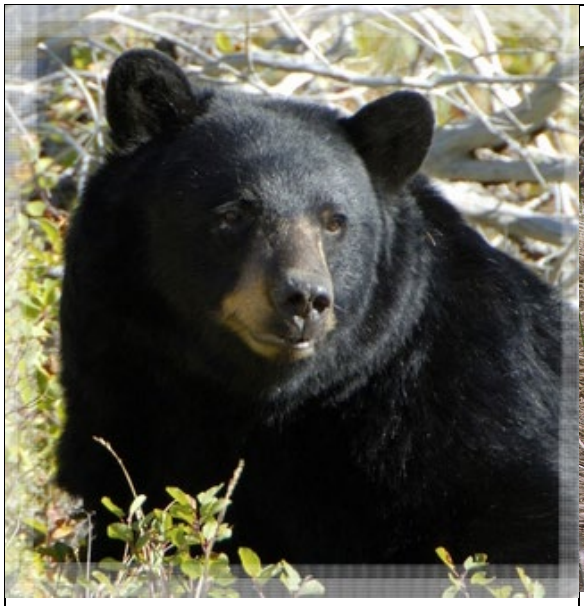
Contact Information on pronunciation of the Blackfeet

For guidance on correct pronunciation of the Blackfeet language contact their Tribal Education Department (406-338-7538), Blackfeet Community College (406-338-5441), or Browning Public Schools Native American Studies (406-338-2715) and ask for their Blackfeet Language instructors.

VENN DIAGRAM TITLES

HERBIVORES
CARNIVORES
OMNIVORES

ANIMAL CARDS



Black Bear

Sikohkiaaya nan

Image used with used with permission of
Montana Fish, Wildlife & Parks; photo by B. Smith

Badger

Siinaisskinan

Image used with used with permission of
Montana Fish, Wildlife & Parks; photo by B. Smith.

Mule Deer

Awatoyinan

Image used with used with permission of Montana Fish,
Wildlife & Parks; photo by S. Carson.

Red Fox

Maohkataatoyi

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Parks; photo by C. Jourdonnais.

Red Squirrel

Miiyattsihayinan

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Rabbit

Sikaaattsistaa

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Gray Wolf

Omahkapisinan

Image used with used with permission of Montana Fish, Wildlife & Parks.

Mountain Lion

Omahkatayo

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