

Welcome/ Staff/Volunteer Names
Introduction: **Today's Topic-Rodents**
Question: Why are rodents known for their front teeth?

Ice Breaker/ **Rodents & Relatives Match Up**
Game:

Background/ Ask the students what mammal characteristics they remember.
Exploration: What is special about the mammals we call rodents?
Discuss the special features of rodents:

- The largest and most diverse group of mammals with over 1500 species
- Chisel-shaped front teeth (incisors) grow continuously
- No fangs (canines)-a space between incisors and molars
- Strong jaw muscles pull the lower jaw forward and back for gnawing
- Most reproduce often and have large numbers of young
- Herbivores-eat mostly plants, seeds, bark, etc.
- Provide food for many predators

Activity: **Skull Search**-Help the students look at skulls of various mammals, including rodents and their close relatives, noting the teeth and their patterns.

The chisel shape of rodent incisors comes from the outer layer of enamel being harder than the inner dentine, which wears away faster. A rodent can die if its teeth aren't worn down enough by gnawing, they can grow into its skull!

Insectivores are often mistaken for rodents, but are predators who eat insects and other invertebrates.

Discuss insectivore characteristics:

- Tend to be smaller, nocturnal and secretive
- Burrow for prey
- Sharp pointed nose and tiny ears
- Teeth are unspecialized, with one point each
- Small eyes, may be mostly hidden by fur
- Include shrews, moles, and hedgehogs

Activity: **You and a Shrew**-Read shrew facts, then compare to humans.

Rabbits, or **lagomorphs**, were once thought to be rodents, but now have their own group. Lagomorphs:

- Include rabbits, hares, and pikas
- Most are great jumpers with long hind legs
- Rabbits and hares have long narrow ears
- Have a second smaller set of teeth behind two front incisors
- Herbivores

Activity/Snack: Baby carrots to "gnaw" on.

Game: **Fox and Squirrel**

OUTDOOR Hike to an area near water and look for beaver chews.
EXPLORATION: Look for other signs of rodents-tunnels in snow/grass, seed caches, etc.

Activity: Find some active squirrels and observe their behavior.

Closing: Rodents are often thought to be a nuisance due to their large numbers, eating of human food stores, and carrying of disease. Rodents, whether prey or nuisance have some special and interesting features.

Send Off: Goodbye!
Next Month-Rocks & Fossils

Take Home: Parent Outline

Vocabulary

Rodent, incisor, enamel, dentine, insectivore, lagomorph, canines, molars

Background

Iowa Wildlife. 1998. Iowa Association of Naturalists. ISU Press, Ames, IA. (IAN-601--606)
IAN-601 Iowa Mammals <http://www.extension.iastate.edu/pubs/wi.htm>