

Kindergarten Life Science Unit

Senses

Teacher Background Information – for teacher content knowledge only, NOT student learning goals

Learning usually begins with the sensory systems through which people receive information about their bodies and the physical and social world around them. The senses do not give people a mirror image of the world but respond selectively to a certain range of stimuli.

Each organism has a unique set of senses that helps them adapt and survive according to their specific needs.

Instructional Implications

Because the child's world at grades K-4 is closely associated with the home, school, and immediate environment, the study of organisms should include observations of themselves, and interactions with other living things. Emphasis should be on asking questions:

How do I know that this milk is spoiled and will make me sick?

How do I know that there's a fire in my house?

Students should have lots of opportunities for developing observations and description skills. Set up centers for students to explore their five senses.

Children should not be forced into the idea that people are animals, but they should explore the similarities and differences. Students can mimic the various ways that animals get sensory information from their environment.

Big Idea

Senses give us information and help us to survive in our environment.

Essential Questions

How do our senses give us information about the world?

In what ways do an animal's senses help it to survive in its environment?

AAAS Benchmarks/National and Science Education Standards

- Senses can warn individuals about danger; muscles help them to fight, hide, or get out of danger.
- The human body has parts that help it seek, find, and take in food when it feels hunger – eyes and noses for detecting food, legs to get to it, arms to carry it away, and a mouth to eat it.
- The brain enables humans to think and send messages to other body parts to help them work properly.
- Plants and animals have external features that help them thrive in different kinds of places.

Local Connections

- Observations and interactions within the natural world of the child, including pets and plants in the classroom, and the natural environment around the school

Science Process Skills

Observation
Classification
Simple Investigation
Prediction
Data Collection
Communication

Materials/Resources

Insights: The Senses

Related Scientist or Career Path

Biologist

Assessments

Assessment– ongoing formative, appropriate for the primary classroom

Science Notebooks

Anecdotal notes – continuum

Photo documentation - of student work

Student Difficulties and Misconceptions

- Young children think concretely about individual organisms, such as animals are pets or kept in a zoo. The idea that organisms depend on their environment is not well developed.
- Children easily imagine animals acting like people: they may have difficulty classifying people as animals.
- Children at this age think each organ has its own independent function. One can expose children to some of the interconnectedness of the sense organs in response to their questions.