

THE STANDARD

Animal Senses

"Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways."



LS1.D • Information Processing

"Different sense receptors are specialized for particular kinds of information, which may be then processed by the animal's brain. Animals are able to use their perceptions and memories to guide their actions."

This isn't five senses memorized off a poster. It's one chain of events: a sense picks up information, the brain figures out what it means, and the body does something about it. **The senses, the brain, and the response all work together as one system.**



Developing and Using Models

"Use a model to test interactions concerning the functioning of a natural system."

4th graders build a model, like a flowchart or a labeled drawing with arrows, that shows information moving from a sense to the brain to an action. The model isn't decoration. **They use it to test their thinking: does my arrow chain actually explain why the animal reacted?**



Systems and System Models

"A system can be described in terms of its components and their interactions."

An animal sensing its world is a system: parts that work together. The parts are the senses, the brain, and the body that acts. The interaction is the information passing between them. **Break any link and the whole thing stops working.**