Activity 4.9 HOW DO ANIMALS MOVE?

(Small-group activity)

Materials Needed

- Pictures of animals that move in different ways (swimming, walking, hopping, gliding, crawling, flying, climbing) and of animals that don't move, such as barnacles
- · Live animals in aquarium, cages, and terrarium
- Paper
- Pencils

Procedure

- 1. Look at the live animals and the pictures of animals in your room. Can you tell how each one moves about? Can you find any that don't seem to move?
- 2. Write the names of the animals on the left side of your paper. Next to their names, write the ways they move (remember, some move in different ways). Try to think of more than one word to describe their movement, for example, fish swim, but they also wiggle and swish; snakes crawl, but they also slither and glide; cats walk, run, crawl, creep, climb, stalk, and pounce. How many words can you find for each animal?
- 3. Think of the ways you move. Look at your list of animal movements. Underline the ones you can imitate.
- 4. Are there any movements you can do as well or better than some other animal (hint: pick up a pencil or tie a shoelace)? Why are you able to do these things better?
- 5. Have a class discussion about why you think animals move as they do.

Teacher Information

Younger students may enjoy trying to imitate the movements of animals. Older students can play animal movement charades, in which they guess the animal being portrayed. Animal movements may also inspire creative dancing. Some cultures imitate animal movements with costumes, music, and dance.

Animal movements are most often based on their environment (water, land, or both), method of obtaining food, courtship rituals, and defense or protection. Some animals seem to dance or play just for fun.

When size and proportions are taken into consideration, animals that specialize in a particular type of movement can perform that movement far better and more efficiently than people (even remaining still). Thanks to the opposed thumb, the movement people can make better than any other animal is grasping. This has enabled people to be the best tool users and,

along with their ability to think and reason, to create many technical and mechanical adaptations to compete with the specialized movements of other animals.

Don't forget the many mechanical robots that are popular as children's toys. You might plan a "robot day" when everyone is invited to bring his or her favorite doll or mechanical animal toy and explain how it works. No matter how well designed, mechanical toys cannot perform animal movements nearly as well as the animal itself.

INTEGRATING: Language arts, social studies, art

SKILLS: Observing, inferring, classifying, communicating, comparing and contrasting, formulating hypotheses, identifying and controlling variables