COMMON MISCONCEPTIONS

Students at this age are limited in their perceptions of the outside world and base knowledge on their own experiences. They would expect all animals to have the same five senses and body parts as themselves. They are not yet aware that some animals have keener or weaker senses than they do or that some animals have different senses than humans. For example, the ability of bats to use echolocation (sonar) to explore their surroundings or that snakes “smell” with their tongues. Also students think that touching is a sense that only our hands do, however you can touch with any part of your skin, even with the skin on your feet or face.

BACKGROUND

Senses are the means by which animals gain knowledge of the world around them. This information helps them to survive. Humans have five types of sense receptors that enable them to obtain information about their environment. Other animals also have receptors that may be different than the receptors of humans. Humans have a weaker sense of smell and hearing than many animals. Some animals, like bees which can sense the Earth’s magnetic fields, have senses that most other animals do not possess. Many plants also have receptors to sense light, gravity, and humidity. Senses help animals and plants survive in a wide range of environments.

People have five senses:
- Eyes are used for the sense of seeing (sight)
- Ears are used for the sense of hearing
- Noses are used for the sense of smelling
- Tongues are used for the sense of tasting
- Skin is used for the sense of touching

TIPS FOR TEACHERS

Have your students make a booklet on the five senses. On each page they will write the name of the sense and draw a small picture of the body part used for that sense. They will then draw a larger picture of something they can use that sense to explore.

Have your students make a class booklet on animals using their senses. Give each student a sheet of paper and have
each draw a picture showing an animal using one of its body parts to explore its environment. For example, a student could draw an elephant using its trunk to feed or a monkey swinging through the trees. Have each student write the word for the sense that animal is using to explore its world.

There are some excellent books to use in a unit on the five senses, such as *My Five Senses* by Aliki; *You Can’t Smell a Flower with your Ear* by Joanna Cole; *The Magic Schoolbus, Exploring the Senses* also by Joanna Cole; or *The Blind Men and the Elephant* by Karen Backstein.