Understanding Animal Behavior

Materials: stopwatch/timer and Animal Behavior Data sheet found at the end of this lesson plan
Duration: 10-15 minutes

Summary of activity:
This activity is designed to help your child see themselves as a scientist and begin to think critically about problem-solving. The goal is to share concepts through discovery and to encourage using scientific thought processes. As with all lessons provided, feel free to adapt them to your child's abilities. Certain scientific vocabulary may or may not be appropriate for your child's level of understanding. Take these ideas, make them your own, and your child will have a greater chance at success.

The study of animal behavior is called ethology and it can help scientists better understand animals which provides valuable knowledge to inform how to best care for them in zoos, as well as inform conservation efforts to help the species overall. When scientists conduct animal observations, they use something called an ethogram. Ethograms are a list of observed behaviors an animal might exhibit and when used, they help to ensure consistency between many scientists conducting the research.

There are many different ways to collect animal behavioral data. For this activity, you will use a process called "point scan sampling." At predetermined intervals (like every 20 seconds, for example), you will record what the animal is doing at that exact moment in time. This provides a snapshot as to the animal's behavior and when combined with many other data sets, scientists can begin to make conclusions about the behavior of that animal or group.

Procedure:
1. Begin this activity by discussing what an ethogram is and why it's important for scientists to collect animal behavioral information.

2. Have your child identify what animal they would like to record behavioral observations for. It could be a pet or an animal that spends a lot of time in your yard. There are also plenty of animal videos on Cleveland Metroparks Zoo's Online Resource Library to use, as well. Begin by making a list of all of the behaviors you have observed this animal do in the past. These might include feeding, playing/socializing, sleeping/resting, walking, standing, sitting, vocalizing, and/or cleaning themselves.

3. Now that you've created your list, it's time to put it into a data sheet. A blank copy can be found at the end of this activity sheet. You can use this one exactly how it is provided or create your own.

4. For this activity, you will be using a method of data collection called "point scan sampling." Decide how often and for how long you want to record data (consider every 20, 30, 45, or 60 seconds for at least five to 10 minutes). At the exact interval moment, record what your animal is doing. Reminder – you will see many different types of behaviors between each interval while watching your animal, but it is important to only record the behavior that is happening at the specific interval.

Post Activity Discussion:
Why do you think it is important to collect behavioral data for animals that live at the Zoo? When you get sick, it's easy to tell a doctor what's wrong, but animals can't tell us what they are feeling. By knowing what "normal" behaviors for that animal or species are, it makes it easier to identify when they are acting abnormally. For animals in the wild, knowing how a species acts helps inform the conservation decisions needed to protect them.

Animal Behavior Data

Name of scientist recording data: _____   Date: _____

Where are you conducing the data collection?   Indoors   Outdoors

Start time: _____   End time: _____

Weather conditions (if applicable):   Sunny   Cloudy   Raining   Snowing   Overcast

Interval	Feeding	Playing/ Socializing	Sleeping/ Resting	Walking	Standing	Sitting	Vocalizing	Cleaning Themselves
0:30								
1:00								
1:30								
2:00								
2:30								
3:00								
3:30								
4:00								
4:30								
5:00								
5:30								
6:00								
6:30								
7:00								
7:30								
8:00								
8:30								
9:00								
9:30								
10:00								
TOTAL								

Create a pie chart or bar graph to summarize your findings:

Observed Behaviors

# of times behavior was observed	Feeding	Playing/ Socializing	Sleeping/ Resting	Walking	Standing	Sitting	Vocalizing	Cleaning Themselves
20								
19								
18								
17								
16								
15								
14								
13								
12								
11								
10								
9								
8								
7								
6								
5								
4								
3								
2								
1								