Animal Behavior Inquiry
Grades K-5

In this activity, students will work either in groups or individually to answer a question using inquiry skills. They will ask their own question (using a fill in the blank method) and use observation skills to answer that question.

Materials to bring with you to the zoo:
Animal Behavior Inquiry activity sheet (both sides); pencils; clipboard or stiff cardboard; something to keep time (will need seconds)

Background on animal behavior study:
By researching the behavior of animals, zoo staff gain valuable information about the animals; this contributes to keeping the animals healthy and conserving wild populations of their species. Behavior is essentially anything animals do in response to their environment.

Pre-visit preparation in the classroom:

- Practice: The purpose of this activity is to prepare students to collect animal behavior observations. Students can practice observation techniques by having half the class role-play animal behaviors and the other half record data. Choose a species of animal that is familiar to your students and have the whole class practice role playing a behavior (e.g. sleep/rest; eat/drink). Make sure each behavior is easily distinguishable from the others. Then, divide the class in half with one half as the 'animals' and the other half as the 'researchers.' Have each researcher choose on individual animal to observe. For three minutes, have the researchers use the observation worksheet to mark the behaviors they observe at the end of every 30 seconds – you can keep time and call out "now" every thirty seconds to help the researchers. Then switch 'animals' and 'researchers' and run the practice observations once more.

- Designate working groups: Decide ahead of time if you will have students working individually or separately. Make sure each group or individual has a timing device for when they get to the Zoo.

- Datasheet: Hand out the "Animal Behavior Inquiry" sheet and explain each step as outlined on the datasheet. Tell students that they will be choosing one individual animal to watch for several minutes. After each 30 seconds, students should put a check mark under the behavior they observe their animal doing at that moment. Explain that students working in pairs should have one person keep time while the other one records observations. Keep in mind that not all students need to watch the same animals or ask the same questions within the group. In fact, having a variety of questions means your class will collect more information which you can interpret as a group back in the classroom.

Before leaving the classroom:

- Let chaperones know that at some point they will need to stop at a particular exhibit and help their students complete the Animal Observation Inquiry activity sheet. Go over the worksheet with chaperones, clarifying directions and answering questions as needed.

At the zoo:

- Have chaperones briefly review with students how to complete the datasheet. Following data collection, have students form a conclusion based on their observations.

Post-visit wrap-up in the classroom:

- Have your students present their findings to the whole class.
- Discussion: What more do we know about the animals at the zoo? What more do you want to know? How could we use this model of questioning in other ways?

This activity was adapted with permission from Woodland Park Zoo.

WOODLAND PARK ZOO

Animal Behavior Inquiry

Do penguins spend more time on land or in the water?

Do orangutans spend more time on the ground or in trees?

Do brown bears spend more time together or apart?

Names: _____

_____

1. Find an animal you want to learn more about. You'll need to focus on one individual animal for this study.
(For example if you want to study penguins pick a specific penguin to watch)

2. Fill in the question with what you want to learn.

"Do _____ spend more time _____ or _____?"

(Animal) (Place or Action) (Opposite place or action)

3. Make a prediction. What do you think the answer to your question will be?

I think...

4. Time to collect your data! Every 30 seconds you are going to mark what your animal is doing or where it is located. Use the back of this sheet to record your animal's location or action.

5. Repeat step 4 until your data sheet is complete.

What other things could you compare about this animal?

What other tools could help you answer your question?

Why do you think the animal was acting that way?

Do you think other similar animals would act the same way?

Date:_____

Time:_____

Weather:_____

Instructions

1. Use the same place or action from the front to fill in the spaces above the data table.
2. Keep a close eye on your individual animal.
3. Every 30 seconds put a mark in the correct box.
4. After the 5 minutes total each column.
5. Write out your conclusion and then try to answer the questions found around the sides of the paper.
6. If you want to do this again with another animal just use a different symbol in the box!

	Not Visible	Place or Action _____	Opposite Place or Action _____	Neither
30 sec				
1 min				
1 m 30 s				
2 m				
2 m 30 s				
3 m				
3 m 30 s				
4 m				
4 m 30 s				
5 m				
Total # of checks				

What do your results tell you about the animal in the wild?

If you did this again, what would you do differently?

Conclusion

The _____ spent more time...
(Animal)

Could things like weather or time of day affect your results? What else would?

What other questions came up?