

ANIMAL BEHAVIOR ETHOGRAM

EDUCATOR NOTES

Activity Overview:

Observation is a key component of the scientific process. Scientists and Zoo staff observe animals and their behaviors to learn more about them. This activity asks students to select an animal of their choice, record its behavior over a set period of time and analyze the data gathered. It can be completed at the Zoo, virtually through the Zoo's webcams or out in nature. There are two versions available for students at different learning levels.

Materials:

A timer or watch

Learning Objectives and Outcomes:

In this activity, students will develop their observation and data collection skills by observing animal behaviors and draw evidence-based conclusions through data analysis.

Students will be better able to:

- Develop scientific inquiry skills such as observation and data collection.
- Identify and categorize different animal behaviors.
- Interpret observational data to draw conclusions about animal behaviors.
- Develop a deeper appreciation for the natural world.

Grade Level(s):

Kindergarten through upper middle school using extensions

Education Standards:

Supports NGSS K-LS1-1, K-ESS2-2, K-ESS3-1, 3-LS4-3

Instructions:

Pick an animal to observe during your visit to the National Zoo, on the Zoo's webcams, or out in nature. Watch the animal's behaviors and record what they are doing every 30 seconds by putting a check mark in the box every time you see the behavior.

When you are done recording the animal's behaviors, add up the check marks for each behavior. Put the total number in the last row of the table. Then, analyze your data by answering the following questions.

Extensions:

To extend this learning with older students:

- Research the animal observed, as well as any applicable animal enrichment methods, and various animal behaviors, and write their findings in a report.
- Review the data and determine an analysis of the animal behaviors observed.
- Identify and compare the animal's habitat in the Zoo to its native habitat.
- Explore the needs of the animal and design a new Zoo habitat. This includes basic needs, climate, temperature control, square footage, and enrichment toys.
- Investigate the animal's International Union for Conservation of Nature's (IUCN) conservation status and develop a conservation plan to help save the species.



Smithsonian
National Zoological Park
Conservation Biology Institute



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Animal: Meerkat

Animal Behavior	Number of Times You See the Behavior	Total
Resting 	✓ ✓	2
Walking 	✓	1
Running 		0
Eating 	✓ ✓ ✓	3
Playing 	✓	1
Bathroom 		0
Grooming 	✓	1
Other: _____		0



SAMPLE ACTIVITY

First Name: Bonnie



ANIMAL BEHAVIOR ETHOGRAM



Animal: Orangutan Time Observed: (from) 1:15 p.m. (to) 1:20 p.m.



Description of animal habitat: Outdoor habitat with trees, branches, and a hammock



Time	# Animals	Resting	Walking	Running	Eating	Playing	Bathroom	Grooming	Other:
00:30	2	✓							
01:00	2	✓							
01:30	2		✓						
02:00	2							✓	
02:30	2							✓	
03:00	2							✓	
03:30	2							✓	
04:00	2							✓	
04:30	2							✓	
05:00	2							✓	
TOTAL		2	1	0	0	0	0	7	0





SAMPLE ACTIVITY



1. What behavior did the animal do the most often?

The orangutans were grooming the most.



2. What behavior did the animal do the least often?

I saw them walking the least often.

3. What “other” behaviors did you observe?

The orangutans were also resting.

4. What was your favorite behavior? Why?

I enjoyed observing the orangutans grooming each other.

5. How did the animal interact with its habitat?

They were resting in the hammock.





First Name: _____

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Animal: _____

Animal Behavior	Number of Times You See the Behavior	Total
Resting 		
Walking 		
Running 		
Eating 		
Playing 		
Bathroom 		
Grooming 		
Other: _____		



First Name: _____

ANIMAL BEHAVIOR ETHOGRAM

Animal: _____ Time Observed: (from) _____ (to) _____

Description of animal habitat: _____

Time	# Animals	Resting	Walking	Running	Eating	Playing	Bathroom	Grooming	Other: _____
00:30									
01:00									
01:30									
02:00									
02:30									
03:00									
03:30									
04:00									
04:30									
05:00									
TOTAL									



1. What behavior did the animal do the most often?

2. What behavior did the animal do the least often?

3. What “other” behaviors did you observe?

4. What was your favorite behavior? Why?

5. How did the animal interact with its habitat?
