



# Nature-Watch Activity Kit

## Animal Track Game

(Nature Watch Kit #160)

### Kit Contents

<u>Item:</u>	<u>Kit Size</u>		
	<u>1</u>	<u>25</u>	<u>100</u>
Game Sheets	1	25	100
Sticker Sheets	1	25	100
Game Folding	1	1	1
Instructor Manual	1	1	1
Practice Sheets	1	25	100

### Next Generation Science Standards Alignment

K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

3-LS3-1. Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.

4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

MS-LS4-2. Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer evolutionary relationships.

*This page includes the Next Generation Science Standards (NGSS) mapping for this kit and Science, Technology, Engineering, and Math (STEM) extensions (on back) to use in adapting and extending this activity to other subject areas.*

**See Back for  
STEM Extensions**

*This Nature Watch Activity Kit contains an Instructor Manual and materials to implement the curriculum. The kit was designed to be used with adult supervision only. Unsupervised use is not recommended.*



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## STEM Extensions

### Science

Create an animal tracking plot nearby. Mark off a small section of land (4' x 4' is a good size) and make the ground muddy so that animal tracks will easily appear. Visit the plot daily to look for new tracks; try to identify which animals made them. If you have space, make multiple plots in different areas and compare how much traffic the plots get from various animals.

After thinking about animal tracks, look at the feet that make those tracks. What are some of the interesting features of animal feet (such as hooves, pads, toes, and claws), and how do they help the animals in their everyday lives?

Use playdough and small plastic animal toys to create an animal tracks mystery for your classmates to solve. Roll out a layer of playdough onto a flat surface. Walk several different plastic animals across the playdough in different paths, leaving footprints. Include some objects such as trees, buildings, rivers, etc. Then your classmate will have to figure out what animals had been there and what they did while they were there (such as visit the river to drink, climb a tree, etc.).

### Technology

Go online to learn how scientists use technology to track animals. Look into GPS, VHF, and satellite tracking. What are they learning by using these tools? How do these tools help in conservation efforts?

Use the macro feature of a camera to photograph one small area each day for a week. Then, examine the photos to look for any signs of animals passing through. Don't forget to look for signs of tiny wildlife, too, such as earthworms and ants.

### Engineering

Create an all-in-one tool for tracking animals. Think about what you might need if you go tracking out in the woods. You'll probably want something that helps you identify the type of tracks and measure the size of the tracks, the stride, and the straddle. See if you can also incorporate the Tracking Tools mentioned at the bottom of page 2. Draw and label your design.

Make a plaster cast of an animal track that you find. You will need some kind of border to place around the track to contain the plaster. For small tracks, a large round cookie cutter may work; for larger tracks, try cutting edges from a cardboard box or a section of a soda bottle. Mix plaster of Paris with water according to the plaster of Paris package's instructions, then pour the mixture into the mold, starting with the finer details (like toes). Let the plaster set for at least a half hour before carefully removing the cast. When you remove the cast and turn it over, you will see the track in the plaster.

### Math

(Younger) As you complete the Walking Stride/Running Stride activity on the bottom of page 3, record the distances between steps as each student walks. Whose stride is the longest? Whose is the shortest?

(Older) As you complete the Walking Stride/Running Stride activity on the bottom of page 3, record the distances between steps as each student walks. Calculate the average stride for each student. Calculate the class-wide average. Do the same for running and compare the results.