

Animal Olympics: Day 1

The Olympics in Tokyo may have been canceled, but this week we are hosting our own games. Just as humans' abilities are highlighted in the Olympics, animals have special skills as well. They use speed, balance, aim, endurance, flexibility, and many others to accomplish their daily activity—and some of their skills are pretty amazing. This week we will explore these similar abilities that help animals in day to day survival.

These curated activities are listed in a suggested sequence but may be done in the order that works best for you and your young scientists. Learn more about this series in the <u>Introduction to Weekday Wonders</u>.



Question of the Day Do you have the speed of an animal champion?

Daily Nature Journal

Spending some time outside completing their daily nature journal is a great way for young scientists to become aware of the beauty of nature. Need help to help them? Use the <u>Guide to Nature Journaling</u> to support them in nature journaling each day.

All the Right Moves

Ask your young scientist to take a short walk around outside and observe the variety of ways animals move. Have him or her be sure to look for both big and small living things that share our spaces such as ants, grasshoppers, and other insects. Your scientist can carefully turn over logs or rocks, being sure to lift the side away from him or her. S/he should observe the living things then gently replace the rock or log.

Ask your scientist to draw the animals and make notes about how it moves. Have him or her tally the number of different ways that animals move. Then discuss which animals move quickly or slowly, whether those with more legs move faster, and which living things seem to be the most effective at moving quickly. Have your scientist consider each insect and decide if there is an Olympic event or athletic sport for which the insect would make a great athlete.

Insect Races

Tell your scientist that s/he is going to host an Olympic competition for insect races. Ask your scientist to collect 2-4 insects or other invertebrates and put them into a jar. Your scientist should collect a variety of race competitors such as ants, grasshoppers, roly polys (also known as pill bugs, doodle bugs, or sow bugs), millipedes, snails, daddy long legs, or different types of beetles.

Have your scientist observe how each of the race participants moves then predict which race participant will win the race. Give your young scientist the following examples to understand how to make the prediction.

- The roly poly (pill bug) will finish the race the fastest because it has many legs.
- The daddy long legs will be the fastest because it has long legs.

Find an outside area to hold the races. Ask your scientist to draw a circle in the dirt using a stick or on a sidewalk with chalk. Have him or her place all the racers in the center of the circle by opening the jar and gently turning it over so the mouth of the jar is on the ground. Start the race by lifting the jar and setting the participants free.

Ask your scientist to observe the racers. They will (hopefully) make their way toward the edges of the circle. The first racer to cross over the line of the circle is the winner. Have your scientist revisit the prediction s/he made to determine if it was correct. If so, ask if the reasoning was correct or if your scientist made any new observations about the way the insect moves. If not, have your scientist discuss why the prediction was not right and why s/he thinks that was. For example, an insect might have been moving quickly but not following a straight path to the edge.

Note: Be sure that at the end of the races, all participants are released back into their natural environment. If you are using the sidewalk or driveway to conduct the race, be sure that every animal gets out of the circle as these hard surfaces can get really hot and be dangerous to the animals if they are left on it for an extended period of time.

Variation:

Race only one participant at a time. Have your scientist time each participant and record the times in a chart. After all participants have completed the race and have been returned to the natural environment, your scientist should analyze his/her data. One way more experienced scientist could analyze the data would be to plot the times on a graph. Have your scientist reflect on questions such as

- Was your prediction correct?
- Did any of the times of the animals surprise you? Why?
- If s/he did the races again, would the same racer win?

Test Your Speed

Share the following information with your young scientist. Some animals depend on speed for their survival. Some are very slow like the sloth, moving only about 0.15 miles per hour, while others like the cheetah are known for their speed. Cheetahs are considered the fastest land animals reaching speeds of 75 miles per hour! However, even a cheetah cannot catch a peregrine falcon it the middle of dive to catch its prey. These falcons have been clocked at 242 miles per hour!

In this activity, your young scientist will have a chance to test how fast he or she can move. Mark off a course of at least 25 feet on a sidewalk, around the house, or across a yard or park. The course should have some straight lines in order for scientists to build up speed.

Time your scientist as s/he runs the course as fast as s/he can. If multiple young scientists are playing, they can time each other and compete for the fastest time.

For more fun, have your scientist run the course in the way different animals would. Crayfish use their tails to propel themselves rapidly backward to escape predators. Some lemurs leap sideways. Some animals run on more than 2 legs. Challenge your scientist to see how fast s/he can complete the course on all fours, running backwards, skipping, galloping, or moving sideways. These different "Olympic events" should offer a fun time for all involved.