

# SciGirls Activity 13

## Rabbits



### Icebreaker

Visit a zoo, aquarium, or pet shop to do this fishy observation!



#### You'll need:

- a view of an aquarium with many different kinds of fish
- a notebook
- colored pens or pencils

### SciGirls Skill: Observing

#### Guide your girls as they

- 1) Seek out fish of different body shapes in the aquarium. Fish might be flat, disc-shaped, long and skinny, round and puffy, etc.
- 2) Sketch the different body shapes in the notebook. Give a word label that describes each shape.
- 3) Pick one of the fish shapes to focus on, and find one fish in particular that has that shape. Watch it for 5 minutes, and notice where in the aquarium it spends the most time (for example, at the bottom, among plants, hiding among rocks, near the top of the water), and how it swims (slowly, in short bursts of speed, up and down, for example).
- 4) Next, pay attention to a fish of a different body type. Observe it for 5 minutes, again noticing where in the aquarium it mostly spends its time. Observe a third fish type, also.
- 5) When you have finished, write a sentence or two for each fish, describing how its body shape helps it live where it lives and helps it to swim as it does.



**SciGirls Suggestion:** This activity encourages girls to look beyond what initially meets the eye when watching animals. Take advantage of the fact that girls often express themselves well in writing, and encourage them to write detailed descriptions of what they see.



Find descriptions of other animal observation activities at [pbskidsgo.org/dragonflytv/show/livingthings.html](http://pbskidsgo.org/dragonflytv/show/livingthings.html)

## Investigation

### Rabbits

We're Jerika and Shannon, and we love Jersey Woolies, Mini-lops, and American Polishes. In other words, we're into rabbits! We raise rabbits as pets, and we noticed that the different breeds have different physical characteristics. Since we're always looking for ways to keep our bunnies entertained and happy, we want to know: How do different rabbit breeds compare when "competing" in our Rabbit Olympics?



For each group of four girls, you'll need:

- 1 or more pet rabbits!
- rabbit food treats
- 2 large bedsheets [Dash event]
- a large cardboard cylinder and old newspapers [Tunnel event]
- a 12" wide plank, 4 feet long, and a chair [Ramp Climb event]
- a small, lightweight, hollow plastic ball [Ball Nudge event]
- a stopwatch
- a notebook



Find out more about Jerika and Shannon's investigation at [pbskidsgo.org/dragonflytv/show/rabbits.html](http://pbskidsgo.org/dragonflytv/show/rabbits.html)



Check out this investigation on the SciGirls DVD. Select "Rabbits" from the main menu.



## SciGirls Want to Know

### How do different rabbit breeds compare when “competing” in our Rabbit Olympics?

#### Guide your girls as they

- 1) Set up four Rabbit Olympics events:
  - a) **Rabbit Dash:** Lay a flat bedsheet on the ground or floor. Set the rabbit at one end of the sheet. Entice the rabbit to run or hop across the sheet to the far end, using rabbit treats. Count the number of hops it takes the rabbit to reach the end.
  - b) **Tunnel Run:** Lay a cardboard cylinder on the ground. Crumple up some sheets of newspaper, and set them in the cylinder. Put the rabbit into one end of the cylinder. Using treats, entice the rabbit to “tunnel” through the newspaper and emerge on the other side. Use the stopwatch to determine the time it takes the rabbit to travel through.
  - c) **Ramp Climb:** Set a plank up as a ramp, with the high end resting on the seat of a chair. Set the rabbit at the base of the ramp, and entice the rabbit to go up the ramp and rest on the chair seat. Use treats as a lure. Measure the time it takes the rabbit to go up the ramp with a stopwatch. Note: If the rabbit seems unwilling to climb up, you may start the rabbit on the chair seat, and entice it to go down the ramp instead.
  - d) **Ball Nudge:** Set the rabbit down in an enclosed area. Place a ball in the enclosure. You may want to scent the ball with rabbit treats. Observe the rabbit for a 5 minutes. Count the number of times the rabbit nudges or pushes the ball with its nose.
- 2) If you have access to a number of different rabbits for this test, make a note about the rabbit’s breed, its body length, and body weight, for later comparison.



#### SciGirls Secret

Advise the girls that it is acceptable, even preferred, to work with animals that already have been trained in the desired activity. They will find that working with animals that have not been trained might be frustrating. The girls should indicate in their notes whether they are working with trained or untrained animals.



## SciGirls Synthesize Data and Analysis

- 1) **Rabbit Dash:** If your rabbit will cooperate, have it complete the rabbit dash more than once, then take an average of the number of hops to go the full distance. If you have several rabbits, find the average number of hops for each. Examine the data to see if larger rabbits take more or fewer hops to complete the dash.
- 2) **Tunnel Run:** If your rabbit will cooperate, have it complete the tunnel run more than once. Take an average of the time it takes to complete the course. If you have several species of rabbits, make a bar graph that compares their average times.
- 3) **Ramp Climb:** If your rabbit will cooperate, have it complete the ramp climb more than once. Take an average of the time it takes to complete the climb. If you have several species of rabbits, make a bar graph that compares their average times.
- 4) **Ball Nudge:** If your rabbit will cooperate, have it complete the ball nudge more than once. Take an average of the number of nudges it makes in 5 minutes. If you have several species of rabbits, make a bar graph that compares the average number of nudges.

## Keep Exploring!

You can set up a similar experiment with just about any pet. However, you want to select activities that are based upon behaviors that the animal naturally displays. Before setting up any task, observe your pet's behaviors, and select an activity that is related. If your bird climbs around in its cage, set up a climbing activity. If your hamster chews up cardboard tubes, set up a chewing activity.