

Diversity of Living Things: Day 2

This week through Weekday Wonders, young scientists will delve into the diversity of living things. The week starts with your scientist discovering basic physical characteristics of animals. Then scientists will explore how these characteristics are tools to help sort animals into groups. Young scientists finish the week by looking at how the differences in these characteristics, even within the same group, play an important role in their 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 [Introduction to Weekday Wonders](#).



Question of the Day

How are all animals similar and different from each other?



Daily Nature Journal

Ask your young scientists to spend some time outside completing their daily nature journals. Use the [Guide to Nature Journaling](#) to support them in nature journaling each day. Ask them to look back in their journal to last Tuesday and to visit the same spot to complete their journal. How is the spot similar? How is it different?



I Am Thinking of an Animal...

For this activity, your young scientist will play a questions game, similar to 20 Questions; however, there is no limit on how many questions he or she can ask. Either you or another scientist in the home should think of animal, but do not reveal the animal to the scientist.

The person who thought of the animal should signal that s/he is ready to begin by stating, "I am thinking of an animal." Your young scientist should ask "yes" or "no" questions to discover the animal's identity.

Some examples of questions that could be asked include

- Does your animal have legs?
- Does your animal have 4 legs?
- Does your animal eat meat?
- Is it a reptile?
- Does it have fur?"

When your scientist thinks s/he has figured out the animal, he or she should ask “Is your animal a (n) _____.” If the young scientist is incorrect, let him or her continue asking questions. If your scientist is correct, let him or her think of an animal for the next round.

For the youngest scientists, keep the animals really basic and familiar—dog, cat, penguin, fish, bear, squirrel, bird, etc. For older or more experienced scientists, the animal possibilities are endless and can be as specific as you would like—flying squirrel, sea star, stick bug, lady bug, blue bird, cardinal, etc.

After a few rounds, ask your scientist why they think some rounds take longer than others or which animals were harder to guess and why.



Animals in Your Yard

Encourage your scientist to observe all the animals in your yard. Don’t forget to include insects, pets, and humans. In his or her journal, have your scientist compare the animals they see. What body parts do they have (legs, wings, antennae) that are alike? What are some body parts that are different? Do any of the animals move in similar ways?



Safari Sort

Refer back to [earlier Weekday Wonder activities](#) and ask your scientist to list some ways to identify a living thing, such as whether it eats, reproduces, or grows. Then send your young scientist on a safari to gather stuffed animals, or s/he can use the pictures on pages 4 and 5.

Ask your young scientist to sort the animals (stuffed or pictures) into groups based on the different ways the animals *move*. For example, one grouping could be “animals with wings that fly.” After your scientist has completed the sorting, have him or her explain the groups that they have created.

Challenge your scientist to consider whether or not an animal can belong to more than one group, so that s/he can begin to recognize how the different animals’ methods of movement are similar and different. Ask your young scientist to explain the parts of each animal’s body that are used for movement.

To extend this activity for older scientists, print the Venn diagram on page 6 or have your scientist draw a similar one on paper. Ask your scientist to choose two animals from one group then label the two circles in Venn diagram by writing one of the animal’s names in each circle. Looking at the two animals, have your scientist list shared characteristics in the shared portion of the circles and list any unique characteristics in the appropriate circle’s unshared space.



3-Minute Movement Mayhem

Have your scientist write different ways that animals move on individual slips of paper and place the slips into a container. For younger scientists, have them tell you different ways animals move for you to write on the slips of paper for them. Examples of movements might include walk, crawl, jump, hop, swim, fly, waddle, gallop, trot, slither, wiggle, climb, and others.

Without looking, have your scientist choose a slip of paper from the container and read the movement listed. Tell your scientist to write or say as many animals that move in that way as s/he can before the time expires. Start a 3-minute timer. If you have a younger scientist, ask him or her to try to come up with 3-5 animals that move in the way listed. You may wish to give them as much time as they need, rather than using a timer.

Once the time is up, have your scientist read the list out loud. Reset the timer and draw another movement to make a new list. After your scientist has three or four lists, have them compare the animals on the list and note observations or conclusions he or she can make from their lists. Are there some animals on multiple lists? Do all animals on the list accomplish the movement in the same way? For example, both an ostrich and a cheetah run (similarity), but a cheetah has four legs and an ostrich only has two (difference). Fish, turtles, whales, and snakes all swim (similarity); however, fish and whales use fins, turtles use legs or flippers, and snakes use muscles in their body (differences).

For more experienced scientists, make the activity a little more challenging by giving them a specific number of animals to list and shortening the amount of time in which to make the list. For example: list ten animals that walk in two minutes.

If you have more than one experienced scientist, have them play the game together. After each round, they can compare their lists and mark off any animal listed on more than one scientist's list. The scientists can score the game by getting 1 point for each animal that is left on his or her list after they have compared animals. Play several rounds to see who can earn the most points or decide before beginning the game a number of points that will determine the end of the game—first scientist to ten points wins!



I Like to Move It...

Set up a path or trail around the room, house, or yard. Place at least 6 pictures or stuffed animals from "Safari Sort" along the way. As your scientist follows the path and comes to an animal, he or she should decide how that animal moves. Then, your scientist should imitate that movement until s/he comes to the next animal on the path.

At the next animal, your scientist should change movements to match the new animal. Continue in this fashion until your scientist reaches the end of the trail. Encourage your scientist to talk about the different movements s/he tried. Which were the most challenging? Which were his or her favorites?

Safari Sort Cards





Safari Sort Venn Diagram

