

Diversity in Ecosystems: Day 4

This week, Weekday Wonders will help young scientists explore the variety of living things in our world. To do this, they will consider where animals live in different habitats, including oceans, rivers, streams, and forests. Young scientists will also have a chance to observe what lives in their own backyards and to learn the difference between a habitat and an ecosystem.

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 Where do animals live in your backyard?

Daily Nature Journal

Have your young scientists complete their daily nature journal using the <u>Guide to Nature</u> <u>Journaling</u>. Observation is an important part of learning about nature. Ask your young scientists to observe their surroundings closely to find new objects that engage their senses.

Observing Your Backyard

Have your scientists pick a view from the house or yard and encourage them to draw what they see. Older scientists can also make a list of the plants and animals they observe. Ask them to think about ways they could help make their backyard a healthy habitat for their animal neighbors and to write down their ideas in their journal.

Helpful and optional tools for your young scientists are the iNaturalist or Seek (designed for kids) apps on a mobile phone. Both apps identify plants and animals and allow your scientist to take photos of what they observe.



Making a Birdfeeder

Gather a few household materials that your young scientists will need for this activity that will let them create a simple birdfeeder.

- Empty toilet paper or paper towel roll
- Small twig/branch, or pine cone
- Peanut butter, sunflower butter, or honey
- Any of the following: bird seed, grapes, apple, peanuts, sunflower seeds, carrot, celery, cucumber
- Knife or spoon
- Plate, baking sheet, or paper plate
- String, twine, or yarn (optional)

To begin crafting the birdfeeder, help your young scientist prepare the snacks that they will share with wildlife by cutting up the fruits, vegetables, or larger nuts into small pieces. Ask your young scientist to consider why the pieces should be cut small and which different animals in their backyard would like which snack. For example, birds will be drawn to the bird seed, while a squirrel may find the fruits and small nuts to be a tasty snack!

Once the different foods are in small pieces, put all of them onto a plate or baking sheet. Have your young scientist spread them out evenly on the surface. Remind them that the closer all the pieces are to each other, the more snacks that will be on their feeder! If you have string or twine available to hang the feeder, now would be the best time to help your scientist attach it onto the tube, twig, or pinecone. Show your scientist how to knot the string at both ends, rather than looped through the feeder, to ensure that birds cannot become entangled in it while they are trying to get a snack.

Once the feeder (with or without string) and the snacks are prepared, have your young scientist spread the peanut butter, sunflower butter, or honey onto the tube, twig, or pinecone using either a utensil or their hands. After the feeder is thoroughly coated and sticky, have your young scientist roll their feeder across the food pieces that are spread on the baking sheet or plate. Encourage them to place the snacks on as much of the sticky surface as they can!

Encourage your scientist to choose a place to hang the feeder that will be easily observed from the inside of their home. Ask them why it might be better to observe the birds on the feeder from inside rather than going outside to watch, and remind them that birds might fly away if people are too close to them. The next step is have your scientist observe the birds that come to visit. If they would like to identify their friendly visitors, they can visit https://www.audubon.org/birding/identifying-birds for help. Make sure to remind your scientist to write down or draw the birds they observe in their Nature Journal!

Nature Observation

In the last activity, your young scientists created a bird feeder to draw wildlife into their backyards, so they could observe the different birds. In this Nature Journal exercise, your scientist will be observing all of nature, not just birds or wildlife! To help your scientist engage in this activity, he or she will make a representation of binoculars.

The materials they should gather are below.

- 2 toilet paper rolls or 1 paper towel roll cut in half
- Glue, tape, or stapler
- Scissors
- String or ribbon
- Construction paper or white paper to draw on and decorate
- Other decorating supplies (optional)

Once your scientist has gathered all their materials, have them glue the two toilet paper rolls together, so they can hold them up and see through them. While the glue is drying, encourage your scientist to decorate the paper that will cover their binoculars. Once the binoculars are dry, have your scientist wrap their binoculars in the paper they decorated and attach the paper with glue or tape. Once the paper is on, help your scientist cut off the excess paper from around the binoculars. Finally, help your scientist cut one hole on each side to attach the string or ribbon, so they can wear their binoculars around their neck.

Now that your young scientist is better equipped to observe the world around them, have them to explore their backyard or even just look out their window using their binoculars. Encourage your scientist to document all their findings in their nature journal, no matter how small. They may observe the birds around the feeder they made, the insects buzzing around their window, or even the small plants in the cracks of the sidewalk. Your young scientist can draw pictures of their findings, makes lists, or both!

Nature Scavenger Hunt

Your young scientist has had lots of practice with observing nature so far. To put their skills to the test, challenge them to a Nature Scavenger Hunt! Share the following list with your scientist and ask him or her to explore and gather the objects below.

Something smooth
Something fuzzy
3 kinds of leaves
Something colorful
A flat rock
A piece of trash
A stick
Something pointy
A weed
Something you think is a treasure

After your scientist collects as many items off the list as they can, give them a piece of cardboard with a line down the middle. Have him or her use their items to create a piece of art on one side of the cardboard. On the other half, have them sketch and label each item they found.