

WEEKDAY WONDERS



Content developed by the
Tennessee Aquarium
Education Department



TENNESSEE
AQUARIUM



Biodiversity and Me: Day 4

This week, Weekday Wonders will help young scientists explore and appreciate the variety of living things in our world. To do this, they will discover and think about the relationship of humans to wild animals. They will delve into what resources we share, how we depend upon each other and how humans can protect biodiversity at home and away.

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 do humans take care of animals at the Tennessee Aquarium?



Daily Nature Journal

Ask your young scientists to spend some time outside completing their daily nature journal. Use the [Guide to Nature Journaling](#) to support your scientist in this activity each day.



Enriching Lives

One of the best ways that the Tennessee Aquarium provides extraordinary care to animals is through enrichment. Although we have many other ways that we care for our animals, from providing safe environments to food to veterinary care, enrichment is one of the most fun and unique, so we are focusing on that aspect for today's Weekday Wonders.

Share the following information with your young scientist.

In the wild, animals' lives are very unpredictable. They must search for food, work to avoid predators, and stay alert to changes in their environments. When animals are cared for by humans, their food is provided, they do not live with predators, and there are not generally threatening changes in the environment. Humans caring for animals can help keep their minds and senses active by providing enrichment activities.

Tell your young scientist that s/he is going to have a chance to make enrichment for animals that live around you, whether it is a pet or an animal neighbor outside. Making enrichment for these animals can be a lot of fun to make and to observe once the animal finds it.

Have your young scientist decide which animal s/he would like to focus on for this activity. Then share a list of types of enrichment with your scientist and ask him or her to think about which kind(s) might be best for the animal.

Some examples of enrichment include:

- Creating artificial plants to explore and relax near
- Freezing food or toys in ice
- Making artificial “prey” that the animal can chase or hunt
- Applying different scents to an area or toy
- Showing the animal new objects, such as bubbles
- Making puzzle feeders that challenge and slow down animals’ meals

Tell your young scientist that at the Tennessee Aquarium, all enrichment items must be approved to make sure they are not dangerous for the animal. Some potential supplies your scientist might use are

- Cardboard
- Newspaper
- Toilet paper tubes
- Paper towel tubes
- Cereal boxes
- Natural twine
- Flour paste, see recipe here <https://newzoo.org/wp-content/uploads/2013/12/PaperMache.pdf>
- Paper, including tissue paper
- Twigs/sticks (be careful using with pets)
- Rocks, make sure they are not small enough for the animal to accidentally ingest
- Non-toxic Tempera Paint, important to use this kind as other types can be toxic if ingested by the animal
- Peanut butter, sunflower butter, honey, grapes, apples, seeds, pet food or treats that your pet has had before.

If your young scientist plans to create enrichment for wildlife, natural items that can often be found outside can make great enrichment opportunities. Whether it is creating a bird feeding station with

peanut butter, honey, bird seed, apples, and grapes or adding new structures made of natural materials outside.

Enrichment for pets can be new toys, treats that are safe for them, new smells, safe outings outside (depending on the pet). Your scientist can make a snuffle mat by cutting a shape out of paper or cardboard and attaching small squares of tissue paper so that the edges stick up. Then you can hide treats in the mat.

Once your young scientist has created one or more enrichment items, offer it to the animals. To extend this activity, you can have your scientist do an investigation, recording observations and collecting data about how long the animal seems interested in the enrichment, which item(s) the animal seems to prefer, and any ways they might improve the enrichment.



Penguin Painting

Share the following video with your young scientist: [Penguins Make Animal Art at the St. Louis Zoo](#). The Penguins at the Tennessee Aquarium also make art! Many animals at zoos and aquariums enjoy doing artwork as part of enrichment as well, including hippos, turtles, insects, elephants, and others.

Have your young scientist make his or her own artwork outside using water and a sidewalk or driveway. Provide a bucket or other container with water in it, preferably big enough for your scientist to put his or her feet in it. You may also wish to have your scientist wear clothes that can get wet.

Offer some or all of the following prompts to help your scientist get creative.

- Challenge him or her to see what kinds of shapes can be made with hands or bare feet dipped in water.
- See if he or she can figure out ways to make shapes using different tools, such as sticks, leaves, grass, or other materials dipped in water.
- Have your scientist see how his or her tracks are different when walking, running, skipping, or dancing with wet feet.
- If you have an extra sponge, see if your scientist can use the sponge and water to make a landscape “painting.”
- Have your scientist cup water in his or her hands and drop it from standing height to see the patterns the water makes.

The joy of painting with water is that it dries quickly and your scientist can have a fresh “canvas” every few minutes. Encourage him or her to try many different ways to make prints, patterns, abstract shapes, and other types of art.



Nature Journal

Discuss the following information with your young scientist. Animals that are in human care at zoos and aquariums live a life of luxury. They have an ideal environment, plenty of food, and no predators that they need to hide from. But, training and enrichment can help to keep them engaged and active.

Have your young scientist choose a favorite animal from a zoo or aquarium. Have him or her draw a scene to show how s/he would care for that animal, including types of food, enrichment, and training. Older scientists can also write a story to go with the picture to share his or her vision of a day as an animal specialist.