

Living Things and the Environment: Day 4

This week, Weekday Wonders will help young scientists explore ecosystems and the world around them. They will start by learning about living and nonliving things, then find out more about the needs of plants and animals. Toward the end of the week, young scientists will discover how plants and animals rely on each other and determine how the parts of an ecosystem share resources.

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 How do living things rely on each other to live?



Daily Nature Journal

Have your young scientist go outside and complete a daily nature journal entry. Tell them to record at least three things they hear and three things they see. The <u>Guide to Nature</u> <u>Journaling</u> offers other ideas on how to nature journal.



A Special Relationship

A popular children's movie features a clownfish as one of the main characters. In the movie, the clownfish lives in an anemone. Clownfish and anemones have a special relationship in

nature, too. Print the cards found on page 3 or write the items on small pieces of paper. Choose an object in the yard or house that will serve as the anemone and place the cards face down at different distances around it.

Ask your young scientist to remind you of what living things need. Help them remember that all living things need food, water, and air. This includes both clownfish and anemones.

Tell your young scientist that he or she will play a game to show how anemones and clownfish live together. Let your young scientist know which object is their home anemone. Then have them leave the anemone and go pick up a card. If it is food or another clownfish, they can continue gathering cards. If it is

a big fish or eel, they must take the card and run back to the anemone for protection as fast as they can. Once they arrive at the anemone, they must place the card beside the anemone and then do a dance to represent luring smaller fish to the anemone for dinner. The dance also represents the clownfish swimming around swishing its tail to circulate water through the anemone and to keep the water from getting stagnant.



Make an Anemone

Take an empty toilet paper tube and cut it in half so that it is about 3 inches tall. Give your young scientist strips of paper, plastic grocery bags, or tissue paper. Older scientists can cut their own strips. Have your scientist glue the strips onto the toilet paper tube to make an anemone. Tell them to think about what features would help an anemone protect a clownfish.



A clownfish in an anemone.

Once your young scientist has made an anemone, have them color a picture of a clownfish. Allow them to cut it out and see if they can hide it in the anemone. If they feel as though the anemone is not offering enough protection for the clownfish, they can add to their anemone.



Superhero Slime

Anemones sting animals that come near them. How, then, do they protect clownfish without stinging them? It turns out that clownfish are coated in a protective mucus or "slime" that protects them. Ask your young scientist to explore how slime can affect what they do.

Start with two to four tablespoons of cornstarch in a medium-sized bowl. Ask your scientist to slowly add water and mix the slime with his or her hands. Continue adding water and mixing until the mixture has the feel of slime.

Ask your young scientist to cover one hand in slime and leave the other clean. Then have them investigate how things feel with and without the slime covering. They might touch ice, touch a warm cup, and dip fingers into cool water. Make sure they try each item with the uncovered hand and the hand with slime. Talk about how having a thin layer of slime changes the way things feel. Then have them infer how a shock from an anemone might be different to a clownfish covered in mucus compared to a different ocean animal that is not protected in this way.



Nature Journal

Remind your young scientist that clownfish and anemones rely on each other to live. The clownfish gets protection from the anemone. The anemone can get food that follows the clownfish as well as a way to have water circulated through it.

Have your young scientist go outside and look for evidence of other living things that rely on each other to live. For example, they might see a bee pollinating a flower, a bird making a nest in a tree, or a squirrel eating a nut. Let your scientist write or draw about the findings in his or her nature journal.

"A Special Relationship" cards



Divers are big and scary to me. Swim home!

These look like friendly fish. Keep swimming!