

Mushrooms are great for soil health!

Read about Mushrooms

Some mushrooms are edible while others are poisonous. It's good to know your mushrooms. Check out a mushroom ID book from your local library. Inform children to NEVER eat a wild mushroom.



The mushrooms in the grow box are safe to eat - they are called Oyster Mushrooms. Watch them grow. Investigate. Offer a taste test. Experiment.

Mushrooms help break down organic matter into nutrients that plants can use, hook up with plant roots to help them access water, and improve soil structure. They even help plants communicate with each other! In short, a healthy fungi population is essential for healthy soil. <https://kidsgardening.org/resources/digging-deeper-soil-fungi/>

Little Inspector

Start the lesson with an inspection activity. Have magnifying glasses out to inspect the growing mushrooms in the box. Talk to the kids about living and nonliving. Discuss how mushrooms are a part of the living things in our world, but the rocks we see are non-living.



While on a nature walk, help the children notice the birds up in the trees and plants next to some rocks by the sidewalk they are walking on. Notice some bugs or other critters. Are the plants, trees and birds living? Are the rocks living? What about the sidewalk? The bugs? Why or why not?

Ask your student the following questions. Does it...

- grow, get bigger, or develop?
- eat and drink water?
- breathe air?
- have babies, eggs, or seeds?
- move or respond to touch or the environment?

If something has all of these characteristics, then it is living.

For example, a tree: grows, it needs water and gets food from the sun, it breathes air, it makes seeds so that baby trees can grow, it responds to the environment; it grows towards the sun.

You can also give the example of us, people, as living things. We grow, drink water, eat food, breathe air, have babies and we move and respond to our environment. I find that when we come back to talking about ourselves, the conversation about living and nonliving makes more sense to young children.

Here's some more information on living and non-living lessons:

<https://youtu.be/X9qGI4Ju8ak>

Non-Living, ?, Living Sorting Activity

From the Little Inspector activity, children bring in living and nonliving objects collected from outside. For the living and nonliving activity, you will need:

- labels that say living, non-living, and “?”
- 1 object collected from nature to represent each label (optional)
- small bowl or basket for the objects
- objects found around the classroom that could be living or non-living or “?”

After you sorted all the living and non-living objects, you can talk about how all of living objects are similar: What do they have in common? Do they grow, breath, eat/drink, have babies, move?

Mushroom Print

One of the most common purposes of mushroom spore prints is to help identify a mushroom. A single mushroom spore can be seen only with a microscope. But you can see a mushroom's many spores by making a spore print. Just get a white piece of paper, a fresh mushroom with gills, and a glass. Remove the stem from the mushroom and place the gill side on the paper. Add a drop of water to the mushroom cap and then cover it with a glass. Wait overnight. Carefully lift the mushroom off the paper. What do you see?



What do you do with the mushroom grow box afterwards?

Empty the contents from the mushroom bag out into your garden beds or in your compost area. You might have more mushroom surprises! Remind the children never to eat wild mushrooms, and that mushrooms are very good for the soil, so we don't want to pick them up or squash them - we want to protect them and leave them be. The cardboard is 100% recyclable.

Soil Fungi: A World of Wonder Beneath Our Feet

KidsGardening.org - There's a wild and wonderful world that remains hidden for most of us — at least most of the time. It's an amazing ecosystem filled with fascinating creatures interacting with one another to create an intricate, dynamic web of life. And it's right under our feet: the soil ecosystem! Many organisms make up this ecosystem, and some of the most important ones are the fungi. Healthy soil is alive and teeming with an array of fungus species, each playing a vital role in its environment.

What are Fungi? Say the word "fungus" and what comes to mind? For some gardeners, the word may have a negative connotation, conjuring up images of various diseases, such as the blights that infect tomato plants. Fungi species that cause diseases are called pathogenic fungi, or simply pathogens. Although most garden ecosystems contain some disease-causing fungi, by far there are more beneficial fungi than pathogenic ones.

Healthy soils are alive with an especially diverse array of fungal species, and many are essential to the health of the plants growing in that soil. In fact, a soil devoid of fungi is a dead soil, and is unlikely to support thriving plants. Some soil fungi are single-celled and visible only through a microscope. Others form large, underground networks of filaments that can cover an area the size of a football field or larger. Most of us are familiar with the above-ground parts of some soil fungi: the mushroom. Mushrooms are the reproductive structures, or fruiting bodies of some types of fungi. They pop up (sometimes overnight) when conditions are right. Mushrooms are akin to icebergs — what you see is a small piece of something much larger. The rest of the mushroom's "body" lives underground within the soil as thin strands called hyphae (HI-fee). Collectively, the hyphae form an extensive network called the mycelium (my-SEE-lee-um). In many cases the hyphae are too small to be seen with the naked eye; however, you may be able to see the delicate white strands coursing through compost, decomposing organic matter, or soil.



What kind of room has no windows or doors?

A mushroom!

Why does the mushroom always get invited to birthday parties?

Because he's a Fungi