

Fungi prints

Activity

The Science

Fungi begin their life cycle as spores which are released into the environment (much like the seeds of plants). From these spores, thin strands grow which are called hypha. Over time, more and more hyphae grow and form a large underground network called a mycelium. The fungus also produces mushrooms which contain the spores in their cap. The mushroom cap releases the spores, starting the life cycle again. As spores are very small, you usually cannot see them with your eyes. In this activity, we will be able to make the fungal spores visible by making a spore print!

Safety Instructions

Make sure you wash your hands after handling the mushroom and touching the spore print.

Time

2 hours (+2 days waiting time)

Materials

- A very large mushroom (e.g., portobello mushroom)
- A sheet of paper
- A glass or bowl
- A knife (optional)
- Hairspray (optional)

Instructions

1. Carefully pull the stalk of the mushroom off the cap. Alternatively, you can use a knife to cut off the stalk.
2. Leave the mushroom cap to dry for a couple of hours on a radiator or a windowsill.
3. Put the mushroom cap onto the sheet of paper, gill side down.
4. Place the glass/bowl upside down over the mushroom cap.
5. Leave the mushroom cap under the glass/bowl for at least 2 days.
6. After 2 days, remove the glass/bowl.
7. Carefully lift the mushroom cap off the paper – you should be able to see a spore print!

Tips and Extras

- If you would like to keep your spore print, you can set it by spraying hairspray over it and allowing it to dry.
- Spore prints are used to help identify different types of mushrooms; you can try repeating this experiment using the different types mushrooms you can buy at the shop.

- You could even try making spore prints from mushrooms you find in your garden or local park – be extremely careful when handling mushrooms growing in the wild and make sure you research how to do this safely!

Things to think about

- Spores are just one part of the fungus – can you draw and label the whole fungus? (mushroom cap, mushroom stem, spores, mycelium)
- Yeasts are also a type of fungi – can you think of different things that we eat or drink that contain yeast?
- Fungi are very important – can you think of what stuff (other than food) that we get from fungi or things that fungi can do that benefit humans?
- Fungi can grow in lots of different places – can you think of the different places where you have seen a fungus growing before?