

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Goal 12: Responsible Consumption and Production

Ensure sustainable consumption and production patterns.

Responsible production and consumption is about making and using things in a clever way that reduces waste and produces items that will have multiple uses, a long-life, or can be recycled easily.

Companies, businesses, manufacturers and producers around the world are changing and choosing more responsible and sustainable ways of making the items we need for daily living. People are making choices to reduce, reuse, recycle, repair and re-purpose things that they buy and own.

We are now going to learn about one of nature's recyclers – the mushroom.

The important job of mushrooms in recycling

Mushrooms are part of the fungi family. One of the most important jobs of fungi in nature is turning decaying material into nutrients for other plants and animals to use. They can break down organic materials such as dead trees, roots, leaves and other plant parts.

There are many different types of mushrooms. They come in many different colours ranging from white to purple, red, yellow, orange, and tan. They come in many different shapes including bells, spheres, cones, cylinders, trumpets, and funnels. Did you know that there are almost 1,200 different types of mushroom growing in Ireland.

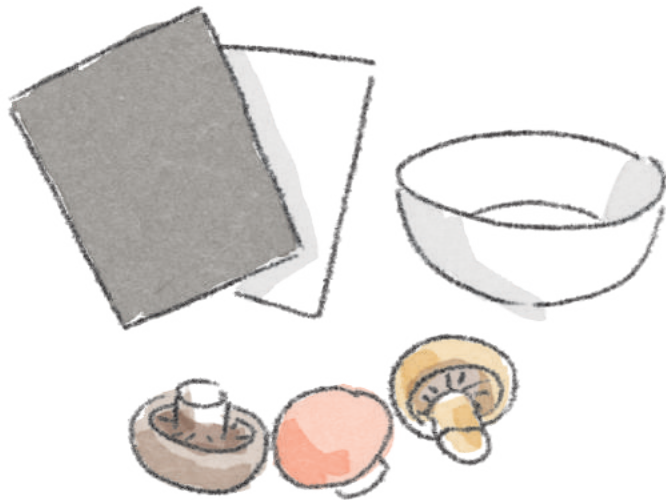
Mushrooms grow in damp, dark conditions where there is a large amount of decaying matter. The next time you are walking in a woodland or forest take a look around to see if there are mushrooms growing.

1. Fungi are plant-like organisms that do not contain chlorophyll. They produce spores and feed on organic matter.

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Experiment - Make Mushroom Prints

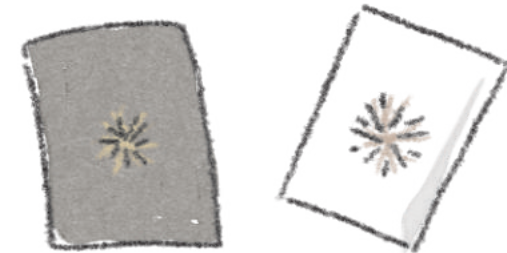


What you need:

- A variety of different mushrooms
- Black paper
- White paper
- A bowl

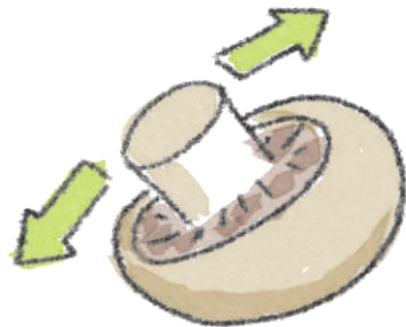


4. Leave the mushroom cap covered for several hours or overnight.

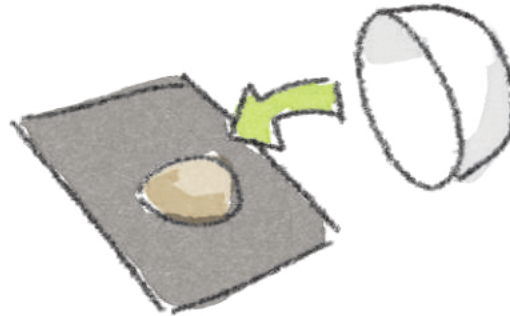


5. Remove the bowl and explore the different prints of different mushrooms.

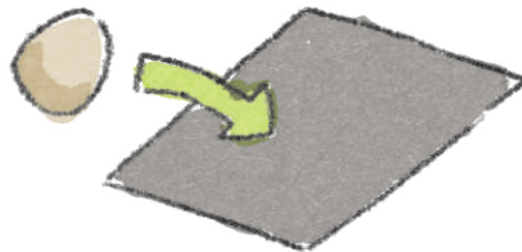
Are there any interesting patterns?



1. Remove the stem from the mushroom but be careful not to damage the cap.



3. Cover the mushroom cap with the bowl.



2. Place the mushroom cap (gill-side down) on a piece of paper.

What are your thoughts?

Have you learned something new about recycling in nature?

What would you do to ensure we have responsible consumption and recycling?

What Do We Learn From This Experiment?

Responsible Consumption & Production

SDG 12 - Responsible Consumption and Production

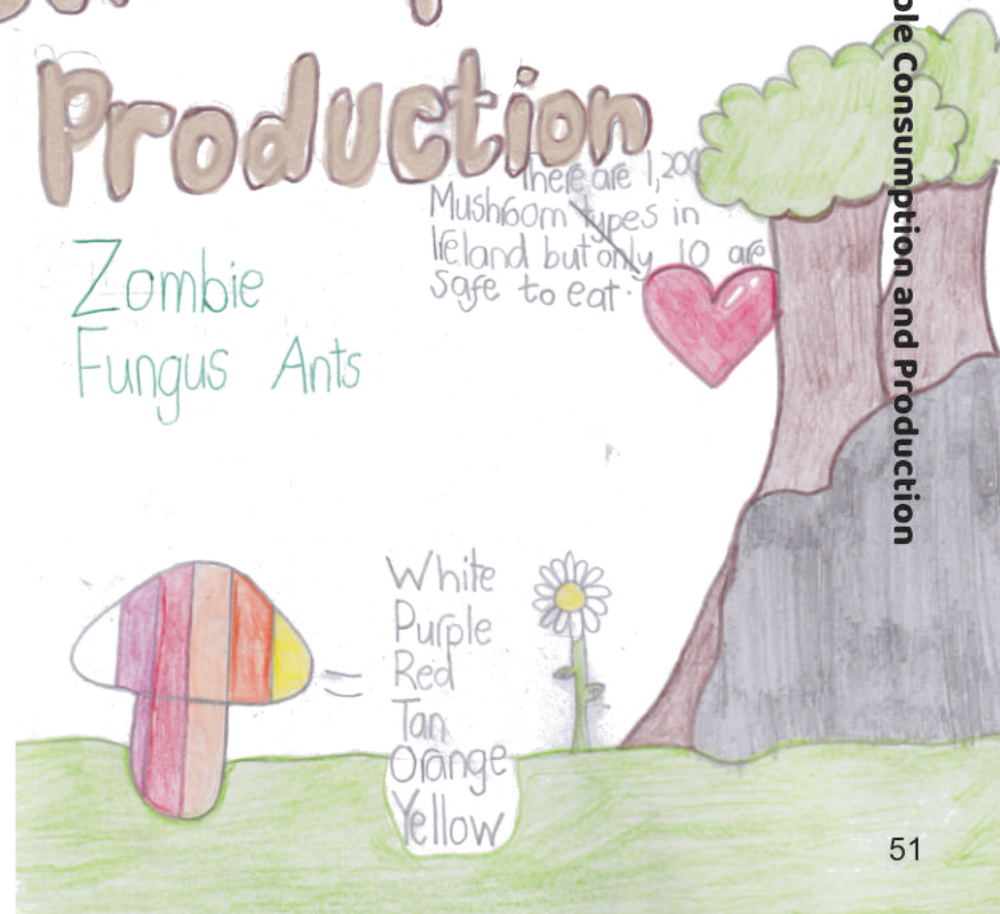
Making Mushroom Prints

Mushroom prints are formed by spores that are present in the gills of the mushroom. Mushroom prints have been used to identify different types of mushrooms as the colour and the pattern of the mushroom print is unique to each type of mushroom.

Did you see differences in the colours and patterns of your mushroom prints?

In nature the spores shed from the mushroom and grow to form new mushrooms. This is similar to the way that plants shed seeds for new plants to grow. Spores are very small cells and are easily carried in the wind. They can travel very large distances, up to thousands of kilometres, once they are airborne.

Did you know that one of the largest living organisms on the planet is a mushroom? The fungus *Armillaria solidipes* grows in the Malheur National Forest in America. It is so large that it covers 10 square kilometres!



What Can We Do?



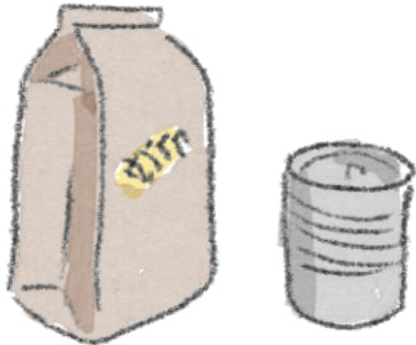
Encourage family to buy products that have minimal packaging.

SDG 12 is all about ensuring sustainable consumption and production patterns.

It can be hard to know the things we can do in our lives to make a difference, but by following some of the tips on this page we can start making the world better for everyone. You may not think that little changes will make a difference, but everyone making little changes adds up to big change.



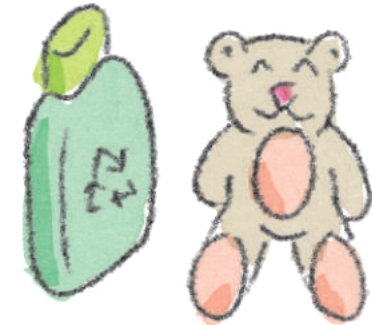
Buy products that are committed to the fair trade principles.



Encourage family to buy products that have a long lifespan.



Learn about and practice the 5 Rs at home and at school – Refuse, Reduce, Reuse, Repurpose and Recycle.



Buy items and toys made from recycled materials.