



Activity sheet: Fungi Foray

Fantastic Fungi Facts

- The world's largest and oldest fungus is the Honey Fungus. It is 1500 years old and 10,000kg in weight. Its hyphae occupy 15 hectares of land.
- There are around 1.5 million fungi in the world and only 5% are known to science.
- The stinkhorn fungus can reach a length of 20cm in only 2 to 3 hours, due to the cells sucking up water.
- Just 0.5g of a Death Cap fungus can kill 100,000 mice.
- Fungi are neither plants nor animals and have their own kingdom.
- Fungi build their cell walls out of chitin, just like insects.
- Fungi feed by absorbing nutrients from the organic material in which they live, they don't have chlorophyll and so can not photosynthesize like plants.
- Fungi have no stomachs, so they must digest their food before it passes through the cell walls into the hyphae.
- Hyphae secrete acids and enzymes that break the surrounding organic material down into simple molecules they can be easily absorbed.
- Some Fungi are decomposers living on dead organic material like leaves, they are recyclers.
- Some fungi cause diseases by using living organisms for food. These fungi infect plants, animals and even other fungi, they are parasites.
- The mycorrhizal fungi live as partners with plants. They provide mineral nutrients to the plant in exchange for carbohydrates or other chemicals fungi cannot manufacture. They are exchangers.
- Athlete's foot and ringworm are two fungal diseases that can affect humans.



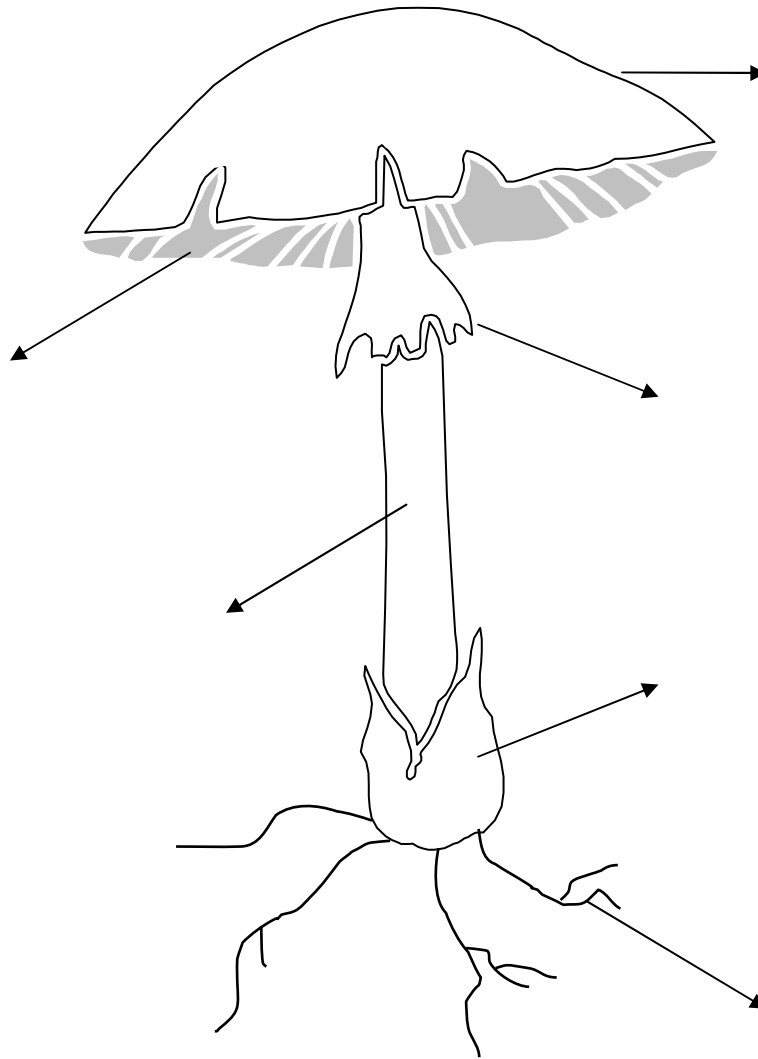
NATIONAL PARKS

Britain's breathing spaces

Parts of a Mushroom

Give each part of the mushroom the correct name:

Stem or Stipe / Mycelium / Gills / Cap or Fruit Body / Volva / Ring



Fungi Glossary

Ascomycete - A fungus that reproduces by making spores inside a sac-like structure called an **ascus**

Basidiomycete - A fungus that reproducez by producing spores on the outside of a clubshaped cell called a basidium

Fruit Body – the part of the fungus where the spors are produced

Gills – Plate – like structures on the under-surface of the cap of some mushrooms

Hypha (pl. hyphae) – Individual thread-like filament that forms the mycelium and fruit body

Lichen – A complex plant made up of an alga and a fungus growing in symbiotic association

Mushroom – a descriptive term for a fungus with a cap and stem. The word **toadstool** can be used synonymously and neither should be taken to imply anything about the edibility of the fungus

Mycelium – A mass of hyphae (usually underground) that makes up the body of the fungus

Mycorrhizal – Forming a symbiotic relationship with plant roots. The fungus obtains sugars from the pant, whilst the plant gains increased supplies of nutrients caotured from the soil by the fungus

Parasite – an organism living in or on another living organism(host) from which it extracts nutrients

Partial Veil - Protective layer covering young gills in some mushrooms and eventually forming the ring

Ring – membrane attached to stem, derived from partial veil

Saprotroph – An organism that obtains its nutrients from dead and decayng plant or animla matter

Spore – The reproductive structure of a fungus. It differs from a plant seed in that it does not have its own food reserves.

Stipe – the stem or stalk of a mushroom

Substrate – The surface on which a fungus lives and feeds

Universal veil – A protective membrane enclosing the developing fruit body in some fungi

Volva – A cup like bag derived from the remains of the universal veil that encloses the base of the stem in some mushroom.

The Fungi Quiz

True or False?

1. Fungi are plants
2. The spores from a puffball can make you blind
3. Santa Claus has his red coat from a fungus
4. Some fungi glow in the dark

Choose the correct answers:

1. Mycorrhizal fungi

- A Kill trees
- B Break down dead wood
- C Help trees grow
- D Cause disease in sheep

2. In Italy truffles are collected from underground using

- A Pigs
- B Birds
- C Dogs
- D Foxes

3. The strands that make up a fungus are called

- A Strings
- B Hyphae
- C Fronds
- D Feathers

4. A person who studies fungi is called a

- A Taxonomist
- B Fungologist
- C Taxidermist
- D Mycologist

5. What is a Lichen?

- A Fungus
- B Alga
- C Plant made of Fungus and Alga
- D Moss

6. Are all Toadstools edible?

- Yes
- No

7. Where can I find Fungi?

- A Only in woodlands
- B In the countryside
- C Everywhere
- D On the ground

8. How many spores can one Fungus produce?

- A 10000
- B 100000
- C 1000000
- D 10000000

9. How many Fungi (with fruiting bodies) are there approx. in the UK?

- A 2100
- B 1400
- C 4800
- D 3500

Fungi Recording Sheet

Location Tree / ground / fallen tree or other?	Single / Cluster / Ring	Colour and Smell	Size	Type	Common name (if known)	Latin Name (if known)

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