



## 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.



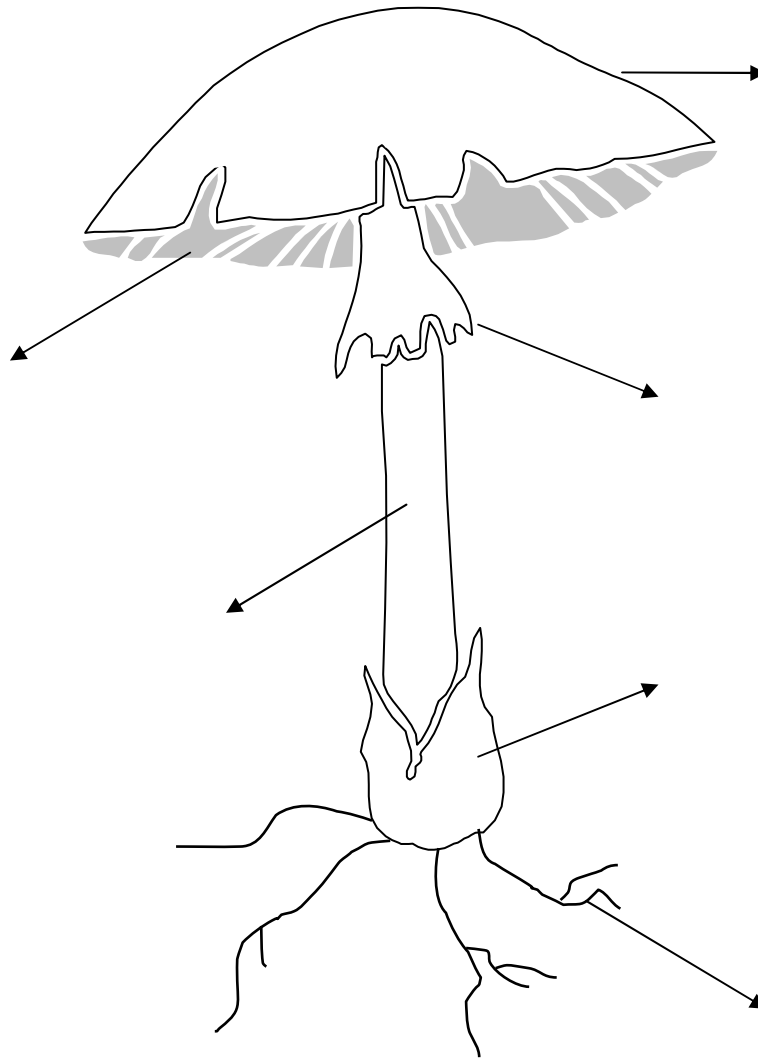
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## Parts of a Mushroom

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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