## Mushroom Prints and the Life Cycle of a Mushroom

Essential Question: How do mushrooms (fungi) reproduce?

### Some Fungi Facts

Mushrooms and molds are both fungi

• Mushrooms reproduce asexually, needing spores from only one parent to reproduce

Mushrooms grow from fungi that live mostly underground.

• A fungus does not have chlorophyll, as plants do. Fungi are not plants.

• Types of fungi are mushrooms, molds, rusts, mildews, and yeasts.

Mushrooms are saprophytes (they get energy from dead and decomposing stuff)

- Fungi are neither plants nor animals, but instead are members of their own Kingdom of living things. They are all heterotrophs (they get energy from other organisms).
- Many fungi live in symbiotic mutualism with other organisms, such as algae (lichens)
  and plant roots (mycorrhizae). This means they help the organism they live with, unlike
  parasites which harm the organism it lives with.

Instead of seeds, mushrooms have spores that drop to the ground from their gills.

 When the spores land on the ground they sprout mycelia the same way a plant seed sprouts roots.

#### **Materials**

Each group will need: 1 fresh mushroom, either store bought or picked; 1 glass, cup or bowl large enough to fit over the mushroom; scratch paper

#### Procedure

- 1. DAY 1 First, draw a picture showing the parts of a mushroom: stem, cap, and gills
- 2. Next, obtain a mushroom, a piece of white paper, and a cup. Put your names on the paper.
- 3. Break off the mushroom stem so that the cap can be laid down fairly flat.
- 4. Lay the mushroom gill-side-down on the piece of paper.
- 5. Carefully cover the mushroom cap with the open end of the glass or bowl.
- 6. Let the mushroom sit overnight or over a weekend.

DAY 2 (after 1-3 days)

- 7. GENTLY lift the glass or bowl from the mushroom and VERY GENTLY lift the mushroom cap from the paper. What do you see?
- 8. Answer the questions on mushroom reproduction.

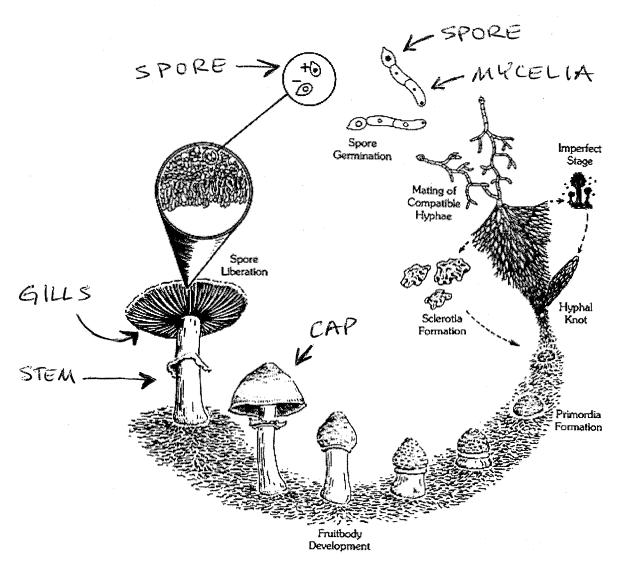
# Questions - Answer Qs 1-5 on Day 1. Do ANALYSIS questions on Day 2.

- 1. What do you think your mushroom cap print will show?
- 2. Draw a life cycle for a mushroom on the back of your answer sheet.
- 3. How do mushrooms reproduce?
- 4. What makes fungi different from plants? List 5 things.
- 5. Where would you expect to find fungi growing? Explain your answer.
- 6. ANALYSIS: Describe your mushroom cap print and explain why it looks that way.
- 7. ANALYSIS: Was your prediction in #1 correct? Why or why not?

Answer these



# LIFE CYCLE OF A MUSHROOM



Mushman Print J

The dark
ring is
made of
thousands
of spores.
They were
released by
the gills.
on the
mushroom

Cap.