

Answers to More Questions About Fungi, Grades 4–8

1. **What makes fungi different from other plants?** They reproduce from spores, unlike plants that reproduce from seeds, and unlike animals and birds that reproduce from eggs. Also, fungi do not produce their own food and have to obtain both food and water from other sources. The cell walls of fungi are made of chitin (also found in the exoskeleton of insects, crustaceans, and other arthropods) and sometimes contain cellulose.
2. **How long do they take to grow?** Anywhere from a few hours to several years. Most fleshy mushrooms take about a week to grow and decay.
3. **Do fungi grow everywhere in the world?** Yes, they do. They grow on all the continents, a few even in Antarctica.
4. **How many different kinds of mushrooms are there in the world?** How many have scientific names? It is estimated that there are about 1.5 million different species. About 80,000 have been identified and named by mycologists.
5. **How big can some mushrooms grow?** A large puffball can grow 3 feet across and weigh about 150 pounds. In Michigan, underground mycelium of honey mushrooms covered 37 acres.
6. **Can you eat the mushrooms that grow in your backyard or on your lawn?** NO! Never eat a wild mushroom, unless it is identified as safe to eat by a knowledgeable person. The mushrooms that your parents buy in the store and cook are safe to eat. Some of the most poisonous mushrooms can grow on your lawn or in the woods near your house, along with edible ones.
7. **How do mushrooms poison people and animals?** The cell walls of mushrooms are made mostly of chitin, and sometimes cellulose, very hard for people to digest, when eaten raw, or not cooked or chewed long enough, and can give you a stomachache. Some mushrooms have mild toxins that will make you and some animals sick for a few days. The most poisonous mushrooms, when eaten, contain poisons that attack your liver and other organs and can kill you. Toxic mushrooms can also poison dogs and cats. The spores of some fungi can travel through the air and get into your lungs or under your skin, causing infections. Touching a mushroom cannot poison you (although a few people have skin allergies to certain mushrooms), but wash your hands after touching any mushrooms or plants anyhow.
8. **Do they grow in groups? What are fairy rings?** Sometimes they grow singly and sometimes in groups. They can also grow from trees or logs in overlapping shelves. Fairy rings of mushrooms grow when a group of mushrooms uses up all the nutrients around them. Then the mycelium grows out in a circle, looking for more nutrients to feed the mushrooms.
9. **What makes an inky cap inky?** Inky cap mushrooms contain enzymes that break down the flesh of the caps and release the black spores in a liquid. You can dip a feather or wood tip in inky cap liquid and use it to write with.
10. **How do people grow the mushrooms sold in the supermarket?** The common button mushrooms sold in the supermarket are grown in sterilized manure. The mushroom spawn is placed in the growing medium and covered with soil. They need moisture, but can grow in the dark. They will emerge in a few days and will quickly grow to eating size. Shiitake and oyster mushrooms grow on logs. Holes are made in the logs, the mushroom spawn is placed in the logs, and the logs are watered until the mushrooms grow.
11. **What is the Poison Control Center?** There is a regional Poison Control Center in every part of the United States and Canada. Look up the phone number in your phone book and report if you suspect that someone has been poisoned by mushrooms.
12. **In what seasons of the year can you find mushrooms?** Every season of the year. Sometimes the same kind of mushroom can grow in different seasons in different parts of the country or the world or at different altitudes.
13. **What kinds of weather conditions are best for growing mushrooms?** Most mushrooms require warm weather with lots of moisture. But there are mushrooms that grow in desert areas, where it almost never rains. The mushroom season is very short in the Arctic and in Antarctica.
14. **What is mycology? A mycologist?** Mycology is the name for the scientific specialty for studying fungi. A person who studies fungi professionally is called a mycologist. (From Greek mykes = mushroom.)