



Activity 0.2

GRADES

3-6 with a K-2 adaptation

TYPE OF ACTIVITY

Observation puzzle

MATERIALS

- copies of page 14
- pencils
- pencil crayons, crayons or markers

VOCABULARY

algae

citric acid

Dutch elm disease

lichens

mycorrhizal relationship

spores

It's a Fungal Jungle!

OBJECTIVE

- To introduce fungi as an intricate part of the living ecosystem and have students begin to see fungi beyond mushrooms

BACKGROUND INFORMATION

Fungi are literally all around us. Everyday we see them, walk by them or on them, eat them, and even breathe them, whether we want to or not. Invited, these fungal friends may accompany us to a family picnic on the menu--sometimes visibly such as on a pizza or as a pâté but sometimes they are more subtle. Some more subtle fungal guises are as a leavening agent in breads; the ripening agent of Brie, Camembert, Roquefort and other blue cheeses; the fermenting agent in alcoholic beverages and soy sauce; and as the precursor to the popular flavouring agent and preservative **citric acid** (commonly found in soft drinks). Both chocolate and coffee involve yeast fermentations during processing. As well, many washing powders contain fungal enzymes.

Fungi may also be seen fruiting as mushrooms near trees with which they have a **mycorrhizal** relationship. They will certainly be busy decaying the dead leaves and grass on the ground. They may also be starting to mould some fruit in the picnic basket. **Spores** will be circulating in the air. Fungi will also likely be found pairing with **algae** as **lichens** on tree bark or rocks. As well, a fungus could be actively attacking an American elm tree as **Dutch elm disease**. This list is by no means complete but it does serve as an introduction to the fungus among us!

TEACHER INSTRUCTIONS

1. Begin by asking students if they have ever invited fungi with them on a picnic (you'll probably get some laughs). Explain that at any given time, there are thousands of fungi all around us.
2. Hand out copies of page 14 to each student and ask them to find as many examples of fungi as they can in the drawing of the picnic.
3. You may encourage them to compare with a neighbour before reviewing the picture as a class and talking about the less obvious fungi that were likely missed.
4. Time permitting, students could also colour their picnic pics.

K-2 ADAPTATION

When working with younger students, you may wish to copy the picture onto a transparency and use an overhead and work through the exercise as a class. You could also hand out individual copies for the students to colour and circle the fungi.

EXTENSION

1. Bring in a stack of supermarket flyers and have students “find the fungi” and cut out items that could contain fungi or fungal products.
2. Have students find the fungi around them in their immediate surroundings, wherever that may be.

IT'S A FUNGAL JUNGLE ANSWER KEY



1. lichens (symbiotic relationship fungi and algae)
2. Mushrooms on pizza
3. Dutch elm disease
4. Shaggy mane mushrooms
5. Yeast in bread
6. Citric acid flavouring in cola
7. Mould on apple
8. Ripening agent in cheese
9. Mycelium hidden underground

Other invisible possibilities:

- decay of old leaves and grass;
- mycorrhizas with tree or other plants
- spores floating in air
- clothing dyes
- athlete's foot



Directions ▶

Fungi are all around us! Find and circle as many different examples of fungi you can.

