**ACTIVITY: Grow your own fungi**

**Activity idea**

In this activity, students explore what conditions are best suited to the growth of fungus using different types of food.

By the end of this activity, students should be able to:

* set up an experiment to observe fungi growing under different conditions
* identify what conditions fungi prefer to grow in.

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Student handout: [Growing fungi](#handout)

**Introduction/background**

This activity enables students to observe how fungi grow in different conditions and identify what conditions fungi prefer to grow in.

**What you need**

For each group:

* 4 slices of bread
* 1 piece of fruit cut into quarters
* 4 tea bags
* 4 paper plates
* 3 small ziplock plastic bags
* Copy of the student handout: [Growing fungi](#handout)

**What to do**

1. Hand out copies of the student handout [Growing fungi](#handout) and have students work in small groups to set up and observe the experiment.
2. Discuss the results.

**Student handout: Growing fungi**

Working together, you will set up four different experiments to see what conditions fungi like to grow in.

**What to do**

1. Prepare the food and position the plates as follows:

Cool temperature:

* Put a slice of bread, a piece of fruit and a teabag on a paper plate.
* Place the plate in a fridge.

No oxygen:

* Seal a slice of bread in a plastic ziplock bag. Try to exclude as much air as possible before you seal the bag shut.
* Repeat with a piece of fruit and a tea bag in their own separate bags.
* Place the three bags on the plate.
* Put the plate in a position in the classroom where it won’t get disturbed.

Moisture:

* Place a slice of bread, a piece of fruit and a teabag in some boiled water.
* Take them out of the water and place them on a plate.
* Put the plate in a position in the classroom where it won’t get disturbed.

Control:

* Place a slice of bread, a piece of fruit and a teabag on a plate
* Put the plate in a position in the classroom where it won’t get disturbed.

1. Have a look at the plates every 2–3 days. If you have a digital camera, you could take photos every few days and put them together to form a time lapse sequence. (It is important to be able to line up the camera exactly the same each time, so brainstorm ways you could do this.)
2. Answer these questions:
   1. How soon did fungi start appearing?
   2. On what food did fungi appear first?
   3. What plate was first?
   4. What plate and/or food was the slowest to form fungi?
   5. How long before the fungi changed colour? Was it the same on all food?
   6. How many different appearing fungi did you get?
   7. Can you work out what conditions fungi prefer to grow in?