





## Steps to Success

Lockdown	
Date	
Subject/s	<u>Science</u>
Learning Objective 	To plan an experiment on microorganisms

		SA 	TA 
Success Criteria 	I know microorganisms can be helpful or harmful		
	I can explain the definition of virus, fungi and bacteria		
	I can plan an experiment that investigates the growing conditions of microorganisms		
Support	Independent	Adult Support (    )	Group Work
Taught by TS			
<b>Key vocabulary for the lesson:</b>			
Microorganisms    microscopic    bacteria    virus    fungi    mould			

Read and watch: <https://www.bbc.com/bitesize/articles/zsgtrwx>

Have a go at planning and writing your own experiment investigating microorganisms in bread! You could even have a go at home.

## What Makes Mould Grow?

Mould is the name for the types of fungi that grow on food.  
What do you think makes mould grow?

It is useful to know what makes mould grow so that we can stop it happening as fast, and keep our food fresher for longer.

You will work with a partner to investigate the conditions which cause mould to grow.

You will use 2 slices of bread and 2 clear plastic bags. You will place each slice of bread in a plastic bag, then change the conditions that each slice of bread is exposed to over a week.

For example, you may put one slice of bread in the light and one in the dark. Or one may go in the fridge and the other over a radiator. Or you may choose to dampen one slice of bread before putting it in the bag, while leaving the other dry.



Remember to include all of the sections below in your experiment. You can also use the template to help you. Remember to include lots of detail!

- Question. What are you investigating?
- Hypothesis.
  - Prediction and Explanation
- Variables.
  - Independent variable (what you are changing)
  - Dependent variable (what you are measuring)
  - Control variable (what you are keeping the same)
- Equipment
- Method and Labelled Diagrams
- Results
- How I know my test was fair.
- Were there any anomalies? Why do you think this was?
- Conclusion

### Template:

You are going to investigate the conditions that cause mould to grow on bread.

Independent variable (the condition you will change for your slices of bread):

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What is the question you will investigate?

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Dependent variable (the thing that will be affected by the independent variable – this is the thing you will observe or measure about the bread):

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Controlled variables (all the other things that you will keep the same for the bread slices and your investigation):

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What do you predict will happen? Which slice of bread will grow mould the fastest?

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Complete your results in the table below:

	Description of slice of bread (the conditions it will be under)	Observations of mould growing over time				
		Day 1	Day 2	Day 3	Day 4	Day 5
Slice 1						
Slice 2						