



Make your own microbes (10-15 mins)

**Curriculum Links (KS1 and KS2)**

**Science:** Working scientifically; Living things and their habitats

**English:** Reading and Comprehension

**PSHE:** Core Theme 1 - Health and Wellbeing

**Art and design:** Sculpture; recording observations

**Learning Objectives for KS2:**

**All students:**

- Will know that bacteria, viruses and fungi are three different types of microbe
- Will understand that microbes are found everywhere

**Some students:**

- Will know that microbes come in different shapes and sizes

**Risk Assessment:**

*In the event of an outbreak of infection you may need to modify this activity to ensure social distancing or other criteria according to your school's policy. Please email the e-Bug team at [e-Bug@phe.gov.uk](mailto:e-Bug@phe.gov.uk) if you wish to discuss ideas or modifications to this activity that are needed to follow guidelines in your setting.*

This activity features in the **KS1** and **KS2** school packs and **Beat the Bugs** community pack. It involves making different microbes out of play dough. Any type of medium can be used that is colourful and malleable enough to be moulded into different shapes and sizes to showcase the diversity of microbes. You can purchase ready-made products or make your own modelling clay using common kitchen ingredients. Click [here](#) for the instructions to make your own play dough.

In this activity, participants use images of different microbes, including bacteria, viruses and fungi to create a microbe using bits of coloured play dough. They can use these images as inspiration to make different shaped microbes, e.g. cocci-shaped bacteria, moulding the play dough to make their creation. Petri dishes or paper plates can be used to keep the play dough microbe in place. Coloured pens or felt-tips can be used to colour in the petri dish, to liken what would happen in a real lab!



### Before you begin you will need:

- Background and lesson plans from the “Microbe Mania” (KS1 lesson pack) or 1.1 “Microorganisms an Introduction to Microbes” (KS2 lesson pack)” or “Meet the Bugs” for community groups
- Images of microbes: participants can use these for inspiration and as examples of the different colours, shapes and sizes that microbes come in (you can use different photos downloaded from the e-Bug website or you can use student handout 1 from the KS2 pack)
- Copies of student worksheets for each participant
- Different coloured modelling clay/Play-Doh/Plasticine
- Petri dishes or cardboard paper plates (participants can use these as a place to hold their play dough microbe)
- Coloured pens / felt-tips

Click here to access the resources for this activity for [KS1](#), and [KS2](#) groups, and [Beat the Bugs for community groups](#) .

**Use the introduction in the lesson plan or community pack activity to discuss:**

- What is the name of the microbe?
- Is it a bacteria, virus, or fungi?
- Is it useful or harmful?
- How can this microbe spread?

**Use the following steps as a guide to implement this activity:**

- Remind the participants, with the visual aids and printed off photos of microbes, that there are three different types of microbes (viruses, fungi and bacteria) and how these are different.
- Encourage participants to take some play dough and to make a microbe in a Petri dish or on a paper plate (can be done individually or in groups).
- Explain they can make any microbe using the photos provided.
- Point out common forms of microbes that they might have heard of to get them started.
- Ask them which microbe they are making and tell them a bit about it e.g. is it a fungi, bacteria or virus and is it useful or harmful? (refer to the information sheets provided)
- When they have finished, write what they have made on the Petri dish or paper plate with permanent black marker for them to take home (tape around the edge of the Petri dish to secure the lid if necessary)

**Video (00:24): [Example of play dough microbes](#)**

Use the plenary or discussion section to check participants understanding of the activity. Then complete action plan (Beat the Bugs).