

Time	Audio	Visual
0:00-0:10	We are going to explore how microbes can be useful to humans. We will do this by looking at a fungi called yeast and how it can be used to make bread rise	“Key Stage Two: Useful Microbes – Yeast Races”
0:10-0:20	The resources required for the class are two plastic bowls,	The resources are laid out on the table: two bowls labelled A and B, two measuring cylinders labelled A and B, a bowl of flour, a bowl of sugar, a tin of yeast, and two bowls of water
0:21-0:25	Please take a moment to look at the e-Bug lesson plan for information on health and safety	“Please look at the e-Bug lesson plan for information on health and safety”
0:26-0:33	Label two bowls A and B. In both bowls add four teaspoons of flour and three teaspoons of yeast.	A spoonful of flour is added to bowl A and a spoonful of yeast is added to bowl B
0:34-0:36	In bowl B add one teaspoon of sugar	A spoonful of sugar is added to bowl B
0:37-0:43	Now add 30ml of lukewarm water to both bowls and stir	Water is poured from the bowl into bowl B and is stirred using the spoon
0:44-0:49	Label the cylinders A and B. Pour the mixture from the bowls into the corresponding cylinder	The mixture in bowl A is poured into cylinder A, and the mixture in bowl B is poured into cylinder B
0:50-1:00	Ask students to measure what happens over the next 30 minutes. Discuss with your class. Why did the mixture rise in cylinder B? What process is happening when the mixture is rising?	The mixture rises in both cylinders, but rises significantly higher in cylinder B
1:01-1:12	This experiment shows that microbes can be useful. Here, the fungi yeast is using the sugars for energy. The yeast produces gas bubbles which causes the dough to rise	The mixtures are showing rising inside the cylinders from above
1:13-1:15	This process is called fermentation	“Fermentation”
1:16-1:22	Go to www.e-Bug.eu for more ideas on how to teach about microbes	“For the full lesson plan, extension activities, work sheets, answers, and much more visit the e-Bug website: www.e-Bug.eu ”