

# Little Rotters



## Location

Ground floor, Our World exhibition

## In a nutshell

Watch as our delicious plates of food decay. In nature insects, mould and bacteria are crucial to recycle all the material locked in dead plants and animals.

## What to do

Using the button and the dial select a film to watch. Use the dial to move back and forward in time to see the process of decay in various foods.

## Time Required

KS1 & KS2      2 minutes per student

## What's happening?

Mould and bacteria are important recyclers. By breaking down food they release nutrients for themselves and then back into the environment when they die.

These films are made by taking one photograph every five minutes. We don't add anything to the food because mould and bacteria are carried in air all the time. When they land on the food they start to grow and multiply.

The mould and fungi you can see growing on the food don't take in food like we do. Instead they release enzymes which start the digestive process outside of their bodies. Mould use the nutrients that are released to grow, reproduce and for energy which produces by-products including water and carbon dioxide.

Mould and bacteria are essential for the Earth's natural recycling process. Without these recyclers all the dead bodies and waste products would soon build up into a deep layer. Fortunately this does not happen because dead organisms and animal wastes become food or a home for other organisms.

For a long time people have been using mould and bacteria in compost bins at home to break down organic household material. Recently we have scaled up and now compost on an industrial scale. For example, in the UK we produce 1.5 million tonnes of compost from our green waste every year. This process means we can reuse the nutrients for growing plants in our gardens.

## Curriculum links

<b>KS1/2</b>	<b>English - Spoken language</b>
	- articulate and justify answers, arguments and opinions
	- give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings
	<b>English - Reading – comprehension</b>
	- (Yr1) discussing word meanings, linking new meanings to those already known
	- (Yr2) discussing and clarifying the meanings of words, linking new meanings to known vocabulary
<b>Mathematics - Number – number and place value</b>	
- (Yr1) count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens	
- (Yr1) read and write numbers from 1 to 20 in numerals and words	
- (Yr2) read and write numbers to at least 100 in numerals and in words	
<b>Mathematics – measurement</b>	
- (Yr1) recognise and use language relating to dates, including days of the week, weeks, months and years	

## Relates to:

Workshops & Theme Days	Shows	Trails	Other exhibits
<ul style="list-style-type: none"> <li>System Earth day (KS2)</li> </ul>	<ul style="list-style-type: none"> <li>Blue Marvel (Planetarium, all ages)</li> </ul>	<ul style="list-style-type: none"> <li>All about us</li> </ul>	<ul style="list-style-type: none"> <li>Ecosphere</li> <li>Little Growers</li> <li>Soil core</li> </ul>

