

# Eat what you see!

The eclipse on 20 March 2015 will be slightly different depending where you are in the UK and what time you are watching.

Use a cake\* to show how much of the Sun you can see. You could use icing to show how the eclipse looks, or cut/bite chunks out.

\*cakes/crumpets/cookies should all work fine!



Using several cakes, you might show how what you see changes over time as the Moon passes across the Sun.



 Tweet us your cake eclipse pictures: @ScienceWeekUK #edibleeclipses

## Taking it further...

Why don't you have a go at building an 'orrery'? An orrery is a working model of the Solar System. It shows the relative positions of the planets and how they revolve around the Sun. Some orreries are mechanical, some electronic, and some are computer models. You could

investigate the different types, choose one, and then build it!

You can find more practical project ideas like this here:  
[www.britishecienceassociation.org/crest-awards/project-ideas](http://www.britishecienceassociation.org/crest-awards/project-ideas)



Registered charity 212479 and SC039236

# your life

Supporting the Your Life campaign



# Edible eclipses!

In the morning of 20 March, a solar eclipse will be visible over the UK. Between 80-95% of the Sun will be hidden from view, depending on where you are. Here are some fun activities you can do to understand what's going on.

## What's a solar eclipse?

During a solar eclipse the Sun appears to disappear in the sky. This is because the Moon passes between us (on Earth) and the Sun, blocking our view.



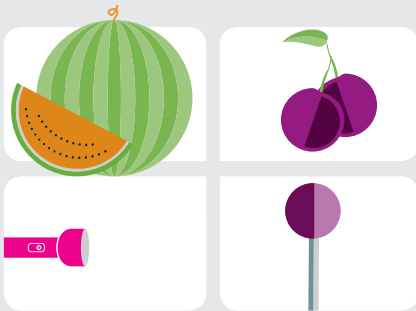
The solar eclipse coincidentally takes place in British Science Week 2015, giving you all the more reason to explore and celebrate it! Find out more at [www.britishecienceweek.org](http://www.britishecienceweek.org)

# Make a model eclipse using food!

One of the best ways to understand how something works is to make a simple model.  
You can make an easy edible eclipse using stuff you can gather from around the house!

## What you'll need:

- **Something to represent the Earth**  
e.g. a round melon
- **Something to represent the Moon**  
e.g. a cherry
- **A light-source to represent the Sun**  
e.g. a lamp/torch or a mobile phone 'torch' app should work
- **Something to suspend or move your 'Moon' with**  
e.g. a wooden skewer or stiff wire



1 2 3 4 5 6

Decide what food items you want to use. Think about which is bigger (the Moon or Earth) and the shape.

1 2 3 4 5 6

Mount your chosen 'Moon' onto your stick/wire.

1 2 3 4 5 6

Dim the light of the room so your light source stands out – it does not have to be pitch black but the darker the better.

1 2 3 4 5 6

Place your 'Earth' at one end of a flat surface and your 'Sun' light source a suitable distance so that it clearly illuminates one side of your 'Earth'.

no less than 30cm

1 2 3 4 5 6

Move your 'Moon' between the 'Sun' and 'Earth'. What does the Earth's surface look like behind the Moon?

What does the Sun look like from the shadowed area of Earth?

1 2 3 4 5 6

Take a picture of your 'edible eclipse' and tweet us @ScienceWeekUK #edibleclipses

## You could try:

Exploring using different foods as your Moon and Earth. Can you think of other food that is round and in a similar size ratio to the real Moon and Earth?

Mounting your 'Moon' so that it can rotate around the Earth. You will have to consider the weight of the food you use.



## More about the eclipse...

In a total solar eclipse, the Moon creates a shadow on the Earth. Where the shadow is darkest (the 'umbra'), people would see the Sun completely blocked (only a faint halo called the Corona).

Where the shadow is less dark (the 'penumbra'), people will see only part of the Sun blocked out. This is called a partial eclipse and looks like someone has taken a bite out of the Sun.

