

# Before birth

## Location

Ground floor, All About Us exhibition



## In a nutshell

What happens in the womb? These models show how in just 12 weeks a single cell becomes a foetus with all its major organs defined.

## What to do

Each month of pregnancy has a model embryo or foetus that students can examine. The older foetuses can be lifted out to feel average weights. The illustrations behind the models show how the mother's body must also make changes to create space for the growing baby.

## Time Required

KS3 & KS4      4-5 minutes per student.

## What's happening?

All humans start life as a tiny fertilised egg. In just nine months that egg develops into a bouncing baby. In the womb, or uterus, babies grow at a faster rate than they ever will again. After 12 weeks all the major organs are in place and starting to work. The mother's body must provide the baby with everything it needs. That means plenty of nourishment and enough room to grow. During pregnancy the mother's organs shift to accommodate the growing baby. By nine months the mother's body is full to the brim and her organs will be working hard to meet the demands of two bodies rather than one.

## Curriculum links

		Curriculum links
KS3	Science - Reproduction	<ul style="list-style-type: none"><li>- reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta</li></ul>
KS4	Science - Transport systems in multicellular organisms	<ul style="list-style-type: none"><li>- describe some of the substances transported into and out of a range of organisms in terms of the requirements of those organisms, to include oxygen, carbon dioxide, water, dissolved food molecules, mineral ions and urea</li></ul>
	Science - Reproduction	<ul style="list-style-type: none"><li>- explain some of the advantages and disadvantages of asexual and sexual reproduction in a range of organisms</li></ul>
	Science - Waves at material interfaces: applications in exploring structures	<ul style="list-style-type: none"><li>- explain, in qualitative terms, how the differences in velocity, absorption and reflection between different types of waves in solids and liquids can be used both for detection and for exploration of structures which are hidden from direct observation, notably in our bodies, in the earth's core and in deep water.</li></ul>

## Relates to:

Workshops & Theme Days	Shows	Trails	Other exhibits
<ul style="list-style-type: none"><li>• Choose Health (KS3 lower)</li></ul>	<ul style="list-style-type: none"><li>• How my body works (KS3)</li></ul>		<ul style="list-style-type: none"><li>• Boy or girl?</li><li>• How to build a human</li><li>• Inside a womb</li><li>• Visible human project</li></ul>

