

# How much DNA

## Location

Ground floor, All About Us exhibition

## In a nutshell

Do you have more DNA than an elephant? How much DNA can you fit in a cell? Depends on whose cells you're looking at.

## What to do

Students pull a ribbon representing the length of DNA per cell of various animals.



## Time Required

KS1 & KS2 1 minutes per student.

## What's happening?

Genetic information is passed from one generation to the next. This is called heredity and why we resemble our parents. The genetic information itself is contained in a complex molecule called DNA. DNA is found in the nucleus of almost every cell. DNA can be measured in millimetres or base pairs (the units that make up the code of DNA). Although DNA can only be seen with a microscope, the total genetic information for an organism, or the genome, can be quite large.

### Curriculum links

<b>KS1/2</b>	<b>Science - Animals, including humans</b> (Yr 1) - identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals <b>English - Spoken language</b> <ul style="list-style-type: none"><li>- listen and respond appropriately to adults and their peers</li><li>- ask relevant questions to extend their understanding and knowledge</li><li>- articulate and justify answers, arguments and opinions</li></ul> <b>Mathematics - Measurement</b> <ul style="list-style-type: none"><li>- (Yr1) compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]</li><li>- (Yr2) choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm);</li><li>- (Yr3) measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</li></ul>
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## Relates to:

Workshops & Theme Days	Shows	Trails	Other exhibits
<ul style="list-style-type: none"><li>Forensics Academy (KS2)</li></ul>	<ul style="list-style-type: none"><li>How my body works (KS2)</li><li>Cell! Cell! Cell! (planetarium) (All ages)</li></ul>		<ul style="list-style-type: none"><li>Relative values</li><li>Where is DNA</li><li>Building proteins</li><li>Constructing DNA</li></ul>

