

# Variation & Inheritance

## Revision support

Revision website— <https://www.bbc.com/education/subjects/zng4d2p>

There are also many revision guides available—look for one which says Key Stage 3 (KS3) Science

## Working Scientifically

Evaluating the work of various scientists and their contribution towards understanding the structure of DNA.

Investigating the variation within the classroom.

## Did You Know????

99.9% of DNA in humans is identical, it is the 0.01% that is different which creates all the variation within the human species.

## Maths

Plot graphs of continuous and categorical data.



What I need to know...	Be-fore	Re-vised
Describe what is meant by variation in a species.		
Explain the difference between continuous and discontinuous variation.		
Plot graphs to show variation.		
Identify whether a feature is inherited or determined by the environment.		
Explain how inherited differences arise by genetic material from both parents combining.		
Describe how identical twins occur, and analyse data about their features.		
Identify that the nucleus contains chromosomes, which carry inherited genetic information.		
Identify that a fertilised egg contains a full set of chromosomes, half from each parent.		
Explain the number of chromosomes in gametes.		
Explain how some genetic disorders arise.		
Describe the importance of variation.		
Explain how variation may help a species to survive.		
Describe how variation causes competition for resources, and drives natural selection.		
Describe what is meant by biodiversity.		
Identify changes that can cause a species to become extinct.		
Use a model to represent inheritance of a trait.		
Predict likelihood of offspring inheriting specific traits.		
Describe the structure of DNA.		
Assess the work of Watson, Crick, Wilkins and Franklin on DNA structure.		
Describe what genetic modification means.		
State what the HGP is.		