

# Working Scientifically

## Year 5

Key vocabulary	
<b>accuracy</b>	Being precise and correct.
<b>apparatus</b>	The technical equipment or machinery needed for a particular activity or purpose.
<b>classification keys</b>	A series of questions about the organism's physical characteristics.
<b>comparative and fair test</b>	Changing one variable, where the variable that is changed can be varied, e.g. material a parachute is made from.
<b>control</b>	A person or thing used as a standard of comparison for checking the results of a survey or experiment.
<b>dependent variable</b>	A variable whose value depends on that of another.
<b>independent labels</b>	Free from outside control. A classifying phrase
<b>line graphs</b>	A graph with points connected by lines to show how something changes in value.
<b>measurements</b>	The size, length, or amount of something, as established by measuring.
<b>predictions</b>	Making a guess about a result or the future.
<b>purpose</b>	The reason for which something is done or created.
<b>reliable</b>	Able to be trusted.
<b>repeat readings</b>	Readings/results taken several times.
<b>scatter graphs</b>	A graph of plotted points that show the relationship between two sets of data.
<b>scientific diagrams</b>	Clear representations of equipment and experiments.
<b>trend</b>	A general direction in which something is developing or changing.

### Significant scientists

**Rosalind Franklin**  
(1920-1958)



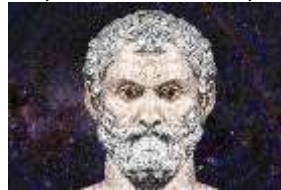
Franklin is best known for her work on the X-ray diffraction images of DNA, particularly Photo 51, while at King's College London, which led to the discovery of the DNA double helix.

**Francesco Redi**  
(1626-1697)



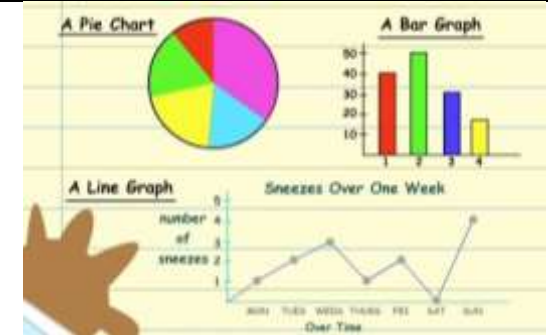
Francesco Redi devised and performed the first controlled experiments in scientific history; showed that flies breed and lay eggs and do not spontaneously generate.

**Thales of Miletus**  
(624 BC- 546 BC)



The first scientist in history, Thales looked for patterns in nature to explain the way the world worked. He replaced superstitions with science.

### Charts and Graphs



### Variables



### Discussion Point

Science in the news – is data bias?  
Should you believe everything you read?