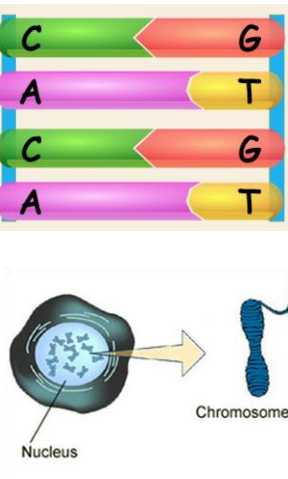
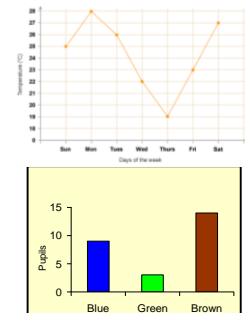
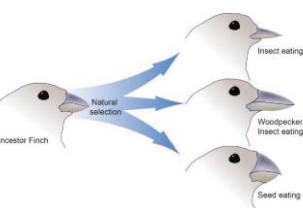


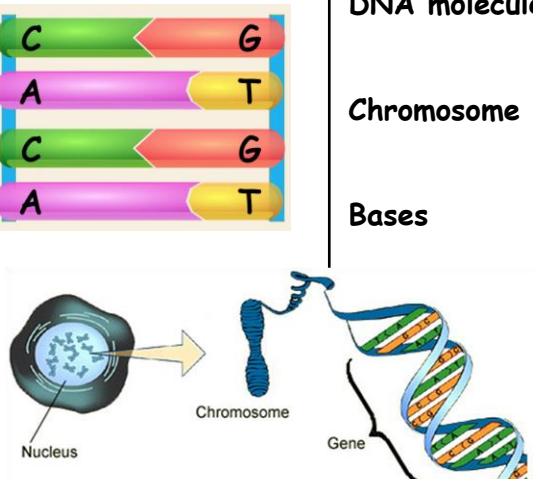
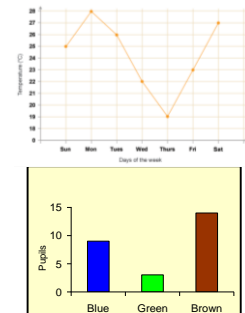
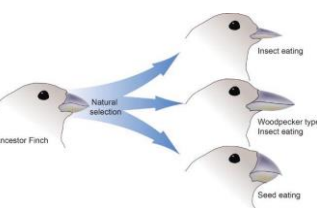




Rationale: This topic looks at the building blocks that make us who we are - DNA. We will also look at what causes the differences within a species and how, in the wild, some characteristics can help or hinder survival. If animals have characteristics that are useful to humans, we can breed from animals who have that trait to get more offspring with that characteristic.

Diagrams	Key words/ideas	Definitions or extra information
	<p>DNA molecule</p> <p>Chromosome</p> <p>Bases</p>	<ul style="list-style-type: none"> - looks like a twisted ladder consisting of two strands. The spiral shape is called a double helix - a very long molecule of tightly coiled DNA (23 pairs of chromosomes in human body cells) - Four chemicals that make up the 'rungs' of the DNA double helix ladder, referred to by their initials and pair up in a specific way. A pairs with T and C pairs with G. <p>Watson and Crick are credited with the discovery of DNA. However the work of Rosalind Franklin and Maurice Wilkins was also vital.</p>
	<p>Variation</p> <p>Continuous data</p> <p>Discrete data</p>	<ul style="list-style-type: none"> - the differences in characteristics between organisms of a species. Variation can be genetic (inherited), or environmental. - a set of data which can vary within a range - data can be displayed in a line graph. - a set of data which fit into categories - data can be displayed in a bar chart.
<p>Darwin's finches</p> 	<p>Evolution</p> <p>Natural Selection</p>	<ul style="list-style-type: none"> - a change in the inherited characteristics of a population over time, which may result in the formation of a new species. - Darwins theory for how evolution happens. Natural selection is the survival of the fittest. The best adapted versions of a species survive to reproduce and pass on their DNA.
	<p>Extinction</p>	<ul style="list-style-type: none"> - when there are no organisms of a species left. <p>Extinction can happen for many reasons - mostly due to human influence eg habitat destruction, hunting, fishing, introducing new species, but also because of climate change or disease.</p>
 <p>Belgian Blue</p>	<p>Selective Breeding</p>	<ul style="list-style-type: none"> - humans choose which animals or plants are going to breed to get the offspring that they want. <p>Disadvantage of selective breeding is that it reduces the gene pool.</p> <ul style="list-style-type: none"> ➢ more likely to have health issues ➢ more likely to suffer if a new disease appears

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