

# Science Knowledge Organisers

Science Focus Evolution

Year 6

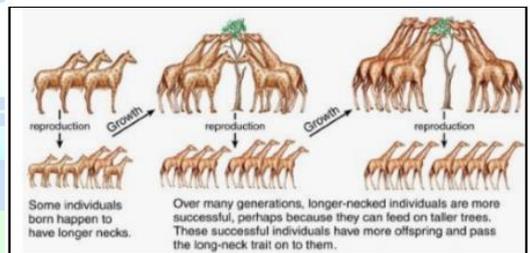
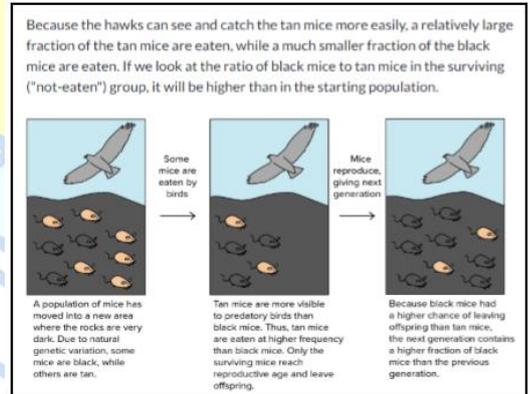
Spr 1 and 2

Key Knowledge	
What is evolution?	Evolution is the way that living things change over time.
Do things evolve?	<ul style="list-style-type: none"> <li>We know that living things used to look a lot different to how they do now. We know this because fossils have been found that show creatures that look a lot different to how they do today.</li> <li>Fossils show us that living things have changed over time.</li> </ul>
How do things evolve?	<ul style="list-style-type: none"> <li>A famous scientist, Charles Darwin observed that although individuals in a species shared similarities, they were not exact copies of each other</li> <li>He noticed that there were small differences or variations between them.</li> <li>He also noticed that everything in the natural world was in competition.</li> <li>The winners were those that had characteristics which made them better adapted for survival. For example, they were stronger, faster, cleverer or more attractive than others in their species.</li> <li>These living things were more likely to reproduce and pass on their useful characteristics to their offspring.</li> <li>Individuals that were poorly adapted were less likely to survive and their characteristics were not as likely to be inherited.</li> <li>Over time, the characteristics that help survival become more common and a species gradually changes. Given enough time, these small changes can add up to the extent that a new species altogether can evolve</li> </ul>
What's the important thing to know?	Living things produce offspring of the same kind. For example, owls produce baby owls and humans produce baby humans... BUT... Normally offspring vary and are not identical to their parents.
So what?	<ul style="list-style-type: none"> <li>Natural variation like this can lead to offspring being more likely or less likely to survive in their environment.</li> <li>If the variant makes them more likely to survive, they are more likely to be alive to pass this variant to their offspring</li> <li>As a result, this variant is more likely to become more common in this species.</li> </ul>
What is adaption	Adaption is when things evolve to overcome challenges in their environment. For example by adapting their behaviour.
Examples of adaption	Migration - birds move around the world to find weather and food sources Sticking together in packs
Possible Experiences	
<ul style="list-style-type: none"> <li>Investigate the work of renowned palaeontologists such as Mary Anning and how Charles Darwin and Alfred Wallace developed their ideas on evolution.</li> <li>Identify examples of how animals have adapted to their environments.</li> </ul>	

Key Vocabulary	
Fossils	A fossil is the naturally preserved remains or traces of animals or plants that lived in the geologic past
Variations	Small differences
Reproduce	To produce again/give birth
Offspring	Children or young
Migration	Seasonal movement of animals from one location to another

### Diagrams and Symbols

#### How variation can impact on evolution



### Greater Depth Thinking

- Show understanding of a concept by using scientific vocabulary correctly.
- Apply knowledge in familiar related contexts, including a range of enquiries.
- Work scientifically to explore the concept with a greater degree of independence.