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?	• 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. • Fossils show us that living things have changed over time.
How do things evolve?	• A famous scientist, Charles Darwin observed that although individuals in a species shared similarities, they were not exact copies of each other • He noticed that there were small differences or variations between them. • He also noticed that everything in the natural world was in competition. • 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. • These living things were more likely to reproduce and pass on their useful characteristics to their offspring. • Individuals that were poorly adapted were less likely to survive and their characteristics were not as likely to be inherited. • 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
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?	
What is adaption	
Examples of adaption	

Possible

¤ Investig... such as M... Alfred Wal...
¤ Identify ... their envir...

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

Because the hawks can see and catch the tan mice more easily, a relatively large fraction of the tan mice are eaten, while a much smaller fraction of the black mice are eaten. If we look at the ratio of black mice to tan mice in the surviving ("not-eaten") group, it will be higher than in the starting population.

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.