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| **What? (Key Knowledge)** |
| **Evolution** |
| 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.  |
| So 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. |
| Variation |
| 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?  | • Natural variation like this can lead to offspring being more likely or less likely to survive in their environment. • If the variant makes them more likely to survive, they are more likely to be alive to pass this variant to their offspring. • As a result, this variant is more likely to become more common in this species.  |
| **Adaptation** |
| What is adaption?  |  • Adaption is when things evolve to overcome challenges in their environment. For example by adapting their behaviour.  |
| Examples of adaptation | Migration • Birds have adapted to move around the world to find weather and food sources to suit them. • Birds that didn’t do this may have run out of food and died.  |
| Sticking together in packs • Animals that learned to live in packs were more likely to be safer and more successful when hunting, leading them to be more likely to survive. |
| **Possible Experiences** |
| Investigate the work of renowned palaeontologists such as Mary Anning and how Charles Darwin and Alfred Wallace developed their ideas on evolution. • Identify examples of how animals have adapted to their environments. |
| **What? (Key Vocabulary)** |
| **Spelling** | **Definition/ Sentence** |
| 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** |
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