



Year 4 – Summer 2 – Science – Pupil Knowledge Organiser



What do I already know?		What am I learning now?	
- All living things do seven main processes (MRS GREN). - Living things can be sorted or grouped based on things they have in common. - Vertebrates are grouped into: mammals, fish, reptiles, amphibians and birds. - Animals can be categorised as herbivores, carnivores, or omnivores. - Plants can be categorised as flowering or non-flowering.		- How can we group living things in different ways? - What are classification keys? - What living things can we find in our local environment? - How can we use classification keys to identify living things in our local area? - How might environments change and what negative impact can this have? - How might environments change and what positive impact can this have?	
Key Knowledge: Classification	Key Knowledge: Environmental Change	Key Skills: Working Scientifically	Key Vocabulary
Living things can be grouped based on their characteristics. Animals could be grouped based on their: diet, physical features or habitat. Plants could be grouped based on whether they are flowering or not. Vertebrates Is it a mammal? No → Crocodile Yes → Does it have four legs? No → Dolphin Yes → Is it a carnivore? No → Zebra Yes → Lion A classification key is a tool to help us identify living things. Classification keys use simple questions based on characteristics to support with identification.	Changes to an environment can be natural or human and have positive or negative effects. Natural changes can be caused by: earthquakes, storms, flood, droughts, wildfires and the changing seasons.  Human actions which can negatively change the environment include: deforestation, pollution, urbanisation.  Human actions such as habitat restoration and forming nature reserves positively change the environment. They give living things what they need to thrive, protecting biodiversity.	Ask Questions Conclusions Enquiry Evaluation Observe Record/ Present Communicate	classification Sorting things into groups based on their similarities. herbivore An animal that eats plants. carnivore An animal that eats meat. omnivore An animal that eats both plants and meat. vertebrates Animals with a backbone or spine. invertebrates Animals without a backbone or spine. class A group of living things with similar characteristics. habitat The place where an animal or plant lives and gets what it needs to survive. environment The surroundings or conditions in which a person, animal, or plant lives. biodiversity The variety of living things in a particular area or ecosystem. negative impacts Harmful effects or consequences. conservation The protection and preservation of the natural world.