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| **ZERO TO HERO** |
| **COMPOSITES** | **COMPONENTS** |
| To observe and name a variety of sources of light, including electric lights, flames and the Sun | To know that light is the opposite to darkTo know that the Sun provides us with natural light and energyTo know that fire provides light To know that many of our light sources are artificial or man-made light e.g electric lightsTo know that we use many different sources of light in our daily lives |
| To know that fire has been used throughout history for heat and light | To know that fire can be dangerous and can cause damage or injury (burns)To know that fire can keep us warmTo know that fire can give us light when it’s darkTo know that flames from fires and candles give us light and heatTo know that heat from fires and candles can be dangerous (melting)To know that Thomas Edison invented the first safe light bulb |
| **To know about simple circuits involving batteries, wires, bulbs and other components (NC)****To know how a switch can be used to break a circuit (NC)** | To know that a battery is an energy source To know that there are + and – signs on a battery To know that batteries need to be arranged the right way round for electricity to workTo know that a circuit is a complete path around which electricity can flowTo know that the circuit must be complete for the batteries to workTo know that we use switches on electrical appliances to turn things on and off To know that the switch creates a a gap in the flow of energy around a circuit |

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| **LAND AHOY!** |
| **COMPOSITES** | **COMPONENTS** |
| **To compare how different things move** **(NC) (LKS2)** | To know that different things move in different ways To know that a force is a push or a pull on an objectTo know that when you use a force to move a thing closer to you it is called a pull forceTo know that when you use force to move a thing away from you it is called a push forceTo know that gravity is an invisible force that pulls objects to the earth  |
| To notice and describe how things are moving, using simple comparisons such as faster and slower | To know that when an object sits on the water this is called floatingTo know that some materials float better than othersTo know that the shape of an object determines whether it sinks or floatsTo know that friction is the force created when two surfaces rub against each otherTo know that friction always slows a moving object downTo know that the rougher the surface, the more friction is produced |
| To understand that there are many different kinds of sound and sources of sound | To know that a sound is something we can hear with our earsTo know that a source is the start of somethingTo know that different objects make different sounds when they are hit |
| **To know that sounds get fainter as the distance from the sound source increases** **(NC) (LKS2)** | To know that fainter means weaker or quieterTo know that the nearer we are from a sound source, the louder it will beTo know that the further away we are from a sound source, the weaker it will be |

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| **GOING WILD** |
| **COMPOSITES** | **COMPONENTS** |
| **To understand the difference between things that are living and things that have never been alive (NC)** | To know that living things breathe, reproduce, grow and adapt and non-living things do notTo know that some things were once alive e.g. fossilsTo know that some things have never been alive e.g. rocks |
| **To learn that animals, as well as humans, have offspring, which grow into adults (NC)** | To know that offspring are babiesTo know that babies need looking after including feeding in order to growTo know that animals and human bodies change shape as they growTo know that adults are all grown up |
| **To learn about the basic needs of animals, as well as humans, for survival (which are food, water and air) (NC)** | To know that all living things need food, water and air to stay aliveTo know that different living things need different types of food e.g. plants get their food from the soil |
| **To identify and name a variety of common animals that are birds, fish, amphibians, reptiles and mammals (NC)** | To know that different types of animals can be grouped according to things they have in common |
| **To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) (NC)** | To know that a bird is an animal with two wings, two feet and a body covered with feathers.To know that a fish is an animal with a backbone (vertebrates)that lives in waterTo know that amphibians are cold blooded, have a backbone (vertebrate) and that they live part of the time on land and part of the time in water. They do not have scalesTo know that reptiles are cold blooded, have a backbone (vertebrate), have scales and can lay eggsTo know that mammals, including humans, are warm blooded animals, have a backbone (vertebrate), have hair and feed their young with milk |

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| **GOING WILD (cont.)** |
| **COMPOSITES** | **COMPONENTS** |
| **To identify and name a variety of common animals that are carnivores, herbivores and omnivores (NC)** | To know that a carnivore is an animal which only eats meatTo know that a herbivore is an animal which only eats plantsTo know that omnivores eat animals and plants |
| To recognise that environments can change and that this can sometimes post dangers to living things | To know that the actions we take impact the environment in which we live e.g. leaving litter can harm animals To know that an animal or species is extinct if there are no more left livingTo know that because of human actions in the past some animals are now extinctTo know that because of the actions of humans today some animals are nearly extinctTo know that animals that are nearly extinct are called endangeredTo know that a habitat is where animals live, feed and raise their young |
| To know that some animals are endangered, the reasons why and what is being done to preserve these species | To know that endangered means that an animal or species is in danger of becoming extinctTo know that humans destroy habitats by cutting down forests, building more houses or draining the land of waterTo know that preserve means to keep safe from harmTo know that there are organisations who are working to preserve habitats e.g. WWPTo know that some areas are protected wildlife areas by law |

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| **THE FOUR SEASONS PROJECT** |
| **COMPOSITES** | **COMPONENTS** |
| To observe and describe weather associated with the four seasons and how day length varies  | To know that the weather explains the daily conditions outside e.g. hot or cold, wet or dry, windy or calmTo know that there are 4 seasons in a year in the UK and that the weather changes in each seasonTo know that the length of daylight in the UK is shorter in winter and longer in the SummerTo know that weather is coldest an winter and warmest or hottest in the Summer in the UK |