



Year Two

Autumn

Crucial Knowledge (Animals- varieties and life cycles)	Expanded Knowledge	Intent/Prove
<ul style="list-style-type: none"> Year 1 RECAP: The 6 main groups of animals including: mammals, fish, reptiles, birds, insects and amphibians. Year 1 RECAP Living things can be plants or animals. The seven life processes are: movement, respiration (breathe), sensitivity, growth, reproduction, excretion (get rid of waste) and nutrition. Reproduction is where living things make a new living thing. Fish, insects, amphibians and birds start their life cycle as eggs. Lifecycle of a human includes; baby (newborn), infant, toddler, child, teenager, adult and elderly. Lifecycle of a frog includes: spawn, tadpole, tadpole with legs, froglet and frog. 	<ul style="list-style-type: none"> Most reptiles lay eggs, a few give birth to live young. Mammals start their life cycle with live young. All mammal babies drink milk from their mothers. All mammals have hair, including whales and dolphins. All living things reproduce and have offspring. Animals grow over time (life cycles). Warm blooded is when an animal can self-regulate its body temperature (remains the same temperature all year around). Cold blooded is when an animal can't self-regulate its body temperature, its temperature is regulated by its surroundings.' Fish are cold blooded animals- they can't regulate their body temperature themselves. Reptiles are cold blooded- they can't regulate their body temperature themselves, so they warm themselves up by laying in the sun (heat lamp for reptiles in captivity). Reptiles are born on land and are left alone from birth because they have strong survival instincts. All mammals are warm blooded- stays the same temperature all the time and is not regulated by their surroundings. 	<ul style="list-style-type: none"> Describe animals based on their characteristics (pointing out key features such as wings, claws, tail etc..). Name and identify the 6 main groups of animals including: mammals, fish, reptiles, birds, insects and amphibians. Sort/group and classify animals. Explain what a living thing is. Create and label a simple life cycle. Sort and classify animals into simple groups with some help. Compare two contrasting life cycles of animals.

	<ul style="list-style-type: none"> • Most mammals are helpless when they are born. They need protection from adult mammals until they can survive on their own. • All amphibians start their life in water with gills and tails and then develop legs and lungs as they grow so they can live on land. • All birds are warm blooded- stays the same temperature all the time and is not regulated by their surroundings. • Insect bodies have three parts, the thorax, abdomen and head. • Insects are invertebrates- don't have bones. • Insects are cold blooded- they can't regulate their body temperature themselves. • Insects have two antennae and 6 legs so spiders are not insects they are araneae. 	
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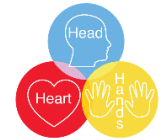
Spring

Crucial Knowledge (Animals-habitats and food chains)	Expanded Knowledge	Intent/Prove
<ul style="list-style-type: none"> • Animals can fall into three different dietary groups – herbivores (eat plants), omnivores (eat plants and meat) and carnivores (meat). • All living things need water, food, air and shelter to survive. • Understand the difference between living, dead and things which have never been alive. • A habitat is a place which gives food and shelter. • There are different types of habitat. For example, ocean, desert and forest. • A microhabitat is where insects and spiders tend to live. • Microhabitats include: Under stones and rocks, in short grass, inside rotting wood, under fallen leaves, in and on the soil and in tall grass and flowers. 	<ul style="list-style-type: none"> • The main 5 habitats including: ocean, desert, forest, grassland and tundra. • Living things have special features that help them to survive in their habitat. • Know that if one or more parts of a food chain is taken away, then this will affect all of the other creatures in the food chain. • Know humans are at the top of the food chain because there's not many creatures that want to eat humans/ humans do not make easy prey. 	<ul style="list-style-type: none"> • Describe what a producer, consumer, prey and predator, herbivore, omnivore and carnivore is. • Name different producers, consumers, preys and predators, herbivores, omnivores and carnivores. • Create simple food chains. • Label simple food chains with producer, consumer, prey and predator, herbivore, omnivore and carnivore. • Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

<ul style="list-style-type: none"> • A food chain is how plants and animals get their energy. • Animals get their energy from food (plants or other animals). • All food chains include a producer. • A producer is something that has the ability to make its own food, usually a plant. • <i>A consumer is a living thing that eats a producer.</i> • Some consumers are either herbivores or omnivores because they both eat plants. • A predator is a living thing that eats a consumer. They are carnivores. • Prey is an animal that is hunted by another animal for food. 		<ul style="list-style-type: none"> • Identify and find habitats in the local area (e.g. school grounds). • Describe what a habitat has to have. • Sort habitats into groups. • Explain why an animal is best suited to a habitat. • Sort and classify animals/living things. • Compare living things which exist in a variety of habitats e.g. ocean and forest.
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Summer

Crucial Knowledge (Plants)	Expanded Knowledge	Intent/Prove
<ul style="list-style-type: none"> • RECAP: Identify and describe the basic structure (roots, stem, leaves, flower) of a variety of common flowering plants, including trees (roots, trunk, branches, leaves). • RECAP: deciduous means (shedding of leaves annually) and what evergreen means (keeps its leaves all year around). • Know the basic function of the different parts of plants. For example, the roots anchor the plant, stem hold the plant upright, leaves produce food for the plant, flower attracts insects etc. • A seed is what a new plant grows from. • A bulb is the part of some plants, which stores food while the plant is in its resting stage. • Plants need the following to grow and stay healthy: soil, water, space, (sun)light and the right temperature. 	<ul style="list-style-type: none"> • We can grow different plants by planting seeds and bulbs. • Most seeds and bulbs don't need light to start growing – they have a store of food inside them. • After a flower that has a bulb has wilted, it can be pulled out of the ground; it can be replanted and it will regrow. • Seeds cannot be replanted and regrow. • A young plant already has roots and leaves/stem inside the seed. • Every living thing carries out its own life cycle. • Plants grow almost everywhere on Earth except the arctic poles. 	<ul style="list-style-type: none"> • Label parts of a plant and explain their roles for the plant's growth/survival. • Describe/ explain the conditions a plant needs to thrive. • Observe and record with some accuracy e.g. the growth of a variety of plants as they change over time from a seed or bulb, or observing similar plants at different stages of growth. • Use comparative tests e.g. to show that plants need light and water to stay healthy.



<ul style="list-style-type: none"> • Germination is when a plants starts to grow from its seed/bulb and a shoot bursts out. • Name some seed dispersal methods- wind, water, food, etc. 	<ul style="list-style-type: none"> • Plants have special features that help them to grow in different environments. 	
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Crucial Knowledge (Everyday Materials)	Expanded Knowledge	Intent/Prove
<ul style="list-style-type: none"> • Recap materials can be natural or human-made. • Recap the names of some everyday materials including wood, plastic, glass, metal, water and rock. • Describe materials using its properties- waterproof means keep water out, absorbent means it can soak up liquid easily, opaque means not able to see through and transparent means easy to see through. • Know that some solid materials can be squashed, twisted, bent stretched etc.. • Identify and compare the suitability of materials for particular uses- metal can be used for cars, coins, cans etc. 	<ul style="list-style-type: none"> • Know who has developed new materials. For example, John McAdams (tarmac), Charles Macintosh (waterproof materials) and John Dunlop (tyres). • Identify/ group materials based on their properties. • Understand there are a variety of ways to record their observations of materials. 	<ul style="list-style-type: none"> • Explore and experiment with a wide variety of materials. • Identify and discuss the uses of different everyday materials so that they become familiar with how some materials are used for more than one thing • Find out about people who have developed useful new materials • comparing the uses of everyday materials in and around the school with materials found in other places (at home, the journey to school, on visits, and in stories, rhymes and songs) • Observing closely, identifying and classifying the uses of different materials, and recording their observations.