Science Autumn 1b					
Animals including humans				Forces and magnets	Living things and their habitats
To identify, name and locate a range of common animals.	To know that animals include humans have offspring that grow into adults	To compare how things move on different surfaces	To recognise that living things can be grouped in a variety of ways.	To describe the differences in the life cycle of a mammal, an amphibian, an insect and a bird.	To describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organism, plants and animals.
Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Can name animals from the six main groups.	Can sort images of humans into a timeline	Can explore forces using different materials on a ramp	Can group animals into vertebrate and invertebrate.	Can describe and order the life cycle of different animals including humans.	Can group animals into vertebrate/invertebrate; subdividing vertebrates into fish, amphibians, birds, reptiles and mammals.
Can identify key features for animals within each group.	Can describe the changes along a timeline	Can describe how the material affects the speed of the object	Can subdivide vertebrates into fish, amphibians, reptiles, birds and mammals.	Can make direct comparisons between lifecycles where there is metamorphosis and where there is not.	Can use taxonomy to classify; subdividing into class, order, family, genus and species.
Can say where animals from each group could be found.	Can match offspring to adults for animals.	Can measure the speed or distance of an object using standard units of measure	Can subdivide invertebrates into snails/slugs, worms, spiders and insects.	Can explain how the life cycle of a human is different/same as other animals.	Can explain how broad groupings can be subdivided, i.e. micro-organisms, plants and animals.

Animals including humans		Forces and magnets	Living things and their habitats		
To describe and compare the structure of a variety of common animals.	To understand the life cycle of 3 different animals.	To notice the differences between the types of forces	To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.	To describe the life processes of reproduction in some plants and animals.	To give reasons for classifying plants and animals based on specific characteristics.
Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Can relate body parts on humans to animals.	Can sequence pictures to show the lifecycle of an animals that demonstrates growth.	Can notice that some forces need contact between two objects.	Can explore the local environment and identify living things within the environment (initial sorting into plants and animals)	Can explain what reproduction means.	Can identify similarities and differences between groups of animals and then subdivide.
Can group animals by what they eat.	Can sequence pictures to show an animals that undergoes metamorphosis.	Can name forces that do not require direct contact.	Can use a classification key.	Can explore growing plants from seeds, bulbs, stems and cuttings.	Can discuss reasons why living things are placed in one group and not another.
Can identify and name different features e.g. feathers, scales	Can relate different life stages to different activities.	Can discuss how magnetic forces act at a distance	Can devise own classification key for an animal group.	Can describe different types of reproduction, i.e. sexual and asexual.	Can find out about the significance of the work of Carl Linnaeus, a pioneer of classification.

		Forces and magnets	Living things and their habitats		
		To explore the behaviour and everyday uses of different magnets (bar, ring, button and horseshoe)	To recognise that environments can change and that this can sometimes pose dangers to living things.		
Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
		Can compare and group materials based on whether they are attracted to a magnet	Can identify changes to local environment over time using Google maps.		
		Can describe a magnet as having two poles	Can identify potential harm to living things for specified changes.		
		Can predict whether two magnets will attract or repel each other, depending on which way poles are facing	Can identify human and natural changes to the local environment.		

Working Scientifically					
Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Can use their observations to compare and contrast animals at first hand or through videos or photographs. Can use their senses to compare different textures, sounds and smells.	Can observe through video or first-hand observation and measurement, how different animals including humans grow. Can ask questions about what things animals need for survival and suggest ways to find answers for their questions.	Can compare how different things move Can raise questions and carry out tests to find out how far things move on different surfaces Can gather and record data to find answers to their questions Can find a fair way to test the strength of magnets	Can identify how local habitats change throughout the year. Can explore the impact of humans on environments, e.g. nature reserves, garden ponds, and the negative impact of pollution, development, deforestation and litter.	Can make observations over time related to growth and reproduction. Can find out about the work of naturalists such as David Attenborough and Jane Goodall.	Can use a classification system and keys to identify some plants and animals in the immediate environment. Can research unfamiliar animals and plants from a broad range of other habitats and decide where they belong in the classification system.
Ask simple questions. Observe closely. Use simple equipment. Perform simple tests. Notice patterns. Identify and classify. Use observations to suggest answers. Gather and record data. Use secondary sources of information.		Can confidently report and present findings from enquiries and observations through class discussions, displays and written	Can group plants into flowering and non-flowering.		

	explanations			

Seasonal Change	
To develop an understanding of seasonal change	
Nursery	**Reception**
Can learn new words rapidly and is able to use them in communicating, e.g. vocab for talking about seasons and activities.	Can begin to use more complex sentences to link thoughts, e.g. using *because, and* Can talk about changes they can see in the environment.
Can help with clothing, relates clothing to season and weather.	Can retell a simple past event in correct order, e.g. related to seasonal activities.
Can use language related to time e.g. soon, later, before.	Can observe the effect of activity on their body and relate to seasons /weather.

To develop an understanding of living things and the environment.	
Nursery	**Reception**
Can notice detailed features of objects in the environment.	Can talk about some of the things they have observed such as plants, animals, natural and found objects.

Can sort objects and images into animals and plants.	Can describe differences / similarities between two animals.
Can talk about different places and what you might find there e.g. farm, zoo, shops, and beach.	Can match animals to where they may be found.