Pentecost 2 Science Year 5: Living things and their habitats (Biology)			
Scripture Link: *Genesis 8:22*			
National Curriculum Objective •			
Enquiry Question: Are all lifecycles the same?			
	Lesson 1	Lesson 2	Lesson 3
Learning intention for each lesson	Know how to describe the lifecycles of an amphibian (frog), a bird and a mammal (human).	Know how to describe the lifecycles an insect (butterfly and grasshopper). Know what metamorphosis is.	(use lesson 4) Know how plants reproduce
Recall and Retrieval	Can describe what is meant by: reptile, amphibian, bird and mammal. Know what 'life-cycle' means	Know what is meant by gestation and puberty. know that the 4 main stages of human life are baby(4 weeks – 1yr), child (1yr – 18yrs), adult (18yrs – 65yrs), old age (65yrs +).	That metamorphosis refers to a dramatic change that some animals and insects go through during their life cycles. Know what pollination and germination mean
Sequence of substantive knowledge throughout the lesson	That an amphibian has 3 common stages in its lifecycle and what they are. That a bird has 7 recognised stages of its life cycle and what they are. That a mammal has 4 common stages of its life cycle and what they are.	That an insect has 4 common stages of its life cycle and what these are called. That metamorphosis refers to a dramatic change that some animals and insects go through during their life cycles. The names of some creatures that undergo a metamorphic life cycle.	That Pollen is carried by insects or blown by the wind from one flower to another. This process is called pollination. That Pollen reaches the new flower and travels to the ovary where it fertilises egg cells (ovules) to make seeds. This is fertilisation. That the seeds are scattered by animals or the wind. This process is called dispersal. Some of the seeds will grow into new plants.
Key Skills/disciplinary knowledge	• **reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;** • **identifying differences, similarities or changes related to simple scientific ideas and processes;**	• **reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;** • **identifying differences, similarities or changes related to simple scientific ideas and processes;** • **identifying scientific evidence that has been used to support or refute ideas or arguments**	• **reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;** • **identifying differences, similarities or changes related to simple scientific ideas and processes;** • **identifying scientific evidence that has been used to support or refute ideas or arguments**
Key Vocabulary	life cycle, live, young, fertilises, egg, runners, reproduce, sperm, metamorphosis	life cycle, live, young, fertilises, egg, runners, reproduce, sperm, metamorphosis, gestation, cuttings, plantlets, bulb, sexual/asexual reproduction	life cycle, live, young, fertilises, egg, runners, reproduce, sperm, metamorphosis gestation, cuttings, plantlets, bulb, sexual/asexual reproduction

	gestation, cuttings, plantlets, bulb, sexual/asexual reproduction		
Main teaching activity ***If the school has another short term planning format, this does not need to be included.***			
Scaffolding	Whole class discussion Children order cards then stick into books. BA can use the amphibian life cycles on the table as a guide. SEND can cut and stick the amphibian life cycle as a sequencing task.	Children discuss what is happening at each stage. TA record any children who are unsure Children act out in small groups or individuals – entirely up to you. Pair or group work	Children go outside to find moss At tables, children observe closely the moss with a magnifying glass. Children record their predictions in science books as assessed piece. Structure and STEM sentences may be needed to support LA learners.
Challenge		Children can use 3 intersecting circles.	
Diversity Links			
Catholic Social Teaching Principles	Stewardship – Seeing God in creation	Stewardship – Seeing God in creation	Stewardship – Seeing God in creation
British Values			
Wider links			

Pentecost 2 Science Year 5: Living things and their habitats (Biology)			
	Lesson 4	Lesson 5	Lesson 6
Learning intention for each lesson	Know how mammals reproduce	Know what conservation is and why it is necessary. Know some of the work of Jane Goodall. Know some of the work of Richard Attenborough.	Know what conservation is and why it is necessary. Know some of the work of Jane Goodall. Know some of the work of Richard Attenborough.
Recall and Retrieval	names of some creatures that undergo a metamorphic life cycle. That an insect has 4 common stages of its life cycle and what these are called.	know what nutrition means Know what humans need to survive. know what endangered means and can name some endangered species Describe ways in which humans impact the environment	That all mammals reproduce through sexual intercourse/mating. The female egg is fertilized internally. In nearly all mammals it is the female that carries the developing young in her body after mating. The young develop inside a part of the mother's body called the uterus, or womb. This is called gestation and this period can vary between species. They receive nutrition through the mother's body. Nearly all female mammals give birth to live young.
Sequence of substantive knowledge throughout the lesson	That all mammals reproduce through sexual intercourse/mating. The female egg is fertilized internally. In nearly all mammals it is the female that carries the developing young in her body after mating. The young develop inside a part of the mother's body called the uterus, or womb. This is called gestation and this period can vary between species. They receive nutrition through the mother's body. Nearly all female mammals give birth to live young.	That conservation refers to protecting our environment and the wildlife that lives in it. It includes looking after biodiversity and the health of the planet. That Conservation aims to protect species from extinction through maintaining habitats and ecosystems that may be under threat from humans or natural events	That conservation refers to protecting our environment and the wildlife that lives in it. It includes looking after biodiversity and the health of the planet. That Conservation aims to protect species from extinction through maintaining habitats and ecosystems that may be under threat from humans or natural events
Key Skills/disciplinary knowledge	• **reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and**	• **reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in**	• **reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree**

	written forms such as displays and other presentations; • **identifying differences, similarities or changes related to simple scientific ideas and processes;** • **identifying scientific evidence that has been used to support or refute ideas or arguments**	**oral and written forms such as displays and other presentations;** • **identifying scientific evidence that has been used to support or refute ideas or arguments**	**of trust in results, in oral and written forms such as displays and other presentations;** • **identifying scientific evidence that has been used to support or refute ideas or arguments**
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Main teaching activity ***If the school has another short term planning format, this does not need to be included.***			
Scaffolding	Children go and do this independently. SEND could put questions together scribed and work on the same animal Children can record this in many different ways. They can take pictures of the progress, complete a diary, table for measurements. Children can create their own based on what they decide.	Bullet point biographies and images to assist.	Bullet point biographies and images to assist.
Challenge			
Diversity Links			
Catholic Social Teaching Principles	Stewardship – Seeing God in creation	Stewardship: Understanding sustainability Participation -recognising problems in our world and seeking solutions.	Stewardship: Understanding sustainability Participation -recognising problems in our world and seeking solutions.
British Values			

Wider curriculum links			