St Bernadette's Catholic Primary Voluntary Academy

Science Medium Term Planning - KS2 Pentecost Term Cycle B - Riches of the Rainforest - Living things and their habitats

MATERIALS	Learning Objective	Activity	Key Knowledge (By the end of the lesson)		Vocabulary (Tier 3)
			Substantive	Disciplinary	
Lesson 1	L.O.12: To be able to describe the life process of reproduction in some plants and animals.	Make a detailed drawing of a flowering plant. Dissect and label the parts of a flower. Research the life cycle and reproduction of their flowering plant.	• Know the parts of a flower, including male and female structures. • Know the life cycle and reproduction of a flowering plant.	**Enquiry Skill Focus** Recording data • Record data and results of increasing complexity using scientific diagrams and labels.	stamen, anther, stigma, filament, carpel, ovary, pistil, seed, pollination, pollen, germination
Lesson 2	L.O.12: To be able to describe the life process of reproduction in some plants and animals.	Learn about the processes of natural and artificial asexual reproduction in plants, including detailed and annotated botanical illustrations of asexual reproductive processes. Set up an investigation into artificial asexual reproduction in flowering plants.	• Know about the processes of natural and artificial asexual reproduction.	**Enquiry Skill Focus** Asking questions • Plan a scientific enquiry to answer questions into artificial asexual reproduction in flowering plants.	corm bulb spores cutting tubers asexual propagation natural artificial
Lesson 3	L.O.11: To be able to describe the differences in the life cycles of a mammal, **an amphibian, an insect** and a bird.	Learn about the life cycles of amphibians and insects. Sketch a detailed and annotated illustration of the life cycle and reproduction of an amphibian and insects.	• Know the life cycle of an amphibian and insect, noting that they reproduce sexually.		life cycle metamorphosis amphibian insect
Lesson 4	L.O.11: To be able to describe the differences in the life cycles of **a mammal**, an amphibian, an insect and **a bird.**	Learn about the life cycles of mammals and birds. Sketch a detailed and annotated illustration of the life cycle and reproduction of a mammal and bird.	• Know the life cycle of a mammal and birds.		life cycle mammal bird gestation sperm egg baby adult

Lesson 5	L.O.11: To be able to describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.	Research the life cycles of a mammal, an amphibian, an insect and a bird that contrasts with those already studied *(linked to the rainforest)*. Create annotated scientific illustrations that reflect the life cycles of the animals they have researched.	• Know the life cycle of a mammal, an amphibian, an insect and a bird.		life cycle reproduction
Lesson 6	L.O.11: To be able to describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.	Make observations, as a natural scientist would, recording data and reporting findings. Learn about some famous naturalists, e.g. David Attenborough.	• Know information on a significant naturalist.	**Enquiry Skill Focus** <u>Observing and measuring</u> • Make observations, record findings and draw conclusions, as natural scientists.	natural scientist naturalist
Lesson 7	L.O.13: To be able to describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals.	Find out about Carl Linnaeus and learn about his classification system. Explore classification systems, understanding that they group according to similarities and differences.	• Know Linnaeus and his classification system. • Know classification routes for a range of living things.		classification class order family genus species
Lesson 8	L.O.13: To be able to describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals. L.O.14: To be able to give reasons for classifying plants.	Identify similarities and differences between animal, microorganism and plant classifications. Group animals, microorganisms and plants into broad groups then sub groups according to observable features.	• Know similarities and differences between animal, microorganism and plant classifications. • Know that animals, microorganisms and plants can be grouped.	**Enquiry Skill Focus** <u>Recording data</u> • Recording data and results of increasing complexity using classification keys.	classification class order family genus species

Lesson 9	L.O.13: To be able to describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals. L.O.14: To be able to give reasons for classifying plants.	Design and test out a classification system for birds, bees or butterflies.		**Enquiry Skill Focus** <u>Setting up tests</u> ● Develop and test out a classification key.	classification class order family genus species
Lesson 10	L.O.13: To be able to describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals. L.O.14: To be able to give reasons for classifying plants.	Observe, research and record features of a range of leaves found in the local environment. Design a key to classify leaves found in the local environment.		**Enquiry Skill Focus** <u>Recording data</u> ● Recording data and results of increasing complexity using classification keys.	classification group similarities differences
Lesson 11	L.O.13: To be able to describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals. L.O.14: To be able to give reasons for classifying plants.	Write scientific descriptions of unusual living things from around the world. Classify unusual living things using descriptions and online research.		**Enquiry Approach Focus** <u>Identifying, grouping and classifying</u> ● Using descriptions of features, and online research, to attempt to classify unusual living things.	classification group similarities differences
Lesson 12	End of Unit Assessment				