

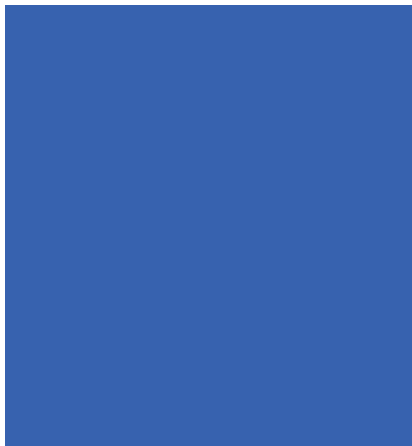
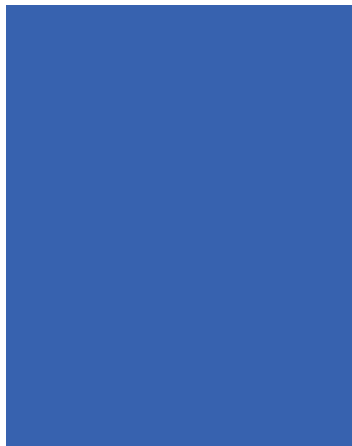
Newquay Primary Academy –Science Autumn Term 1 Sequence



	Year 3	YEAR 4	YEAR 5	YEAR 6
Prior knowledge...	N/A	<p>Prior knowledge... That animals including humans do not produce their own food. The importance of a balanced and nutritious diet. That humans and some other animals have skeletons and muscles for support, protection and movement.</p>	<p>Prior knowledge... We have four seasons (autumn, winter, spring and summer). The Sun is a source of light but the Moon is not. Know that a shadow is caused when an object blocks light from passing through it. The properties of a sphere.</p>	<p>Prior knowledge... We have four seasons (autumn, winter, spring and summer). The Sun is a source of light but the Moon is not. Know that a shadow is caused when an object blocks light from passing through it. The properties of a sphere.</p>

INTENT		<u>Living things and their habitats</u>	<u>Earth and Space</u>	<u>Evolution and Inheritance</u>
		<p>Pupils will understand the structure of a food chain and the impact it has within a habitat.</p>	<p>Pupils will understand the main bodies that make up our known Solar system and explain that the planets orbit around the Sun. They will be able to explain how day and night using the idea of the Earth's rotation.</p>	<p>Pupils will gain an understanding into how humans and other animals evolve and adapt over time as well as how fossils are formed.</p>

VOCABULARY / STICKY KNOWLEDGE				
		<p>Herbivore, Carnivore, producer, consumer. Environmental change affects different habitats differently. Different food chains occur in different habitats.</p>	<p>Earth & Space Earth, Sun, Moon, Axis, Rotation, Day, Night, Phases of the Moon, star, constellation, waxing, waning, crescent, gibbous. Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, planets, solar system, day, night, rotate, orbit, axis, spherical, geocentric, heliocentric. Stars, planets and moons</p>	<p>Fossils, Adaptation, Evolution, Characteristics, Reproduction, Genetics, Variation, Inherited, Environmental, Mutation, Competition, Survival of the Fittest, Evidence, Life cycles have evolved to help organisms survive to adulthood. Over time the characteristics that are</p>



have so much mass they attract other things, including each other due to a force called gravity. Gravity works over distance. Objects with larger masses exert bigger gravitational forces. Objects like planets, moons and stars spin/rotate.

most suited to the environment become increasingly common. Organisms reproduce and offspring have similar characteristic patterns. Variation exists within a population (and between offspring of some plants)

SEQUENCE OF LESSONS



1 – To draw and read a simple food chain.

2 – To talk about the characteristics of a habitat and I can identify that most living things live in habitats to which they are suited.

3 – To describe the role of producers, predators and prey in the food chain in specific habitats.

4 – To classify animals based on their characteristics

Visit to a local beach and local woodland habitat. Visit to Newquay Zoo.

Earth and Space
Space planetarium visit

1 - To identify different planets which make up our solar system.

2 - To describe the sun, Earth and moon as approximately spherical bodies.

3 - To describe the movement of the Earth and other planets relative to the sun in the solar system.

4 - Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.
Visit to the Spaceport

1 - To understand and explain the key ideas of the theory of evolution.

2 - To explain the scientific concept of inheritance.

3 - To demonstrate understanding of the scientific meaning of adaptation.

4 - To identify the key ideas of the theory of evolution.

5 - To examine the evidence demonstrating how plants have evolved.

6 - To understand how human beings have evolved.

OUTCOME / COMPOSITE



Pupils will have created their own food chains linked to a specific habitat and be able to explain how it works.

Earth and Space
Pupils will have practically investigated the structure of the known solar system

Pupils will have practically investigated how evolution and inheritance occurs. They will create their own

and carried out a series of investigations to enable them to explain how night and day occur. They will complete a practical investigation exploring the surface of the moon and how craters are formed, this will result in them making their own lunar landers.

timelines to show the evolution of animals as well as using photographs to compare traits they have inherited from their parents.