Topic: BLUE ABYSS Living things & their habitats Strand: Biology Year 4

Working Scientifically							
Ask relevant	Set up simple enquiries	Make careful observations	Gather, record and classify	Record & report findings	Use results to draw simple	Use scientific evidence to	
questions			data		conclusions	answer questions & support	
						findings	
Koy Vocabulany							

### Key Vocabulary human Changes in **environments** caused by impact humans. Impact can be positive or negative Creature that does not have a spine such invertebrate as an insect or worm life There are 7 life processes that tell us processes something is alive Creature which eats all kinds of food, omnivore meat and plants Area of plants, trees or flowers vegetation vertebrate Creature with a spine classification Dividing things into groups or types using key questions biome Natural area of vegetation carnivore An animal that eats meat classification Putting into groups based on similarities and differences between features Living things which are linked together food chain because each thing feeds on the one next to it in the chain Natural environment in which an animal or habitat plant lives or normally grows herbivore Animal that eats only plants Area in which something survives or lives environment A change in an animal or plant that helps adapt it to survive in its environment camouflage The way some animals are coloured climate The weather conditions in a place over time The protection of an animal or area from conservation damage Marine invertebrates that live in large coral colonies and produce a hard exoskeleton The natural environment where a plant or habitat animal normally lives The natural environment where a plant or oceanography animal normally lives An individual animal, plant or organism microorganism A group of animals or plants that share the species same characteristics and can breed with each other A ship that can travel underwater submarine

## What I should already know

- Animals can be grouped into vertebrates (fish, reptiles, amphibians, birds and mammals) and invertebrates
- Animals can be grouped based on their diet into carnivores, herbivores or omnivores
- How animals and plants are suited to their habitat
- Examples of habitats and microhabitats and the animals and plants that might live there
- The different sources of food from plants and other animals
- That animals and plants are linked via food chains

# Famous Scientist: David Attenborough

- Born 8th May 1926
- Sir David has more that 10 plants and animals named after him
- He is thought to be one of the most travelled people on the planet
- He is best known for writing and presenting, in conjunction with the BBC Natural History Unit, the nine natural history documentary series forming the Life collection, a comprehensive survey of animal and plant life on Earth.

### Ocean zones

Sunlight zone

Most types of fish and animals, including dolphins, turtles, rays, seals, coral and iellyfish, live in this zone.

Twilight Zone

Animals such as whales, shrimps, swordfish, hatchet fish and octopuses live in this zone.

Midnight

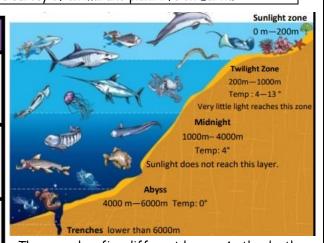
In this zone, you will find animals such larger whales, squid, echinoids and blob fish. The only light in this zone is produced by bioluminescent (light-producing) animals, such as the angler fish.

### Abyss

The organisms that live in this zone include sea spiders, basket stars, medusas and sea pigs.

[renches

Most animals living in this zone are unable to see.



The ocean has five different layers. As the depth increases the temperature and light levels fall and the pressure rises making it a difficult place to live. Oceans are home to hundreds of thousands of marine species, each adapted to live at specific depths

### Bioluminescence

Some marine animals have chemicals in their cells that make light or bacteria that live on them and produce light. Bioluminescence can be used as defence, camouflage, to attract prey or to see in the dark. The most common colours of bioluminescence are blue, green and red.



All living things do certain things to stay alive. These are the life processes: That living things can be grouped in Movement different ways Respiration Sensitivity Growth Reproduction Excretion Nutrition Living things can be grouped - classified - depending on their features, where they live or what they eat Use Classification keys can be used classification to identify and name living keys to group, identify and name living things Taken from: https://www.schoolsofkingedwardvi.co.uk Food chains If a produce in a food chain is in short supply, it will affect all the show where living consumers in that food chain things get their **Producers** are found at the beginning of a food chain. They are usually green plants. They use energy from the sun to make their own food in a energy and how process called photosynthesis. all species in an environment Consumers get energy from eating plants and animals. Prey are animals that depend on each are eaten by other animals. other.. **Predators** are animals that hunt, kill and eat other animals to get their How Living things live in a habitat to which they are suited environments can Environments may change naturally - flooding, fire, earthquakes Environments may be changed through human impact. This can be positive change or negative Environments can also change due to the season

What I will know by the end of the unit



**Great Barrier Reef Corals** are marine invertebrates that live in large groups called colonies. Some species produce hard exoskeleton that forms into a coral reef. The Great Barrier Reef, in the north-eastern coast of Australia, is the longest and largest coral reef in the world with over 600 type of coral. Corals are at risk of being destroyed by climate change, pollution and consumers.

Subject Specific Vocabulary				
annelid	A group of animals that includes worms.			
arthropod	An invertebrate with an exoskeleton e.g. spiders and insects			
cnidarian	A type of marine animal e.g. coral or jellyfish			
echinoderm	A type of marine animal e.g. starfish and sea urchins			
fish	An aquatic animal that has gills.			
mammal	A vertebrate animal that produces milk for its young.			
mollusc	An group of invertebrates usually found in water e.g. octopus			