



Animals Including Humans – Growth

How can living things stay healthy?

YEAR 2
Term 1

Key Facts:

- Animals have a variety of needs in order to survive: food, water, shelter, reproduction, territory and social interaction.
- Meeting these needs is crucial for the survival and overall well-being of animals in the wild, in captivity and in domesticated settings.
- Humans have a range of basic needs that must be met in order to survive: food, water, shelter, clothing, healthcare, safety and security, education and purpose and meaning.
- Meeting these needs is essential for human survival and well-being.
- Eating the right food is critically important for human health and well-being. The human body requires a wide range of nutrients and minerals to function properly.
- Exercise has numerous positive effects on the human body.

Pre-cooked Food



Processed Food



Fresh Food



Frozen Food



Tinned Food



Each serving (150g) contains

Energy	Fat	Saturates	Sugars	Salt
1046kJ 250kcal	3.0g	1.3g	34g	0.9g
	LOW	LOW	HIGH	MED
13%	4%	7%	38%	15%

Key Scientists:

- **Elizabeth Garrett Anderson** – was the first woman to qualify in Britain as a doctor and surgeon.

Key Vocabulary:

nutrition
healthy
protein
carbohydrate
dairy
fat
exercise
hygiene



Fats and Oils
Meat and Fish
Milk, Cheese and Dairy
Fruit and Vegetables
Bread and Cereal



Animals Including Humans – Life Cycles

What is a life cycle?

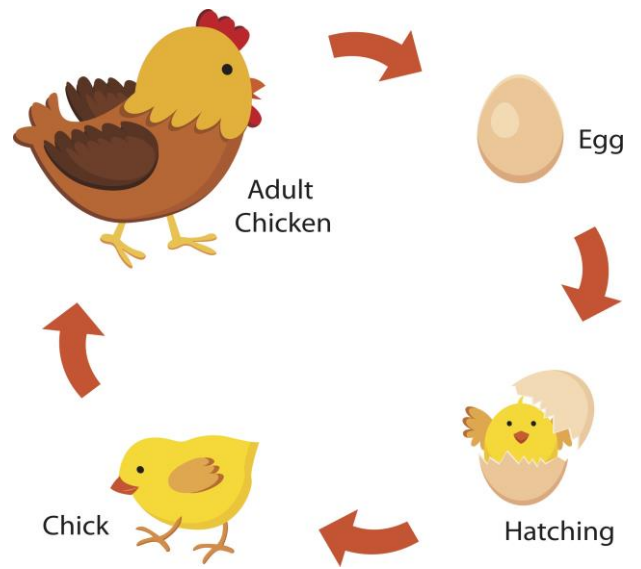
YEAR 2
Term 2

Key Vocabulary:

- life cycle
- foetus
- womb
- offspring
- reproduction
- transformation
- metamorphosis
- froglet

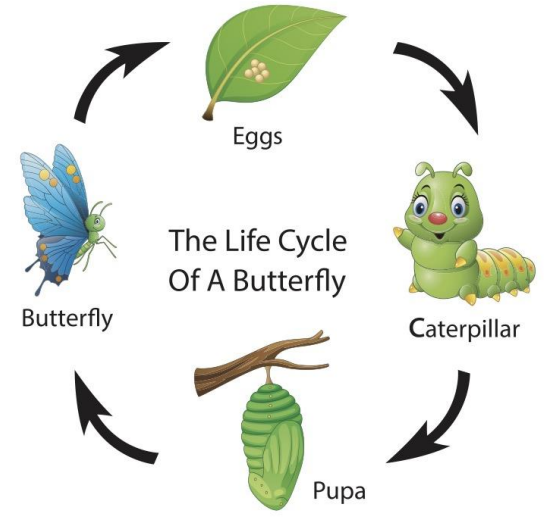
Key Facts:

- The stages of the human life cycle can be ordered as follows: conception, pregnancy, infancy, childhood, adolescence, early adulthood, middle adulthood and late adulthood.
- The life cycle of a chicken is a fascinating process that goes through several stages: egg, chick, pullet, adult and senior.
- The life cycle of a butterfly goes through four stages, known as complete metamorphosis: egg, larva, pupa and adult butterfly.
- The life cycle of a frog goes through several stages known as metamorphosis: egg, tadpole, froglet and adult.



Key Scientists:

- **Dr Rae Wynn-Grant** – is a large carnivore ecologist. She is best known for her research of the human impact on the behaviour of black bears in Montana.
- **Steve Irwin** – was an Australian zookeeper. He is known for his work with crocodiles.



Use of Everyday Materials

How do we choose materials?

Key Facts:

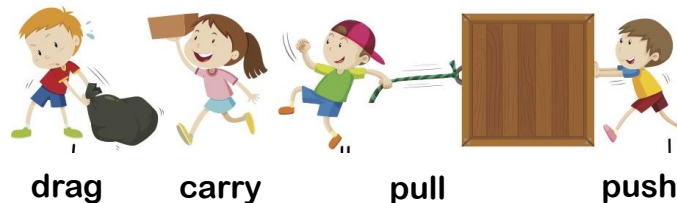
- There are many different materials and each has its own unique properties and uses.
- Choosing the right material for specific purposes is really important. The choice of materials will depend on a variety of factors.
- Some of the key considerations when selecting materials are: strength, durability, flexibility, cost, and environmental impact.
- Materials can change their shape by twisting, bending, squashing or stretching.
- This is because materials have different properties such as elasticity, plasticity and hardness that affect how they can be deformed.

Materials		
material		uses
wood		window frames, furniture, buildings, floors
metal		furniture, buildings, statues, pipes, jewellery
plastic		containers, toys, bags, pipes
brick		walls, floors
rock		roads, garden paths, floors, kitchen tops
paper		toilet roll, writing paper, newspaper, cardboard
glass		drinking glasses, windowpanes, television screens



Key Scientists:

- **Charles Macintosh** – was a Scottish chemist and the inventor of the modern waterproof raincoat. He created a waterproof rubberised fabric.
- **John Boyd Dunlop** – was a Scottish-born inventor and veterinary surgeon. He invented rubber pneumatic tyre and used them in cycle racing.
- **John McAdam** – was a Scottish engineer and road builder. He devised a new model for road building which included crushed stone bound with gravel on a firm base of large stones.



Key Vocabulary:

- material
- property
- obstacle
- construction
- stretchy
- elastic
- force
- bend



bend



squash



Living things and their habitats

What do living things need to survive?

YEAR 2
Term 4

Key Facts:

- Living, dead and never alive are three categories that can be used to classify different things in the world.
- A microhabitat is a small, localised habitat within a larger ecosystem.
- The types of food that animals eat to survive in their habitats can vary greatly depending on the animal species and its location.
- A food chain is a sequence of organisms, where each organism is the food source of the next in the chain.
- The journey that food makes from the farm to the supermarket can involve many different stages and processes.



Key Scientists:

- **Amy Vedder** – is passionate about wildlife conservation and is involved in conservation work with mountain gorillas.
- **Liz Bonin** – is a French science, wildlife and natural history presenter, who has worked on television. He is passionate about big cat conservation.

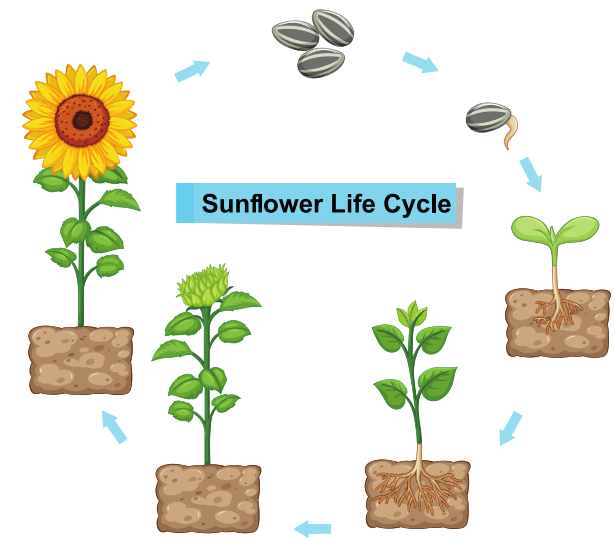
Key Vocabulary:

reproduce
excrete
respire
habitat
microhabitat
survive
producer
consumer

living		All living things breathe, eat, grow, move, reproduce and have senses.
dead		Something that was once a living thing.
non-living		Something that has never been alive.

Key Facts:

- Plants need water to survive. Plants get water through their roots.
- Plants need the right temperature to grow.
- Plants need sunlight to help them grow and make their own food.
- Plants need room and time to grow. It can take days, months or even years.
- A plant germinates when it starts to grow.
- Inside a seed/bulb is the baby plant.
- Seeds need the right conditions to grow. They need air, water and the right temperature.
- Plants begin life as seeds or bulbs. They need soil, air and water to grow. Plants grow into young plants called seedlings. Plants grow flowers and fruits. These produce seeds.
- When the plant is pollinated the seeds find their soil. The process starts again.



Key Scientists:

- **Alan Titchmarsh** – is a professional gardener and gardening journalist. He presents many different gardening programmes.
- **Agnes Arber** – was the first woman botanist to be elected as a fellow of the Royal Society and the third woman overall. She was the first woman to receive the gold medal of the Linnean Society for her contributions to botanical science.

Key Vocabulary:

- force
- friction
- motion
- texture
- magnet
- attract
- repel
- magnetic field
- non-contact force
- magnetism
- compass
- orienting



Living things and their habitats


How are habitats around the world different?

YEAR 2
Term 6

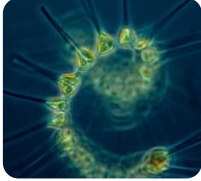
Key Facts:

- A habitat is a place where organisms live.
- A microhabitat is a small area within a habitat which differs somehow from the surrounding habitat.
- If a habitat changes too much, it can cause the animals that live there to become endangered or extinct.
- Rainforests are rich in biodiversity. They contain lots of helpful resources to help us make food, clothes and medicine. It is important to protect the rainforests.
- Tundra ecosystems are treeless regions found in the Arctic.


Ocean life




coral reef



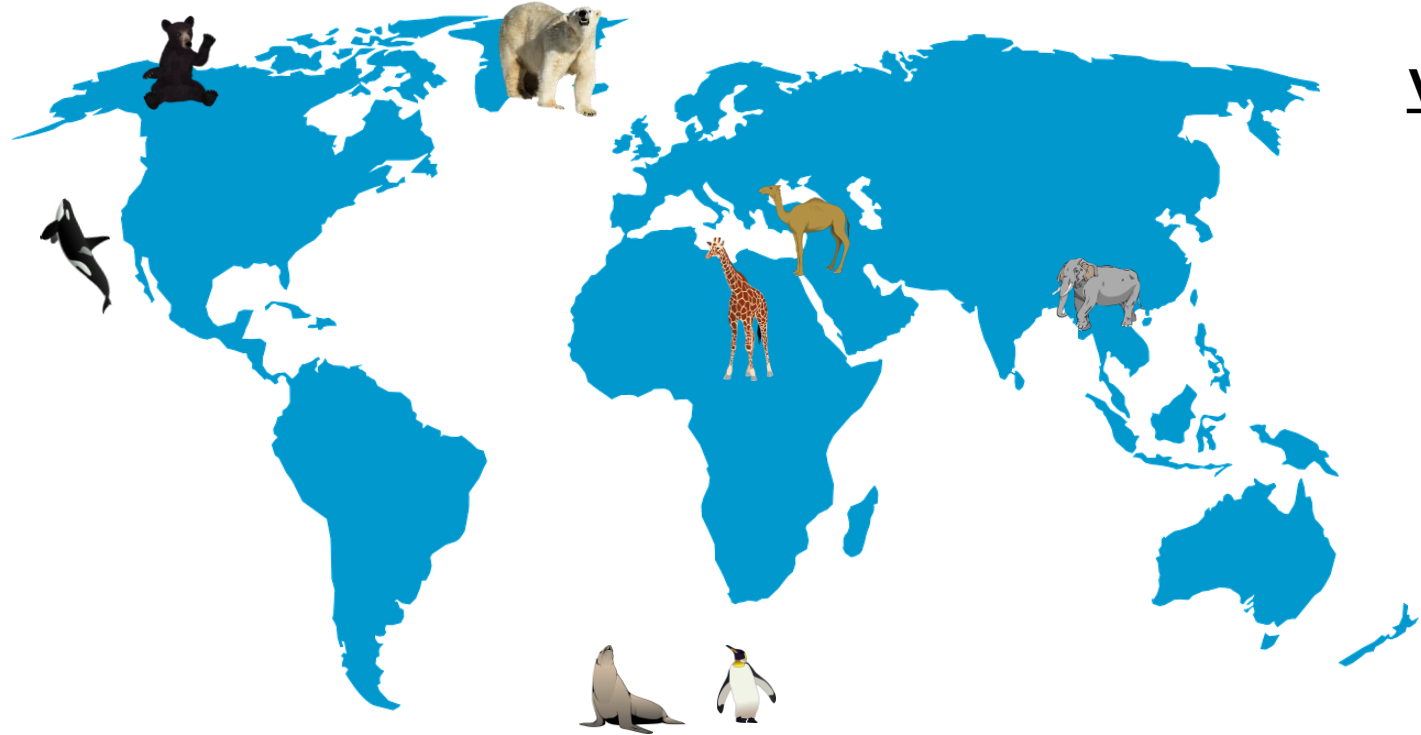
plankton



stingray



turtle



desert



rainforest



ocean



wetlands



Key Vocabulary:

- organism
- rainforest
- endangered
- biodiversity
- ocean
- ecosystem
- desert
- Arctic

Key Scientists:

- **Eugenie Clark** – studied shark behaviour and was very influential in marine conservation.
- **Rachel Carson** – was an American marine biologist, writer, and conservationist. She wrote an influential book which advanced the global environmental movement.