

Year 2 Knowledge Organisers

Science

Year 2

Uses of Everyday Materials

Key vocabulary

materials	Materials are what objects are made from.
suitability	Suitability means having the properties which are right for a specific purpose.
properties	This is what a material is like and how it behaves (soft, stretchy, waterproof).
Transparent	This is clear and allows light through it.
Opaque	Not able to see through it
Waterproof	Keeps water out
Flexible	Able to bend without breaking
Absorbent	Allows water in

Squash an object by pushing both hands together.



Bend an object by grabbing both ends of the object and bringing the ends inwards together.



Twist an object by turning your hands in opposite directions.



Key Knowledge

Properties of Materials



wood:
hard, stiff, strong, opaque, can be carved into any shape.



glass:
waterproof, transparent, hard, smooth.



plastic:
waterproof, strong, can be made to be flexible or stiff, smooth or rough.



metal:
strong, hard, easy to wash.



paper:
lightweight, flexible.



cardboard:
strong, light, stiff.



fabric:
soft, flexible, hard-wearing, can be stretchy, warm, absorbent.



rubber:
hard-wearing, elastic, flexible, strong.

Stretch an object by pulling your hands slowly and gently apart.



Year 2

Living things and their habitats

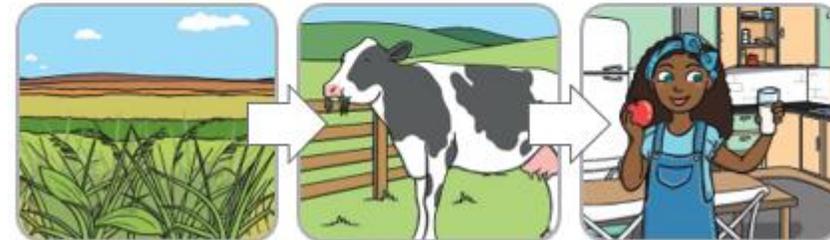
Key vocabulary

Life Processes	These are the things that all living things do. They move, breathe, sense, grow, make babies, get rid of waste and get their energy from food.
Living	Things that are living have all the life processes .
Dead	Things that are dead were once living . They did have all the life processes but don't now.
Never living	Things made out of metal, plastic or rock were never living . They never had the life processes .
Food choices	A food chain shows how each animal gets its food. Food chains are one of the ways that living things depend on each other to stay alive.
Food chain	This shows where living things get their food from.

Key Knowledge



Food chains. The arrows mean 'is eaten by'.



Year 2

Living things and their habitats

Key vocabulary

Habitat

A **habitat** is the natural place something lives. A **habitat** provides **living** things with everything they need to **survive** such as food, shelter and water.

Microhabitat

A **microhabitat** is a very small **habitat** in places like under a rock, under leaves or on a branch. Minibeasts live in **microhabitats**. The **microhabitats** have everything they need to **survive**.

Depend

Many **living** things in a **habitat depend** on each other. This means they need each other for different things.

Survive

This means to stay alive.

Key Knowledge

Examples of **habitats**:



woodland



urban



coastal



rainforest



arctic



desert



ocean



river



mountain

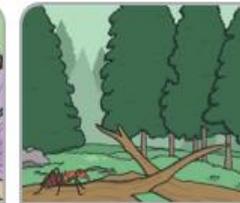
Examples of Microhabitat



short grass



flowers



inside rotting wood



under leaves



in and on soil

Year 2

Living things and their habitats

Key vocabulary

Adult	A fully grown up animal or plant.
Develop	To grow and become stronger
Lifecycle	The changes living things go through to become an adult.
Offspring	The child of an animal.
Reproduce	When living things make a new living thing of the same kind.
Young	Offspring that has not reached adulthood
Live young	Offspring that has not hatched from an egg.

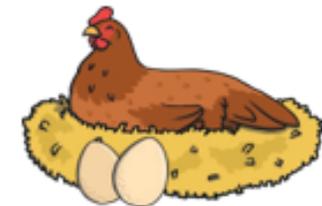
All living things **reproduce** and have **offspring**.

Some animals give birth to **live young**. Their offspring normally look like them when they are born.

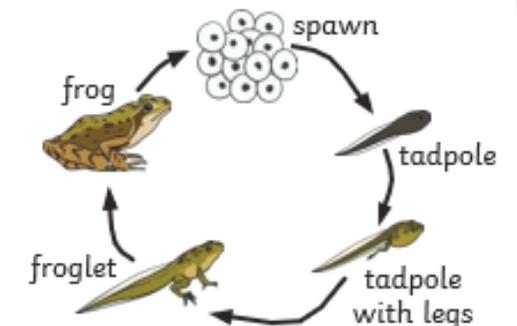
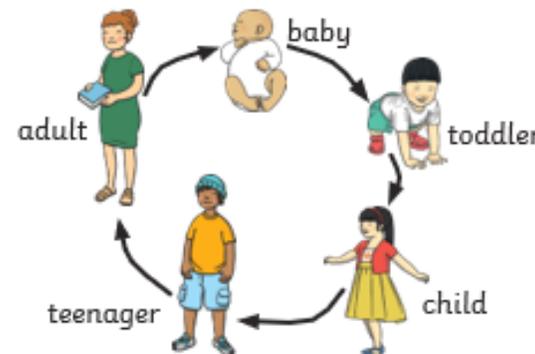


Some animals lay eggs which hatch into live young. This **young** then develops into an **adult**.

When these eggs hatch, some animals look like their adult, e.g. birds and reptiles.



Other animals have offspring which do not look like them, e.g. fish and amphibians.



Year 2

Living things and their habitats

Key vocabulary

Dehydrates	Lose water (Dry out)
Diet	The food and water the animals and human needs to survive.
Disease	sickness
Energy	Physical exercise your body needs
Germs	Bugs and diseases that are harmful to your body.
Heart Rate	The number of times the heart beats per minute
Hygiene	How clean something is in order to stop the germs from spreading.
Nutrition	Food needed to live.
Pulse	The beating of your heart.

To stay alive, all animals have 3 basic needs:

air water food

To grow into a healthy adult, we must eat the right types of food in the right amount and **exercise**.

Eatwell Guide

oils and spreads
Choose unsaturated oils and use in small amounts.

Water, lower fat milk, sugar-free drinks including tea and coffee all count.
6-8 a day

Eat less often and in small amounts.

To stop illness and infections spreading, we must be hygienic and keep ourselves clean.

Year 2

Key vocabulary

Germination	When the conditions are right, the seed soaks up water and swells, and the tiny new plant bursts out of its shell. This is called germination .
Sprout	When a plant sprouts , it grows new shoots .
Shoot	A shoot grows upwards from the seed or plant to find sunlight .
Seed dispersal	Seed dispersal is when the seeds move away from the parent plant. They can be moved by the wind or animals.
What do plants need to grow well?	
Sunlight	All plants need light from the sun to grow well. Some plants need lots of sunlight . Some plants only need a little sunlight .
Water	All plants need water to grow. Without water , seeds and bulbs will not germinate .
Nutrition	Temperature is how warm or cold something or somewhere is. Some plants like cooler temperatures and some like warmer temperatures .
Temperature	Food or nourishment. Plants make their own food in their leaves using sunlight .

