



Year 4 Science – Teeth & Digestion – Autumn 1

What will we be learning?

Identify the different types of teeth in humans and their functions

Describe the simple functions of the basic parts of the digestive system in humans

Muscles contract and relax to move food down the oesophagus to the stomach.

Stomach acids break down food further.

small intestine absorbs nutrients from the food.

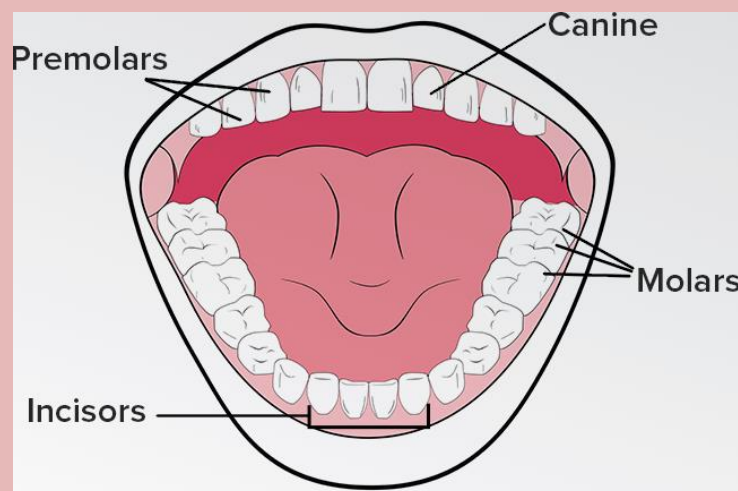
Waste is taken by the large intestine to be excreted.

Ask relevant questions and use different types of scientific enquiries

Make systematic and careful observations

Set up simple practical enquiries, comparative and fair tests

Know that healthy food contributes towards a fully-functioning digestive system.

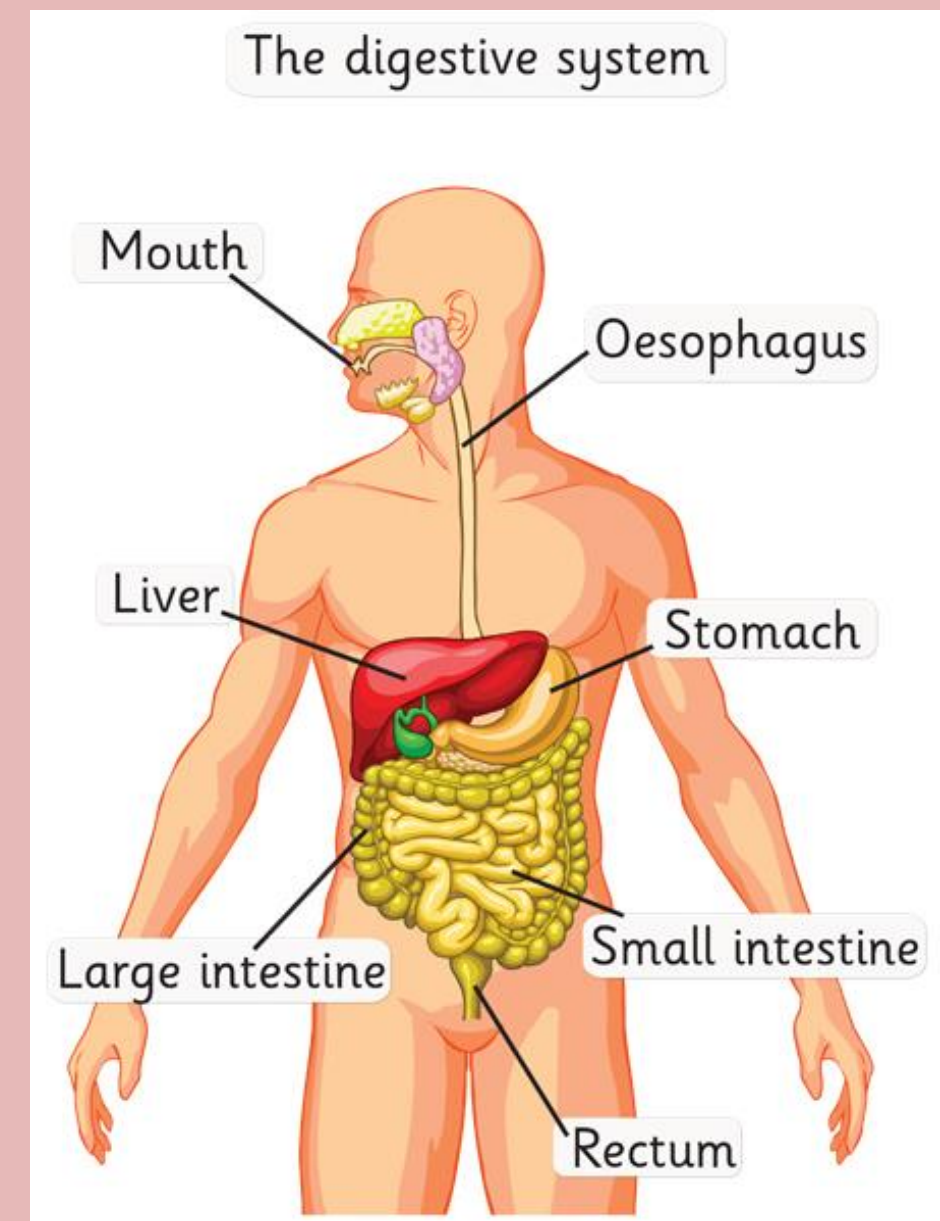


Key Questions

What function does the _____ organ have in the process?

What is kept in the body and what is removed? (excreted?)

How is each type of tooth suited to its job when eating?



Key Vocabulary

Mouth	Stomach	Oesophagus	Incisor
Tongue	pancreas	rectum	Canine
Large intestine (colon)	liver	nutrient	Molar
Small intestine	saliva	stool	Pre-molar



Year 4 Science – Electricity – Autumn 2

What will we be learning?

Know examples of household items that are electrically powered / battery operated.

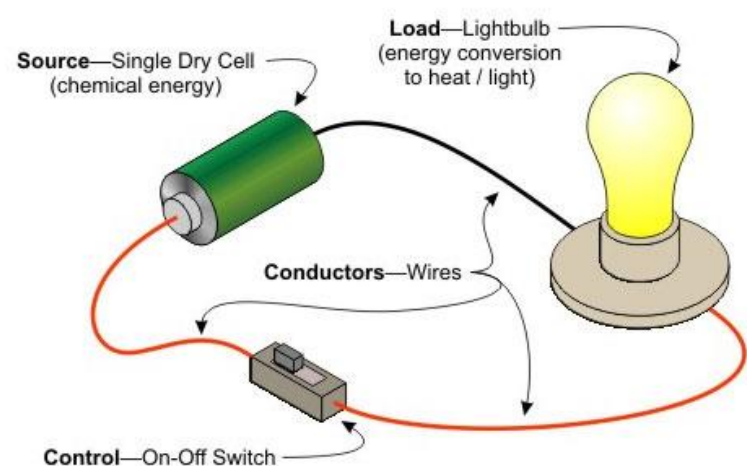
Give examples of renewable energy and explain why they are important.

Know that electricity is a flow of energy around a complete circuit and must have a power source.

Ask relevant questions and use different types of scientific enquiries

Know that electricity can be harmful and safe practices are required.

Set up simple practical enquiries, comparative and fair tests



Key Questions

Why do renewable forms of energy have less impact on the environment?

What impact on a circuit does adding more bulbs create?

Can you name a type of circuit? (series / parallel)

Key Vocabulary

circuit	conductor	flow
current	insulator	Series circuit
Battery (cell)	bulb / lamp	energy
wire	motor	renewable



Battery



Wire



Bulb



Buzzer



Motor



Switch (off)



Switch (on)



Year 4 Science – Materials (change) – Spring 1/2

What will we be learning?

Sort materials based on their properties into 'Solids', 'Liquids' and 'Gases'.

Know that a SOLID can be cut, torn or squashed and keeps its shape.

Know that a LIQUID takes the shape of the container it is in and can be poured.

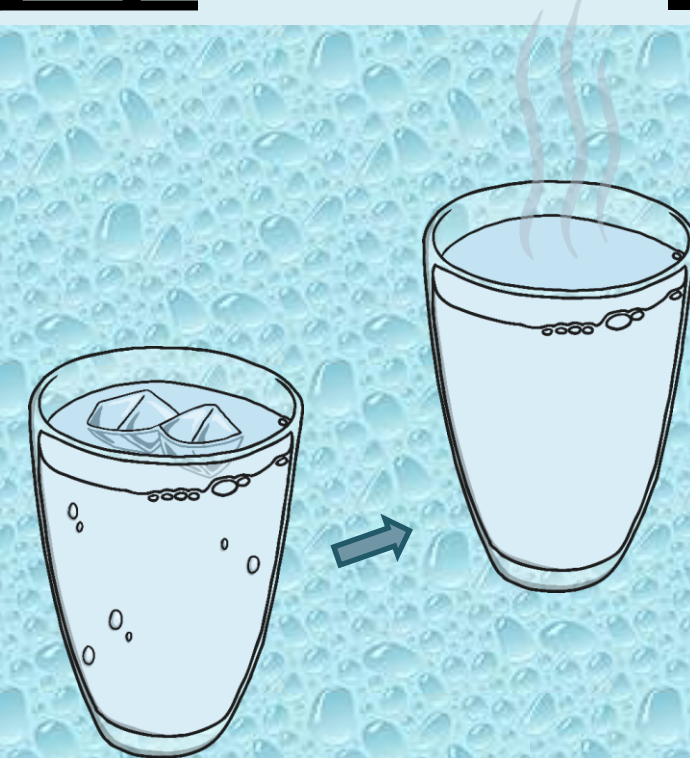
Know that a GAS does not have any fixed shape and spreads out to fill a space.

Understand that all materials are made of 'particles'.

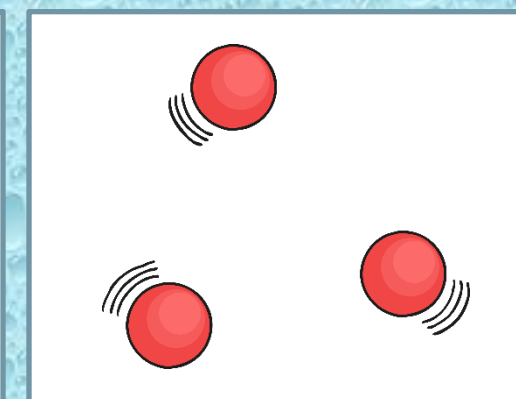
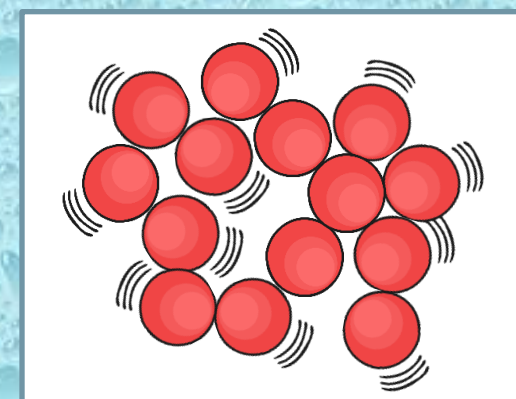
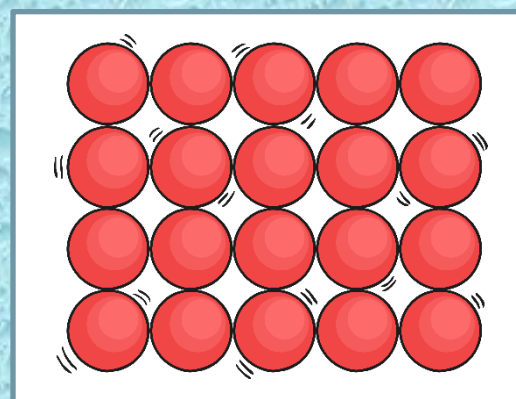
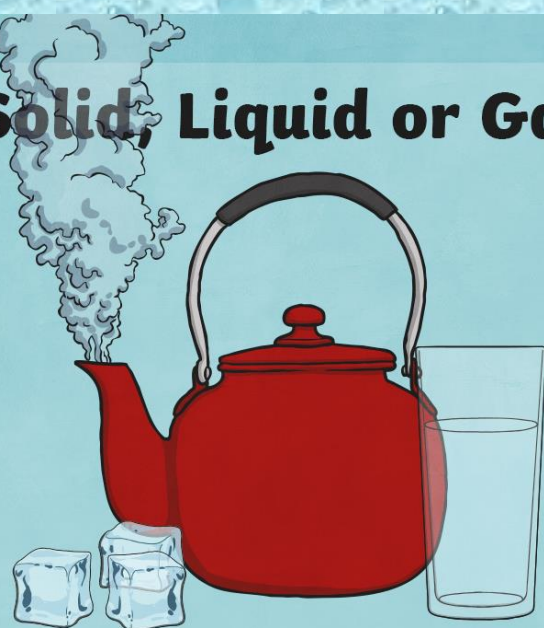
Learn that evaporation is the process of a liquid changing into a gas. This occurs when liquid particles start to collide and move so fast that they turn into a gas.

Know that with heating or cooling, some materials can be changed between a solid, liquid and a gas.

Acknowledge that the Water Cycle involves material change.



Solid, Liquid or Gas?



Key Vocabulary

State of matter	Melt	Particles
Solid	Freeze	Vapour
Liquid	Evaporation	Materials
Gas	Process	Matter

Key Questions

How do you classify a material as SOLID / LIQUID or GAS?

Can you describe the nature of particles in a SOLID / LIQUID or GAS?

What causes a material to change 'state'?

Can you give examples of materials that are a SOLID / LIQUID or GAS?



Year 4 Science – Living Things – Summer1

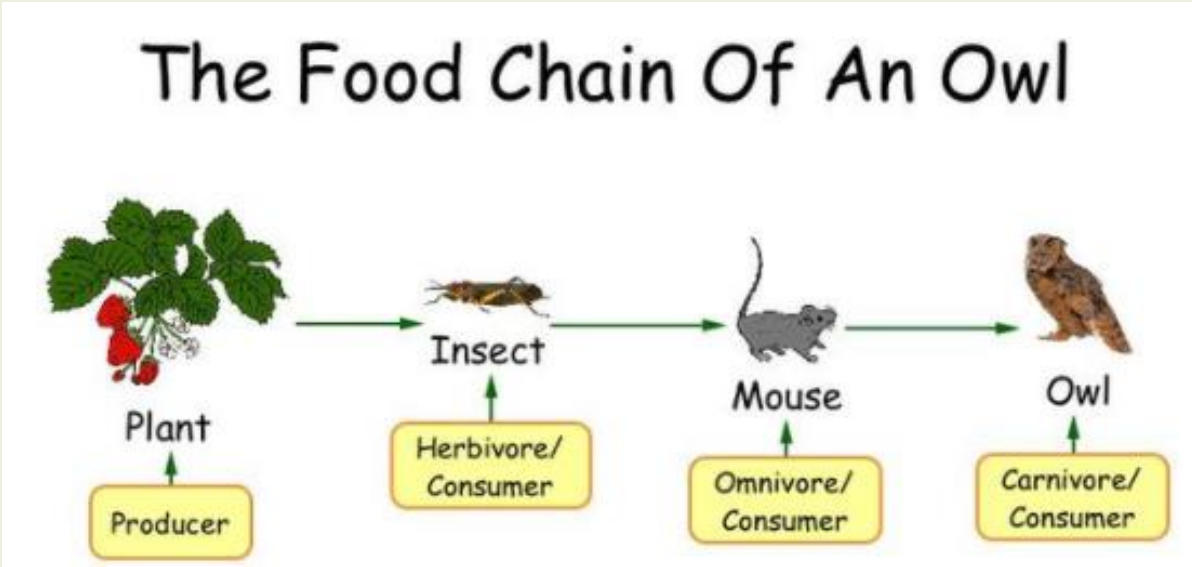
What will we be learning?	
Understand how to use and create their own classification key (generate their own criteria).	Ask relevant questions about living things
Use scientific vocabulary (below) to identify similarities / differences between living things.	Make systematic and careful observations from creature pictures (including skeletons)
Show the characteristics of living things	Set up simple practical enquiries, comparative and fair tests

Key Questions
What are the different ways that you can group and classify woodland creatures?
What are the characteristics of a living thing?
What does a food chain start with?



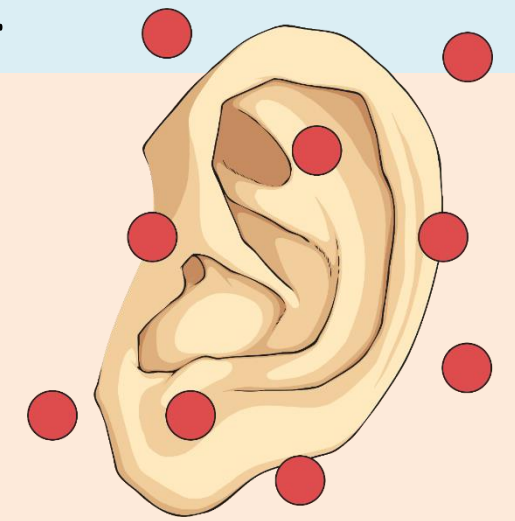
- M**ovement
- R**espiration
- S**ensitivity
- G**rowth
- R**eproduction
- E**xcretion
- N**utrition

Key Vocabulary		
Food chain	Carnivore	Primary
Food web	Herbivore	secondary
Producer	Omnivore	vertebrates
consumer	classification	invertebrates





Year 4 Science – Sound – Summer 2



What will we be learning?

Understand that sound travels through the air in waves due to vibrations.

Sound is made by air molecules vibrating.

When air molecules inside the ear vibrate, they shake tiny hairs on the insides of the ears. This send nerve messages to the brain.

Give examples of how sound can be muffled or made clearer.

Find patterns between the volume of a sound and the strength of the vibrations that produced it.

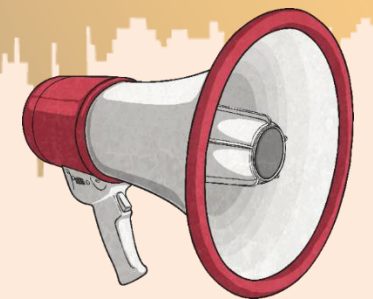
Sound travels much slower than light

Know that sounds travel away from their source in all directions.

Understand that vibrations may not always be visible to the naked eye.

Make systematic and careful observations from creature pictures (including skeletons)

Set up simple practical enquiries, comparative and fair tests



Key Vocabulary

Air molecules	loud	Soundproof
vibrations	Quiet	Distance
pitch	waves	Energy
volume	pitch	

Key Questions

How do we hear?

How can the pitch of a sound be altered?

Can you hear sound under water?

Can sound travel through objects?