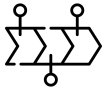
Knowledge Organiser Booklet Year 3

Spring 2

Name		Class	

Contents

Use your knowledge organisers to help you remember more.

	Test Yourself!	Only Connect! 	Memory Cards 	Order, Order! 	Phone a Friend! 	Picture it! 
1	Look at and study the definitions of the key vocabulary on your knowledge organiser.	Create a mind map, making connections and links with things that you remember without looking back.	Make your own information cards by writing questions about key vocabulary on one side of the card.	Using a simple line, sort information from your topic into chronological, sequential or hierarchical order.	Ask a friend or family member to have the knowledge organiser or memory cards in their hands.	Read over your knowledge organiser and the key vocabulary, remembering the definition.
2	Cover or hide the information on the knowledge organiser and write down everything that you remember.	Challenge yourself by covering or hiding the knowledge organiser, using what you can recall.	On the other side of the card, write the answer to your questions. You could add pictures to your cards.	Check these with a friend or family member, using data on your knowledge organiser, add more detail.	Get them to test you by asking different questions about the information on your knowledge organiser.	Using the information you remember, draw pictures or diagrams to represent words.
3	Check your notes! Correct your mistakes and add anything that you might have missed out.	Check what you have added to your mind map by using your knowledge organiser to correct any mistakes.	Ask a friend or family member to ask you the questions you created or to ask you new questions.	Challenge yourself by adding information you recall from previous topics which are related.	Write your own sentences using the key vocabulary to replace those on the knowledge organiser.	Showing your diagrams to friends or family, ask them to guess which word you have represented.

This is your Year 3 Computing Knowledge Organiser for Spring 2. Branching Databases

Tier 2 Vocabulary

attribute

A word or a phrase that can be used to describe an **object** such as its colour, size, or price

An **attribute** defines a property of an **object**, element, or file

Attribute is another way to say property

You will will use yes/no questions to gain an understanding of what **attributes** are

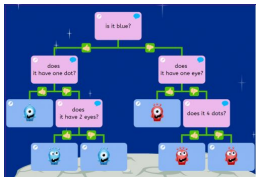
Key Vocabulary

branching database

A **branching database** (sometimes called a binary tree) is a way of classifying a group of **objects**.

A **branching database** is used to classify groups of **objects**.

You will develop your understanding of what a **branching database** is and how to create one.



objects

Something that is uniquely identifiable and has **attributes**.

An **object** can be a variable, a data **structure**, a function, or a method.

You will be sorting **objects** into groups based on their **attributes**.

online database

A database that can be accessed via the Internet.

An **online database** is a **database** accessible from a local network or the Internet, as opposed to one that is stored locally on an individual computer or its attached storage.

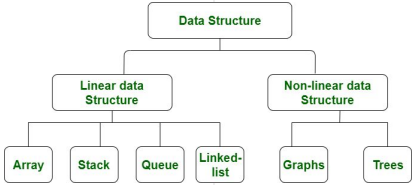
You will learn how to use an **online database** tool to arrange **objects** into a **branching database**.

structure

Construct or arrange according to a plan.

A **structure** is used to represent information about something more complicated than a single number, character, or boolean can do.

You will learn how to create a well-**structured database**.



decision tree

A non-parametric supervised learning algorithm, which is utilized for both classification and regression tasks.

You will create **decision** trees in order to help group your **objects**.

How this connects with previous learning

In Year 1, you learnt how to group data efficiently

In Year 1, you also learnt how to compare data.

In Year 2, you learnt all about the internet and everything that can be stored on there.

How this connects with future learning

In Year 4, you will consider how and why data is collected over time.

In Year 5, you will learn all about a different type of **database**- flat-file databases.

In Year 6, you will learn about how data is transferred using the internet.

This is your Year 3 Design Technology Knowledge Organiser for Spring 2. Levers and Linkages

DT Themes

mechanism

A device used to create movement in a product.

Our **mechanisms** will make part of our greetings card move.

We can create a **mechanism** using levers and linkages

Mechanisms are found in products which move including bikes and books with moving parts.

Tier 2

user

A person or thing that uses something.

We need to think about what the **user** will want from our product.

We are **users** of our playground. There are structures in our playground that appeal to primary school children.

People will **use** our greetings cards to send a message to another person.

purpose

The reason something is made or done,

When designing a new product, we need to think about the **purpose**.

In Spring 1, the purpose of your sandwich was to provide a healthy and balanced lunch.

The **purpose** of our greetings cards are to make people smile.

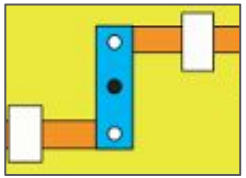
Key Vocabulary

linkage

The card strips joining one or more levers.

Linkages are used in many everyday projects.

Levers and **linkages** work together to make a range of different movements.

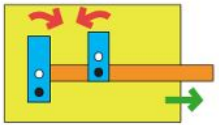


system

A set of related parts or components used to create an outcome.

Systems have an output and an output.

We will create a **system** to make our cards move.

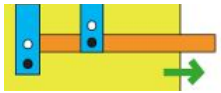


input

What goes into a system.

The **input** movement in our product is where the user pushes a card strip.

When riding a bike, the input is pushing on the pedals.

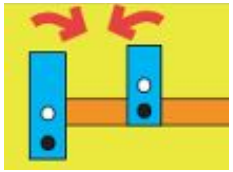


output

What comes out of a system.

The **output** movement in our product is where one or more parts of the card moves.

When riding a bike, the **output** is the wheels moving round.



How this connects with previous learning

In Year 1, you learnt how to make a moving picture using sliders and levers.

In Year 2, you created a mechanism when making a toy vehicle.

In Spring 1, you designed, made and evaluated a healthy and balanced sandwich.

How this connects with future learning

In Summer 2, you will make a gift box for a chosen user.

In Year 4, you will use pneumatics to create a moving creature.

In Year 5, you will use cams to make a display with moving parts.

This is your Year 3 History Knowledge Organiser. Ancient Civilisations

Historical Themes

empire

A group of nations that is ruled by the same leader or leaders.

The British **Empire** is a term used to describe all the places around the world that were once ruled by Britain.

Ancient Sumer is not considered an **empire** but is an early settlement which began to spread its culture..

At the end of the Ancient Egyptian period it became part of Greek **society** and then the Roman **Empire**.

society

A collection of cultural practices, language and belief systems that unite groups of people.

In Year 3 you have learnt that the **hieroglyphics** were an important part of the Ancient Egyptian **society**.

The ancient **society** of the Indus Valley existed between 3300 BCE to 1300 BCE.

The Bronze Age **societies** in Britain and the Indus Valley were happening at the same time.

Tier 2

legacy

The long-lasting impact of particular events and decisions.

The Ancient Sumerian **society** left a **legacy** which still impacts on the modern world.

Ancient Egyptian and Sumerian writing is a **legacy** which changed human civilisation.

Historians with different points of view often debate the **legacy** of certain historical periods.

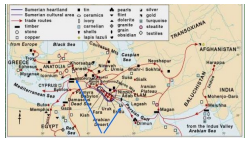
Key Vocabulary

trade

A **trade** occurs when things are swapped or given- this can be money, things, ideas or beliefs.

The geographical location of Ancient Sumer helped it **trade** with many different people and places.

The **trade** of Lapis lazuli united the Ancient Egypt, Ancient Sumer and Indus Valley civilisations.



hieroglyphics

Egyptian **hieroglyphs** were the formal writing system used in Ancient Egypt, used for writing the Egyptian language.

Hieroglyphs were written on papyrus, carved on tomb and temple walls, and used to decorate everyday objects.

Hiero" means "holy" and "glyphics" means "marks" or "writings" – so the word means "holy writings". This is an ancient Greek word.

cuneiform

Cuneiform is a system of writing developed by the ancient Sumerians c. 3500 BCE

Cuneiform gets its name from the wedge like shapes that make up its structure.

Cuneiform is about 300 years older than the **hieroglyphics** of Ancient Egypt.

ziggurat

A **ziggurat** is a type of massive structure built in Ancient Sumer.

Ziggurats were often used for religious activities, including prayer and celebrations.

The **Ziggurat** of Ur still exists and is the best preserved example of this type of building.

How this connects with previous learning

You have studied what life was like during the Stone Age and Bronze Age in Ancient Britain.

In Year 3 you learnt about the importance of rivers to humans across the world.

In Year 3 you have already learnt about the culture of Ancient Egypt.

How this connects with future learning

In Year 4 you will learn how the Roman **Empire** came after this period of history.

In Year 4 you will also learn how Britain changed after the Iron Age.

In Year 5 you will learn how Ancient Sumer laid the foundations for the Golden Age of Islam.

This is your Year 3 PSHE Education Knowledge Organiser for Spring 2. Citizenship

Key Vocabulary

career

A **career** is the work a person chooses to do through life.

Career choices are shaped by influences including interests, strengths, talents and life experiences. Understanding these helps us know why people make certain career decisions.

Throughout their lives, people might have multiple jobs or careers due to personal choices, changing circumstances or shifts in the world of work.

charity

A **charity** is an organisation that raises money for a cause such as the environment, animals or people in need. Charities also promote causes and raise awareness to try to gain a change in the law or government support.

There are international, national and local charities.

You can support a charity by making donations, fundraising or volunteering.

profession

A **profession** is a job or type of work that needs special training or study.

There are many different jobs or types of work that need special training or study. It is important for a person to choose a job that matches their skills and interests.

Sometimes people think some jobs are only for males or females. These are stereotypes and are untrue. Anyone can do a job if qualified.

recycling

Recycling is the process of converting waste materials, that would usually be thrown away, into new materials and objects. Recycling materials helps the environment by reducing rubbish in landfills and reducing the use of raw materials (natural resources).

Lots of our household waste can be recycled including: paper, cardboard, glass, plastic containers and metal cans and tins.

rights

Rights are a set of actions and principles (rules or beliefs) that someone is entitled to.

Everyone has human rights, but children also have child rights.

Child rights include: the freedom to speak out and express opinions; rights to equality, health, education, a clean environment, a safe place to live and protection from all kinds of harm.

United Nations

The **United Nations (UN)**, is an international organisation founded in 1945 after World War 2 which aims to maintain international peace and security, human rights and better standards of living.

The UN has created a set of rights for children in those countries who have agreed to sign up to them. The rights of the child cannot be taken away and adults have a responsibility to make sure children enjoy their rights.

How this connects with previous learning

In Year 1, we begun to understand the importance of rules, recognised ways in which we are the same and different to other people and the differences between spending and saving money.

In Year 2, we explored the different roles and responsibilities people have in our community. We learnt about the difference between needs and wants.

How this connects with future learning

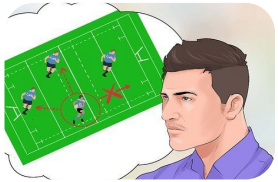
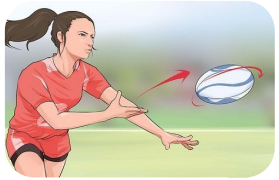
In Year 4, we will begin to understand the role of local government. We will explore career choices. We will identify and challenge stereotypes in the workplace.

In Year 5, we will begin to understand how parliament works and what happens when laws are broken. We will examine the risks associated with handling money online.

In Year 6, we will understand human rights, including the right to education. We will recognise prejudice and discrimination and learn how this can be challenged.

This is your Year 3 PE Education Knowledge Organiser for Spring 2. Tag Rugby

Key Vocabulary

space	pass	mark	dodge	attack	defend
This is an area on the pitch where there are no players.	In rugby you can **pass** the ball back to another player on your team.	**Marking** is when a player stands close to an opponent so that they can challenge them or apply pressure.	To **dodge** is to quickly move out of the way to avoid getting tackled.	**Attacking** players must try to run past the defenders to score a try.	**Defending** players must stop attacking players from scoring a try by tagging them.
To be successful in tag rugby, players need to find **space** away from defenders.	You cannot **pass** the ball forwards, This would be a foul.	To find space you need to avoid places where players are **marked.**	To score a try, you will often need to **dodge** several opponents.	If tagged, the **attacker** must pass the ball backwards to a team-mate	To **defend** well you need to plan how you will mark the players on the other team.
					

How this connects with previous learning

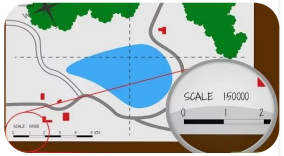
In year 1, you learnt to introduce the concept of simple tactics and throw and catch a variety of balls and objects.	In year 2, you learnt how to make it difficult for the opponent to score a point, and you began to choose specific tactics.

How this connects with future learning

In year 4 you will learn to consistently perform basic tag rugby skills and implement rules and tactics in competitive situations.	In year 5 you will learn combine basic tag rugby skills, such as quickly passing in one movement. You will select and implement appropriate skills in a game situation.	In year 6 you will choose and implement a range of strategies and tactics to attack and defend. You will combine and perform more complex skills at speed.

This is your Year 3 PE Education Knowledge Organiser for Spring 2. Orienteering

Key Vocabulary

maps	diagrams	scale	symbols	orienteering	problem solving
A picture of a particular area of the earth drawn or printed to scale on a flat surface.	A drawing or plan that shows the parts of something or how the parts work together.	The size of a map compared to the actual size of the thing it represents.	Map **symbols** are little icons that represent real objects and landmarks.	This is an outdoor activity where you walk or run a course via a series of checkpoints,	This is when you find the solution to a difficult problem.
We use maps to help us find the way from one point to another.	**Diagrams** help us to understand how something works.	For example, a map might have a **scale** of one cm to a mile.	Certain features like cities, roads and railways are very important so their map symbols are easy to see.	**Orienteering** requires you to use a map to help you find the way.	Working as a team and collaborating makes it easier to **problem solve.**
					

How this connects with previous learning

In year 1 you learnt to recognise rules and apply Them, and use and apply simple strategies for games.	In year 2 you learnt to select and apply a small range of simple tactics, and work with others to achieve a shared goal.

How this connects with future learning

In year 4 you will learn to plan strategies for solving problems. You will gain an understanding of when to use maps, symbols and a compass.	In year 5 you will explore ways of communicating in a range of challenging activities. You will navigate and solve problems from memory.	In year 6 you will use information given by others to complete a task. You will undertake more complex tasks and make amendments.

This is your Year 3 Religious Education Knowledge Organiser for Spring 2. Beliefs about God

Tier 2 Vocabulary

Key Vocabulary

enquiry

The process of seeking information.

In Year 2, you made **enquiries** into religious stories of different faiths and discussed their meaning.

In Year 3 you will **enquire** into what people believe about prayer and how they pray.

In this unit you will be asked to make **enquiries** into the ways in which Christians, Hindus and Muslims describe God.

metaphor

A **metaphor** compares something directly to something else to create an image.

There are lots of **metaphors** in religious stories. They help the reader to understand the message or meaning of a story.

Metaphors are often used in religious texts to teach believers how to live their lives.

religious artefacts

Objects that can have religious significance .

Religious traditions often use **artefacts** in worship, festivals, and import at events. They can also be used as daily reminders of a person's faith and beliefs.

Religious artefacts can be found in places of worship and in people's homes.

Arabic

The language of the Arabs, spoken in a variety of dialects.

The **Arabic** alphabet was originally developed for writing the Arabic language and is used in islam.

Arabic is the native language of about 75 million people throughout the world.

murtis

A **murtis** is a humanised image or statue of a Hindu deity.

Murtis are the colourful figures and pictures of the deities found at Hindu shrines and temples.

These figures usually form the focus for prayer, as they are believed to be filled with spirit of the god they represent.

atheist

Atheism is the absence of belief in any Gods or spiritual beings.

Atheists believe that human beings can live without the aid of Gods or scriptures.

Atheists often believe in the same ideas like kindness, love and equality as religious people, but they decide what is good or bad without any help from the idea of God.

How this connects with previous learning

In Year 1 you developed an awareness that some people regularly worship God in different ways and in different places.

In Year 2 you learnt some of the ways in which Christians, Muslims and Jewish people treat their sacred books.

How this connects with future learning

In Year 4 you will describe what happens in Christian, Sikh, Jewish & Hindu ceremonies of commitment discussing what these mean.

In Year 5 you will explore the rules of living across and between religions and suggest ways in which they might help believers with difficult decisions.

In Year 6 you will compare the similarities and differences between religions.

This is your Year 3 Science Knowledge Organiser for Spring 2. Rocks

Scientific Enquiry

identifying & classifying

Classifying means grouping things together if they have something in common. We will observe and **classify rocks** and **soils** in different ways.

comparative & fair testing

Comparative testing means testing objects to rank them. We will design tests to investigate different properties of **rocks**. **Fair tests** are enquiries that observe or measure the impact of changing one variable when all others are kept the same. We will design a fair test to investigate the water retention of different **soils**.

researching

We will **research** using secondary sources to find out about how **fossils** are made and the work of Mary Anning.

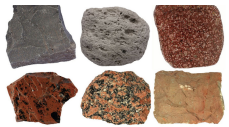
Working Scientifically

Asking scientific questions
Planning an enquiry
Observing closely
Taking measurements
Gathering and **recording** results
Presenting results
Interpreting results
Drawing conclusions
Predicting
Evaluating an enquiry

Subject Specific Vocabulary

rock

Rock is a naturally occurring material. Some examples of **rock** are: **sandstone**, limestone **marble**, **granite**, **chalk** and slate.
Types of **rock** have different properties. **Rocks** can be hard or soft. They have different sizes of grain or crystal. They may absorb water. **Rocks** can be different shapes and sizes (stones, pebbles, boulders).



soil

Soil is made up of pieces of ground down **rock** which may be mixed with plant and animal material (organic matter). The type of **rock**, size of **rock** pieces and the amount of organic matter affect the property of the **soil**.

Examples **soils** are: clay, loam, sand and silt. These all have different properties.

fossil

Some **rocks** contain **fossils.** These are the remains or traces of plants and animals that lived a long time ago. **Fossils** were formed millions of years ago. When plants and animals died, they fell to the seabed. They became covered and squashed by other material. Over time the dissolving animal and plant matter was replaced by minerals from the water.
Fossils help scientists understand what life was like millions of years ago.

marble

Marble is **rock** that develops from limestone. **Marble** lasts for a long time and does not allow much water in. These properties mean that **marble** is often used for buildings, statues and decoration.

chalk

Chalk is a soft, whitish **rock**. It is a type of limestone made from animal shells. It takes many years to form.

sandstone

Sandstone forms when grains of sand are compacted together over time. **Sandstone** can be hard or soft and is used for buildings and making glass.

granite

Granite is a hard, strong **rock** that can last without wearing for a long time. These properties mean that **granite** is often used for floors, paving stones and work surfaces.

Things you learnt in previous topics

In Year 1, you distinguished between an object and the material from which it is made. You identified and named a variety of everyday materials. You described each material's simple physical properties and compared and grouped them together. In Year 2, you compared the suitability of a variety of everyday materials for different purposes.

How this connects with future learning

In Year 6, you will recognise that living things have changed over time and that **fossils** provide information about living things that are now dead.
In Secondary School, you will learn about the composition and structure of the Earth. You will learn about the **rock** cycle and the formation of igneous, sedimentary and metamorphic **rocks**.

This is your Year 3 Science Knowledge Organiser for Spring 2. Plants and their Life Cycles

Scientific Enquiry

comparative & fair testing

In a **fair test**, the variable being changed can be counted or measured. We will investigate what happens to plants when put in different conditions.

identifying & classifying

Identifying means knowing what something is and naming it. **Classifying** means grouping things together if they have something in common. We will identify and classify seeds including how they are **dispersed**.

researching

Researching means using secondary sources to find out information. We will observe and **research** types of **seed dispersal** and explain observations.

study over time (observing)

We will **observe** changes to flowers, seeds, berries and fruits outside throughout the year.

Working Scientifically

Asking scientific questions
Planning an enquiry
Observing closely
Taking measurements
Gathering & **recording** results
Presenting results
Interpreting results
Drawing conclusions
Predicting
Evaluating an enquiry

Subject Specific Vocabulary

flowering plants

Many plants, but not all, have roots, stems/trunks, leaves and flowers/ blossom.

The roots absorb water and nutrients from the soil and anchor the plant in place.

The stem transports water and nutrients/ minerals around the plant and holds the leaves and flowers up in the air to enhance **photosynthesis**, **pollination** and **seed dispersal**.

The leaves use sunlight and water to produce the plant's food.

germination

Germination is when a plant begins to **grow** or sprout.

Often seeds need oxygen, water and the right temperature to **germinate**. However, different plants require different conditions for **germination** and growth.

pollination

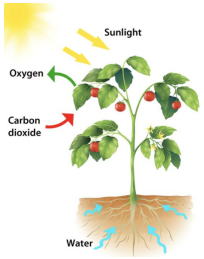
Some plants produce flowers which enable the plant to reproduce. **Pollen** is a fine powder, It is produced by the male part of the flower, is transferred by insects and the wind to the female part of other flowers.

This process is called **pollination** and forms seeds, sometimes contained in berries or fruits which are then **dispersed** in different ways.

photosynthesis

Green plants have to make their own food.

Photosynthesis is the process in which green plants use sunlight to do this.



If a plant does not get enough sunlight, **photosynthesis** cannot happen and the plant will become unhealthy and eventually die.

seed dispersal

In **flowering** plants, the flowers and fruit make their own seeds.

Dispersal means spreading out. **Seeds** need to **disperse** to allow new plants enough room to grow. Seeds are **dispersed** by the wind, insects or water. This allows identical copies of the plant to grow elsewhere

Things you learnt in previous topics

In Year 2, you observed and described how seeds and bulbs grow into mature plants. You found out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

How this connects with future learning

In Year 5, you will describe the life process of reproduction in some plants and animals. In Secondary School, you will learn more about reproduction in plants, including flower structure, wind and insect **pollination**, fertilisation, and seed and fruit formation and **dispersal**.

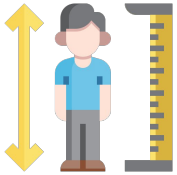
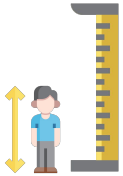
This is your Year 3 Spanish Knowledge Organiser for Spring 2.

Mi familia

Mi familia
My family

	papá
	mamá
	herman o
	herman a
	bebé
	yo

Adjetivos
Adjectives

				
alt o/a	baj o/a	guap o/a	simpátic o/a	antipátic o/a

Frases
Sentences

soy → I am

es → he/she is

tengo → I have

tiene → He/She/It has

Yo me llamo ...	My name is...
Mi mamá se llama ...	My mum's name is ...
Tengo dos hermanos.	I have two brothers.
Tengo un hermano y una hermana.	I have a brother and a sister.
Tengo 7 años y mi herman a tiene 5 años.	I am 7 years old and my sister is 5 years old.
Mi hermano tiene 5 años	My brother is five years old.
Mi papá es alt o.	My dad is tall.

Mi familia
My family

	abuel o
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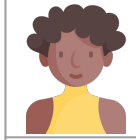	tí a
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new wave federation

At New Wave Federation, we demonstrate...

new wave federation

- Collaboration
- Creativity
- Focus
- Kindness
- Responsibility