Knowledge Organiser Booklet Year 2

Summer 2

Name		Class	

Contents

Use your knowledge organisers to help you remember more.

	Check it!	Link it!	Test it!
1	Write down the key words and definitions.	Create a mind map with all the information you can remember from your knowledge organiser.	Use your knowledge organiser to write down key facts or information onto cards.
2	Try doing this without the help of your knowledge organiser.	Check your knowledge organiser to see if there are any mistakes on your mind map.	Add pictures to help support you to remember things. Use the cards to make up questions.
3	Check your work and make any corrections using your green pen.	Try to make connections, linking the information together.	Ask a friend or a member of your family to quiz you on what you remember!

This is your Year 2 Art & Design Knowledge Organiser for Summer 2. Be an Architect

Art Themes

space

The area around, or within, objects.

The **space** within the building was light and airy.

We will consider the **spaces** in and around our designs.

form

A shape or object with three dimensions (3D).

Some architecture includes curved or geometric **forms.**

We can take inspiration from the way architects use **form** in their work.

Tier 2

design

A plan or drawing produced to show the look and function of something before or after it is made.

We can **design** our own architectural models using a variety of materials.

We will create our **designs** on paper and then transform them into three dimensional models.

Key Vocabulary

structure

Something that is made up of a number of parts connected together in an ordered way.

We can create imaginative **structures** inspired by the work of different architects.

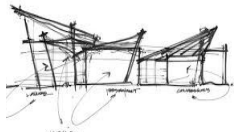
Our **structures** will be stable and strong and will include different colours.

model

Something constructed in three dimensions (often as a small scale plan).

We will construct our own **model** buildings.

We can create **models** using different techniques and materials.



scale

The size of something in relation to something else e.g. if it is bigger or smaller.

We will make small **scale** models for our architecture designs.

An architect makes a small **scale** model before the large **scale** building is built.

architect

Someone who designs buildings.

An **architect** decides what a building will look like.

An **architect** will make sure the buildings they design are well built and safe to use.

How this connects with previous learning

In DT, you designed and constructed playground structures and thought about the space in and around them.

You made toy cars using wood and card earlier in Year 2.

In Year 2, you have arranged natural materials to create art inspired by nature.

How this connects with future learning

In Year 3, you will design your own collages using different shapes and colours.

In Year 5, you will design and construct models of shelters.

In Year 6, you will explore space and form by creating your own immersive art.

This is your Year 2 Computing Knowledge Organiser for Summer 2. Programming Quizzes

Tier 2 Vocabulary

enquiry

The act of asking for information.

Making an **enquiry** helps us to work out things that we do not understand.

To find out when Henry VIII was born, I could make an **enquiry.**

Making an **enquiry** will help me to find out the most suitable command to give my sprite.

Key Vocabulary

sprite

A simple image that can be made to move on a computer programme.

A **sprite** can be moved around on screen using commands.

We can give commands to move a **sprite** where we want it to go.

algorithm

Step by step instructions for performing a task.

A set of steps in order to be followed by a computer.

A set of steps in a sequence that makes the **sprite** do what we want it to do.

sequence

A specific order of events.

A **sequence** of commands in an **algorithm** are in the correct order.

Making a mistake in the **sequence** means the **sprite** will not do what we want it to do.

blocks

Sets of instructions that can be joined together.

You can use **blocks** to build your own codes to move a **sprite.**

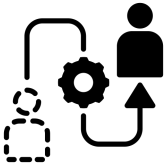
To create our quiz, we need to join different **blocks** together.

modify

To make a change.

If a program is not working properly, we need to **modify** the code.

We will **modify** our designs to make the best version of our quiz.



How this connects with previous learning

In Reception, you used Beebots to explore directional language and instructions.

In Year 1, you learned to write **algorithms** to move a floor robot.

In Year 1, you learned to write **algorithms** to program animations.

How this connects with future learning

In Year 3, you will learn to design and code a maze tracing program.

In Year 3, you will design a program to **sequence** sounds.

In Year 4, you will code a repeating game.

This is your Year 2 History Knowledge Organiser for Summer 2. The Victorians

Historical Themes

Empire

A group of nations that are all ruled by the same leader or leaders

By 1901, the **British Empire** was the largest **empire** that the world had ever seen and Queen Victoria was head of nearly a quarter of the world's people.

society

How people in a specific area live their lives

There was a big difference between the lives of rich and poor people in Victorian **society**. Swimming pools, libraries and wash houses were set up to help the poor.

Tier 2

significant

Having important meaning

There were many significant changes and developments during the Victorian era such as the invention of photography.

Key Vocabulary

trade

Buying and selling goods or services

Britain **traded** goods to and from the countries in the **Empire** and became very rich.

Ships carried these goods back to Britain.

steam engine

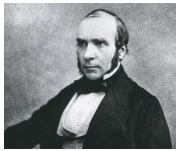
An **engine** that uses **steam** to generate power

The invention of the **steam engine** meant people started to use machines to move goods and get from place to place.

cholera

A disease that is usually spread through dirty water

John Snow reduced **cholera** in London by releasing that the disease was spread by germs and not by bad air.



factory

A building where goods are made

Many Victorian children were poor and worked to help their families. There were lots of jobs available for children in factories. It was cheaper to pay a child than an adult.

Things you learnt in previous topics

In Year 2 'Marvellous Medics' you learnt about how Mary Seacole and Florence Nightingale helped during the Crimean War.

In Year 1 'Monarchy" you learned that about Queen Victoria and why she is remembered today as a **significant** monarch.

How this connects with future learning

In Year 3, you will learn about inventions and technology in much earlier societies including Ancient Egypt and Ancient Sumer.

In Year 4 , in 'Leisure and Entertainment' you will take a closer look at how people's lives changed during and after the Victorian era.

This is your Year 2 Physical Education Knowledge Organiser for Summer 2. Hit, Catch , Run

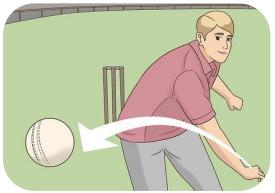
Equipment

stumps

The **stumps** are the three wooden sticks that are placed upright in the ground to make the **wicket.**

The batter tries to stop the ball from making contact with the **stumps**.

Key Vocabulary

underarm	overarm	bowler	strike	umpire
When you throw a ball **underarm**, you do not raise your arm above your shoulder.	Throwing a ball **overarm** is when you stretch your arm over your shoulder and release.	The **bowler** is the player who throws the ball to the hitter/batter.	**Strike** is another word for hit. The batter tries to **strike** the ball to score points.	An **umpire** makes sure the game is being played fairly and that the rules are not broken.
When throwing **underarm** you should face the direction you are throwing and release the ball at waist height.	When throwing **overarm** you should stand side-on to the direction you are throwing and release when your arm is in line with your head.	The **bowler** is aiming to hit the **stumps** with the ball to get the batter out.	In cricket, rounders and baseball, the aim is to **strike** the ball as far as you can. The harder you **strike**, the further the ball will go.	Cricket, rounders and baseball all have an **umpire.** In football the **umpire** is called the referee.
				

How this connects with previous learning

In Reception you learnt to send and receive objects with more accuracy and work with teammates.

In Year 1 you learnt about the roles of batters and fielders.

How this connects with future learning

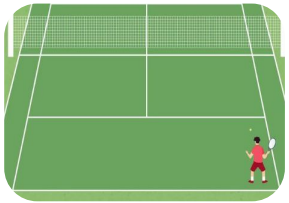
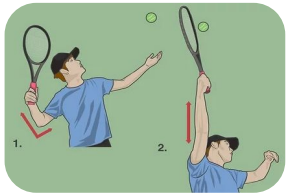
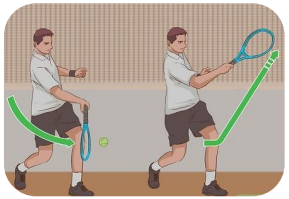
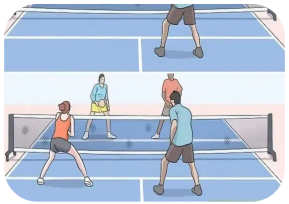
In Year 3 you will learn how to play a simple game of rounders.

In Year 3 you will also develop and use simple rounders skills linked to hitting and catching.

In Year 4 you will learn a range of tactics and how to apply them in a competitive way.

This is your Year 2 Physical Education Knowledge Organiser for Summer 2. Send and Return

Key Vocabulary

court	net	serve	strike	opponent	tactics
An area designed for specific sports such as tennis.	A **net** is used to separate two sides of the court.	The act or action of putting the ball or shuttlecock in play in various games	The action of hitting an object using a bat or racket.	Someone who is on the opposite team.	A way of thinking which can help you to achieve something.
I enjoy playing on the tennis **court.**	In tennis the **net** is in the middle of the court, the aim is to strike the ball over the net.	In order to begin the game we must **serve** the ball into the court	In tennis, you **strike** the ball over the net to try and score points.	You need to hit the ball away from your **opponent** to score points	The **tactic** for today is to hit the ball over my opponents head
					

How this connects with previous learning

In Reception we learnt how to hold a tennis racket.

In Year 1 we learnt how to hit a moving ball using a racket.

How this connects with future learning

In Year 3 we will learn how to serve to begin a tennis game.

In Year 4 we will explore different types of tennis shots.

In Year 5 we will learn how to apply different types of shots to game situations.

This is your Year 2 Science Knowledge Organiser for Summer 2. Animals Including Humans

Scientific Enquiry

researching

We will **research using secondary sources** like non-fiction books different life cycles of animals and present these using diagrams. We will ask scientific questions to people to find out how a baby or animal is looked after.

comparative & fair testing

Comparative tests compare things in order to rank them. **Fair tests** are enquiries that observe or measure the impact of changing one variable when all others are kept the same. We will explore the effect of exercise on the body.

study over time (observing)

A **study over time** looks for patterns over a period of time such as a month. We will observe animals growing over a period of time such as caterpillars.

Working Scientifically

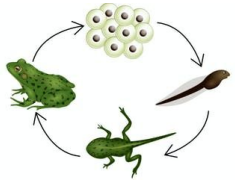
Asking scientific questions
Planning an enquiry
Observing closely
Taking measurements
Gathering and **recording** results
Presenting results
Interpreting results

Subject Specific Vocabulary

life stages

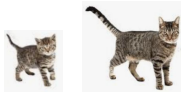
Life stages are the different stages that an animal goes through during its lifetime.
A chicken will go through the stages of: egg, chick, chicken.

A frog will go through the stages of: egg, tadpole, froglet, frog.



offspring

Animals, including humans, have offspring which grow into adults. In humans and some animals, these offspring will be young, such as babies or kittens, that grow into adults.



In other animals, such as chickens or insects, there may be eggs laid that hatch to young or other stages which then grow to adults. The young of some animals do not look like their parents e.g. tadpoles do not look like frogs.

reproduction

Reproduction is the process by which living things make offspring or young.

growth

Growth is an increase in size. A baby is the first stage in the human life cycle. Babies then grow into toddlers, then children, then teenagers, then adults.

food types

All animals, including humans, have the basic needs of water, air, shelter, sleep and food that must be met in order to survive. **Food types** are the different kinds of food that animals, including humans, eat. For example meat, fish, vegetables and rice.

hygiene

Hygiene is keeping clean. Animals, including humans, need good **hygiene** to stay healthy. It is also important to prevent infections and illness.

heartbeat

A **heartbeat** is the heart pumping blood around the body. Heart rates can increase and decrease if animals, including humans, are being active or sleeping.

exercise

Exercise is the act of being physically active. All animals need the right amount and types of exercise to stay healthy.

Things you learnt in previous topics

In Year 1, you identified and named a variety of common animals that eat other animals, eat plants, eat plants and other animals. You identified, named, drew and labelled the basic parts of the human body. You were able to say which part of the body is associated with each sense.

How this connects with future learning

In Year 3, you will identify that animals need the right types and amount of nutrition and that they cannot make their own food. In Year 5, you will describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. You will learn about different ways of reproducing. You will describe the life process of reproduction. In Year 6, you will recognise the impact of diet, exercise, drugs and lifestyle on the way human bodies function.

At New Wave Federation, we demonstrate...

new wave federation

- Collaboration
- Creativity
- Focus
- Kindness
- Responsibility