Knowledge Organiser Booklet Year 4

Autumn 1

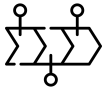
Name		Class	



Contents

Page 3	Using Your Knowledge Organiser Guide
Page 4	Art and Design Knowledge Organiser
Page 5	Computing Knowledge Organiser
Page 6	Geography Knowledge Organiser
Page 7	Personal, Social, Health and Economic Education Knowledge Organiser
Page 8	Physical Education Knowledge Organiser 1
Page 9	Physical Education Knowledge Organiser 2
Page 10	Science Knowledge Organiser
Page 11	Spanish Knowledge Organiser
Page 12	School Values

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 4 Art & Design Knowledge Organiser for Autumn 1 - Storytelling through Drawing

Art Themes

line

A long mark or stroke that could be straight, curved, thick, thin or any direction

We can make different **lines** - thick, thin, long, short, curly, zigzagging etc.

We will use lots of different **lines** in our drawings.



colour

The look something has in the light. Colours can be primary, secondary or tertiary.

We can use different **colours** to express different emotions e.g. blue can make us feel calm.

We will use colour to complete our visual narratives.



Tier 2

purpose

The reason something is done or created.

The **purpose** of our sequence of drawings is to create a visual narrative or story.

The **purpose** of illustrations is to tell a story through pictures.



Key Vocabulary

illustration

A picture, artwork or decoration that often accompanies text e.g. in a book, magazine or poster.

We will create **illustrations** inspired by the poems we read.

Illustrations can bring a story to life using images,



visual narrative

Storytelling through the use of images including drawings.

We can create a **visual narrative** through making a series of drawings.

Visual narratives can communicate ideas and stories through pictures.



sequencing

Arrange in a particular order.

We use **sequencing** when we arrange different drawings to tell a story.

We will use **sequencing** in our own visual narratives.



composition

Arrangement of different parts of an artwork - e.g. shapes, sizes, positions.

We will decide how to arrange our **compositions** in each of our illustrations.

A **composition** can be very simple or complicated with lots of elements.



How this connects with previous learning

In Year 2, you used expressive lines in your paintings.

In Year 3 you used earthy colours suchs as browns and oranges when exploring cave art.

In Year 3 you made animated drawings.

How this connects with future learning

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

In Year 4, you will make 3D sculptural forms inspired by food.

In Year 6, you will create your own activism posters expressing a message.

This is your Year 4 Computing Knowledge Organiser for Autumn 1 - The Internet

Tier 2 Vocabulary	Key Vocabulary				
network	**network switch**	**router**	**server**	**WAP**	**website**
Interconnected computing devices that can exchange data and share resources with each other.	A **network** switch is **networking** hardware that connects devices on a computer.	A device that passes information between two computer **networks.**	A computer that manages the **network** and stores files.	A **networking** hardware device that allows other Wi-Fi devices to connect to a wired **network.**	A group of World Wide Web pages usually containing hyperlinks to each other.
A group of two or more devices or nodes that can communicate.	A device that enables multiple devices on a **network** to be connected with each other.	**Routers** send data packets to the right parts of a computer **network**.	Physical **servers** require humans to maintain them as they can become overloaded and out of date.	A device, connected to a wired **network**, that sends and receives wireless signals for/from devices with WiFi connectivity.	The World Wide Web is part of the internet which contains **websites** and web pages.
A group or system of interconnected people or things.	You will learn all about how the internet connects multiple devices at the same time.	This half-term, you will learn that computers and **networks** on the internet are a connected by lots of **routers**.	You will explore how servers are used to manage, maintain and operate **networks**.	You will learn that you need to have a connection to the internet in order to explore **websites**.	You will explore a variety of **websites** and will investigate what they can and cannot do with the content on them.
This half-term, you will explore your school's **network** and how it is used.					

How this connects with previous learning			How this connects with future learning		
In Year 1, you developed an understanding of technology and the internet and how it can help you.	In Year 2, you explored IT around us an discovered how it helps us in the home, workplace and hospitals.	In Year 3, you learnt all about different digital devices and how you can use the internet on them.	In Year 5, you will develop your understanding of computer systems and how information is transferred between systems and devices.	In Year 6, you will explore how the internet facilitates online communication and collaboration.	In Year 6, you will explore how data is transferred over the internet.

This is your Year 4 Geography Knowledge Organiser for Autumn 1 - Map It

Tier 2 Vocabulary

data

Facts and statistics gathered together.

In Year 2, you collected **data** by carrying out a traffic survey.

We will collect **data** by creating sketch maps of human and physical features and measuring the **noise** level.

I decided I needed to collect more **data** before I could answer the question,

conclusion

The end result of something.

In Year 2, you used your traffic survey to draw **conclusions** about which road had the most traffic.

We will use our **data** to draw **conclusions** about which part of our local area has the greatest **noise pollution.**

I shared my **conclusions** with the team.

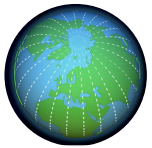
Key Vocabulary

longitude

Describes how far east or west a place is.

The Prime Meridian has a **longitude** of 0°.

The **longitude** of Paris, France is 2° East.



topography

The physical features of an area of land.

Natural formations such as hills, mountains, rivers and valleys are all **topographical** features

A **topographic** map includes elevations like mountains and hills.



land use

The way in which land is used by people.

In London, **land use** includes offices, retail and hotels.

Agriculture is an example of **land use** .



noise pollution

Sounds that can harm the people and creatures who hear them.

The building site was causing **noise pollution** in the local area.

There are many causes of **noise pollution** including local transportation.



fieldwork

Fieldwork is the gathering of information about something in a real environment. It is not done in an office or classroom.

Fieldwork allows geographers to observe, real-life geographical processes. One of the tools they use are maps.

Fieldwork can be carried out in a natural environment like a park, river or local community.



How this connects with previous learning

In Year 2, you devised simple maps of the local area.

In Year 3, you learnt about rivers - a topographical feature.

In Year 3, you learnt that we can use latitude to identify the climate.



How this connects with future learning

In spring 1, you will learn about mountains, volcanoes and earthquakes - all topographical features.

In summer 1 you will learn about land use in North and South America.

In Year 6, you will apply your knowledge of **longitude** when learning about time zones.

This is your Year 4 Personal, Social, Health, Economic Education Knowledge Organiser for Autumn 1 - My Healthy Self

Key Vocabulary

balanced diet

A **balanced diet** is eating the right amounts of different foods to keep the body healthy.

We need to eat a balance of: carbohydrates, nutrients that give our body energy; protein, a nutrient that helps the body grow and repair, and vitamins and minerals, nutrients that help the body work properly and stay healthy. We should eat less of foods high in fat, salt or sugar.



hydrated

As part of a balanced diet, we need to stay **hydrated** .

Being hydrated means we have enough water in our bodies to make them work properly including helping with concentration and movement. When the body is dehydrated, it does not have enough water and it may not work as effectively. Being thirsty, having a slight headache or feeling low on energy can be signs of dehydration. Flavoured water can contain lots of sugar so we should only have it as a treat.



growth mindset

A **growth mindset** is believing we can achieve things if we work hard. "I can't do it yet, but if I practise, I will be able to!"

We can decide what type of person we want to be and we can develop skills and qualities to achieve this.

We can improve our resilience by reflecting on our failures, identifying our strengths and identifying our next steps.



mental health

Our **mental health** is our emotional wellbeing. Good mental health is equally as important as good physical health.

There are some simple things that we can all do that can help our mental health. They are known as the five ways to wellbeing. They are: be active, take notice, connect, keep learning and give.

If you are worried about your mental health, you should talk to a trusted adult.



resilience

Resilience is a willingness to keep trying even when things become hard.

When you experience a challenge and develop strategies to deal with it positively, you become more resilient.

It is normal to feel disappointment or frustration when things go wrong. Talking about these feelings and reflecting on what could have been done differently can be helpful.



support

Support is help or care given to others or received from others.

Trust, believing someone will be honest, kind or do the right thing, can help people decide who to ask for help. Trusted adults are grown-ups who can help you and keep you safe. A trust team includes the trusted adults in different parts of your life. A trusted adult will listen, reassure, help you decide what to do and get further help if needed.



How this connects with previous learning

In Year 2, we described a range of feelings and developed simple strategies for managing them. We understood what it means to have a healthy diet and look after our teeth.

In Year 3, we explored body language, feelings, mood and strategies to help with big feelings. We understood the importance of sleep and following a sleep routine.



How this connects with future learning

In Year 5, we will understand the purpose of failure. We will understand the importance of relaxation and sleep. We will be able to plan healthy meals.

In Year 5, we will understand the importance of a balanced diet. We will explore the benefits of different types of activities. We will learn about self-regulation and appropriate responses.

In Year 6, we will explore dental health and lifelong healthy eating and exercise habits. We will learn further self-regulation strategies and the importance of resilience and how to manage challenges.

This is your Year 4 Physical Education Knowledge Organiser for Autumn 1 - Football

Key Vocabulary

tackle	control	defending	dribble	marking	attacking
To seize and take hold of the ball with the intention of stopping the opponents team from moving forward.	The players ability to handle the ball while dribbling or passing and maintain possession.	Defending refers to the responsibilities of the team that are out of possession of the ball.	To take the ball forwards or passed opponents with slight touches using your feet.	Marking is an organized defensive tactic which aims to prevent a member of the opposing team from taking control of the ball.	To try and advance towards the opposition goal to create a scoring opportunity.
In football the defenders usually **tackle** the attackers to stop them from scoring.	In football to we show **control** by receiving a pass and keeping the ball under control while moving or passing it to another player.	In football **defending** means trying to stop the opposing team from advancing by blocking, intercepting or tackling players with the ball	The attacking player **dribbles** past the defenders to try and create a shooting opportunity.	In football **marking** means to closely follow and opponent to prevent them from receiving the ball or taking the ball forwards.	In football the **attackers** dribble and pass the ball to their teammates to advance and create opportunities to score.
					

How this connects with previous learning

In year 2 you learned to kick the ball over long and short distances.	In year 3 you learned to show basic control and pass the ball with some accuracy.

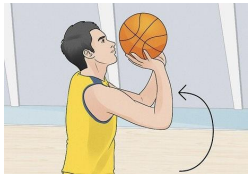


How this connects with future learning

In year 5 you will learn to apply attacking and defensive tactics in games.	In year 6 you will choose and use a range of strategies to attack and defend.	In year 6 you will learn to perform a wider range of more challenging skills.

This is your Year 4 Physical Education Knowledge Organiser for Autumn 1 - Handball

Key Vocabulary

footwork	foul	free throw	double dribble	3 step	link
Footwork refers to the movement and positioning of a players feet. It requires agility and balance to be able to change direction.	A **foul** refers to an illegal action made by a player that results in a penalty or disadvantage to their team.	A **free throw** is awarded when the opposition team commits a serious foul or violation.	A **double dribble** is when a player is bouncing the ball with one hand, stops and then starts dribbling again.	The **3 step** rule refers to the number of steps a player can take whilst in possession of the ball.	Players **link** up to by positioning themselves strategically to create passing option and provide support.
The players agile **footwork** allowed them to get away from a defender creating space to take a shot.	The referee blew the whistle and awarded a penalty shot to the opposing team after the player committed a **foul**.	After a foul was called against the defending team, the referee signalled for a **free throw** .	The referee called for a **double dribble** as the player lost control of the ball, caught it then started to dribble again.	The player took **3 steps** towards the goal and took a powerful shot.	The player had good awareness of their player to be able to link play between teammates, resulting in a good passing sequence.
					

How this connects with previous learning

In year 2 you learnt basic attacking and defending skills.	In year 3 you learnt how to pass, intercept and the basic rules of handball.

How this connects with future learning

In year 5 you will learn specific handball skills in game situations,	In year 5 you will learn to use a wide range of handball rules consistently.	In year 6 you will learn to work as a team to improve tactics and develop defensive skills.

This is your Year 4 Science Knowledge Organiser for Autumn 1 - States of Matter

Scientific Enquiry

identifying & classifying

Identifying means knowing what something is and naming it. **Classifying** means grouping things together if they have something in common. We will name and classify materials, explaining why they are **solids**, **liquids** or **gases**.

comparative & fair testing

Comparative testing means testing objects in order to rank them. **Fair tests** observe or measure the impact of changing one variable when all others are kept the same. We will explore how to melt ice more quickly and changing the rate of **evaporation**.

researching

We will **research using secondary sources** to find out about the **water cycle**.

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

solid

A **solid** is a material that keeps its shape and has a fixed volume. **Solids** like sand can be confused with liquids because they can be poured, but when poured they form a heap and they do not keep a level surface when tipped. Each individual grain demonstrates the properties of a **solid**.

liquid

A **liquid** has a fixed volume but changes in shape to fit the container. A **liquid** can be poured and keeps a level, horizontal surface.

gas

A **gas** fills all available space and has no fixed space or volume.

boiling point

Boiling is a change of state from **liquid** to **gas** that happens when a **liquid** is heated to a specific temperature and bubbles of the **gas** can be seen in the **liquid**. The **boiling point** of a material is the temperature at which a **liquid** will turn into a **gas**. Different **liquids** have different **boiling points**. **Water** has a **boiling point** of 100 °C. Sunflower oil has a much higher **boiling point** of 450 °C. This is why this **liquid** is useful for cooking.



freezing point

Freezing is a state change from **liquid** to **solid**. The **freezing point** is the temperature at which a **liquid** will turn into a **solid**. Different **liquids** have different **freezing points**. **Water** has a **freezing point** of 0 °C at which it then turns into ice.



melting point

Melting is a state change from **solid** to liquid. The **melting point** is the temperature at which a **solid** will turn into a **liquid.** Butter has a **melting point** of 38 °C.

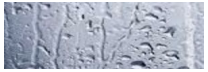
evaporation

Evaporation is the same state change as **boiling** (**liquid** to **gas**), but it happens slowly at lower temperatures and only at the surface of the **liquid**. **Evaporation** happens more quickly if the temperature is higher, the **liquid** is spread out or it is windy.



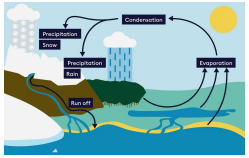
condensation

Condensation is the change back from a **gas** to a liquid caused by cooling.



water cycle

Water at the surface of seas or rivers **evaporates** into **water** vapour (a **gas**). This rises, cools and condenses back into a **liquid** forming clouds. When too much **water** has condensed, the **water** droplets in the cloud get too heavy and fall back down as rain, snow or sleet and run back into rivers etc. This is known as precipitation. These processes are known as the **water cycle**.



Things you learnt in previous topics

In Year 1, you learnt to name a variety of everyday materials and their simple physical properties. You compared and grouped together everyday materials using their properties. In Year 2, you learnt to compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass. You found out how the shapes of **solid** objects made from some materials can be changed.

How this connects with future learning

In Year 5, you will compare and group everyday materials. You will know some materials will dissolve in **liquid** to form a solution and decide how mixtures might be separated. You will give reasons for the particular uses of everyday materials. You will also demonstrate that dissolving, mixing and changes of state are reversible changes and explain that some changes result in the formation of new materials, usually irreversible.

Year 4 Spanish Knowledge Organiser
Todo sobre mí

Los meses
The months

enero January	**febrero** February
marzo March	**abril** April
mayo May	**junio** June
julio July	**agosto** August
septiembre September	**octubre** October
noviembre November	**diciembre** December

Preguntas
Questions



¿Cómo estás?/ ¿Qué tal?
Estoy .....



¿Cómo te llamas?
Me llamo.....



¿Cuántos años tienes?
Tengo ..... años.



¿Cuándo es tu cumpleaños?
Mi cumpleaños es el ..... de .....

Los números
The numbers

1	uno	11	once	21	veintiuno
2	dos	12	doce	22	veintidos
3	tres	13	trece	23	veintitres
4	cuatro	14	catorce	24	veinticuatro
5	cinco	15	quince	25	veinticinco
6	seis	16	dieciseis	26	veintiseis
7	siete	17	diecisiete	27	veintisiete
8	ocho	18	dieciocho	28	veintiocho
9	nueve	19	diecinueve	29	veintinueve
10	diez	20	veinte	30	treinta

¿Cuál es tu color favorito?
Mi color favorito es ....

rojo	azul
amarillo	verde
naranja	rosa
morado	marrón
blanco	gris
negro	

Saludos
Greetings



Buenos días
Good morning



Buenas tardes
Good afternoon



Buenas noches
Good night

Sentimientos
Feelings

Estoy	
	bien
	mal
	feliz
	triste
	fantástico
	hambriento/a
	cansado/a
	aburrido

At New Wave Federation, we demonstrate...



Collaboration

Creativity

Focus

Kindness

Responsibility