Knowledge Organiser Booklet Year 6

Spring 2

new wave federation

Name Class

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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 6 Computing Knowledge Organiser for Spring 2. Introduction to Spreadsheets

Tier 2 Vocabulary			Key Vocabulary				
organise	data	cell	formula	operation	duplicating		
To arrange and order systematically.	A letter, word, number etc. that has been collected for a purpose.	A cell is the intersection where a row and column meet on a spreadsheet .	An expression telling the computer what mathematical operation to perform.	An action that is carried out to accomplish a given task.	An exact copy of another thing.		
Data can be organised in order to create a spreadsheet .	Data is information that is used to analyse something or make decisions.	A cell is an area on a spreadsheet where data can be entered.	A formula will allow you to perform calculations on values within your spreadsheet .	5 types of computer operations , to input, process, output, store and control.	Two or more records of the same data .		
Lessons at New Wave Federation are organised each term.	You can place data into columns and rows to create your own spreadsheet .	Cells can be referenced and formatted.	Using formulas to identify changing inputs that will change the output of the cell .	Data can be used in different operations.	Learners will apply a formula to multiple cells by duplicating it.		
Once data has been organised then a formula can be applied in order to answer questions or analyse it.			f_{x}		₹ 1		
How this connects with previous learning			How this connects with future learning				
In Year 3, you developed your understanding of collecting data through yes or no questions. By doing so, you branched data into groups of objects or subjects.	In Year 4, you began to understand why data is collected over time. You looked at data points, data sets and logging intervals.	In Year 5, you were introduced to flat-file database, where you learnt how to store and organise data in records.	In KS3, you will continue to develop an understanding of spreadsheets through the concept of cell referencing.	Data and spreadsheets are a them in real life context? Think together such as a birthday pr friends. You can gather, collect about cost of transportation, of excursions and anything else.	of an event you might put arty or a holiday with family or t and sort data when thinking		

This is your Year 6 Design Technology Knowledge Organiser for Spring 2. Complex Switches

DT Themes Tier 2		Key Vocabulary				
electrical system	constraint	function	flowchart	monitor	control program	component
A set of electrical components that work together to achieve a desired outcome.	Something that limits or controls what you can do.	The purpose or role that an object or person fulfills.	A chart or diagram that shows step-by how something grows, develops or is made.	To regularly check the development or progress of something.	To make all the decisions about the way something is run.	A part of something.
Every product which uses electricity needs an electrical system.	Time constraints mean that there is only a certain amount of time to complete a project.	The function of an umbrella is to keep you from getting wet.	A flowchart can help us to plan out the steps of a project.	You can use sensors to monitor constraints in a program.	A control program can be used to control circuits including a range of components	Our electrical systems will involve many different components .
An electrical system is used to light up rooms.	A money constraint means that you are given a budget which you must stick to.	A product can have one function or multiple functions .	We will use a flowchart to show the steps of making our game,.	We will use Crumble to will help to monitor and control our games.	We will use the control program Crumble to program an element of our game.	We can choose from a range of components including bulbs, buzzers and motors in our games.
Switches can be used within electrical systems to turn outputs on and off.	Limited resources can also be a constraint for a project.	A sofa bed has two functions. It can be used as a sofa and converted into a bed.	Has the water No No Noise Tre Stop	Set (1) to (2) to (3) to (4) t	Constant and	Bettery Wave Bulb Buzzer MM
How this	s connects with previou	s learning		How th	is connects with future	learning
In Year 4, you designed, made and evaluated a lamp.	In Year 5, you planned the different steps needed when making your own bread.	In Autumn 2, you designed, made and evaluated a moving scene using a pulley system.	90	In Summer 2, you will design, make and evaluate a tablet case.	In Secondary School, you will explore more advanced electrical systems using programmable	In Secondary School, you will identify and solve your own design problems.

components.

This is your Year 6 History Knowledge Organiser for Spring 2. Building the Past

Historical Themes		Tier 2		Key Voc	abulary	
innovation	society	perspective	architect	act	tax	Blitz
A new idea, a new product or a new way of doing something	A collection of cultural practices, language and belief systems that unite groups of people.	A way of thinking about and understanding something.	A person who designs buildings.	A law passed by the government.	An amount of money paid to the government so that it can pay for public services.	The heavy bombing of British cities by enemy aircraft in 1940/41 is referred to as the Blitz .
In Year 5 you learnt about the innovation of democracy in Ancient Greek society and how democracy is still used to rule the UK today.	In Year 5 you learnt that Islamic society valued education and that 'Seeking knowledge is obligatory upon every Muslim'.	From the 1660s the monarch's perspective was that those who did not support the Church were seen as a threat to the state and social order.	Christopher Wren was the architect who designed the new St.Paul's Cathedral after the Great Fire of London damaged it in 1666.	In 1667 a law was passed called 'An act for rebuilding the City of London' it stated that all new buildings should be built of brick or stone.	From 1667 - 1677 every 1.3m³ of coal that entered London had to pay tax to rebuild roads, public buildings and St.Paul's.	During the Blitz on 29/12/1940 the City of London was heavily bombed it became known as the 'second Great Fire of London.'
Wren used the innovation of a domed roof for St.Paul's. Viñoly's innovation used enlarged floor plates at the top of the building.	Christianity had a lot of influence in British society. 87 churches were destroyed in 1666. 51 churches were rebuilt by Wren for worship.	From the perspective of the public and a panel of architects, Rafael Viñoly's 'Walkie Talkie' building was voted the ugliest new building in 2015.	As the architect for St.Paul's, Wren drew a scaled design for the famous cupola (dome shaped roof). This drawing is at the British Museum.	This act also imposed a maximum number of storeys per house for a fixed number of abodes/homes to eliminate overcrowding.	By 1670 the tax was extended to coal coming into all ports and harbours along the Thames Estuary, with 3/16 for St. Paul's.	That night of the Blitz St.Paul's was protected by volunteer firefighters who threw sandbags on a bomb that went through the roof of the cathedral.

Things you learnt in previous topics

Islamic mathematician Al-Khwārizmī introduced including those who did the **innovation** of a decimal counting system influenced British which we use today.

not settle in Britain has architectural designs.

Innovation from cultures In Year 1 you explored the causes and consequences of the Great Fire of London, 1666.



How this connects with future learning

The British Empire used a colonial **tax** system to fund its expansion. America's 13 colonies stopped paying UK tax.

Slavery Abolition Act, (1833), gradually abolished slavery in most colonies in the British Empire.

Olaudah Equiano's writing about his enslavement gives a powerful perspective to help abolish slavery.

This is your Year 6 PSHE Education Knowledge Organiser for Spring 2. Citizenship

Key Vocabulary

career routes Career routes are the

different paths that can be someone differently taken in various job sectors because of different such as health care, information technology. as protected real estate and

When considering a career, it is important to think about what you are good at, what interests you and what is important to you. You can then explore the knowledge and skills you will need.

development, education.

agriculture, and

government.



discrimination **Discrimination** is treating

age, disability, gender,

religion and beliefs.

which helps to stop

discrimination.

race, sexual orientation,

factors. These are known

We can challenge discrimination but we must not put ourselves, or others, in danger to do so. The Equality Act is the law

environment The **environment** is the

local surroundings or place a person lives or works in. The food we choose to eat characteristics and include can have an impact on the

environment. Individuals and governments can make changes around food to help the environment such as reducing plastic packaging; buying seasonal, locally produced food; supporting fair trade



producers and sellers and

care of animals.

human rights Human rights are specific

rights which belong to every person.

The United Nations developed a set of human rights which apply to everyone. These are called We often use the word the Declaration of Human prejudice to describe a Riahts. person's dislike of others.

authority who protect our human rights for example the police, judges, politicians and community/pressure groups. We should know our rights and protect each other's rights.

There are people in

prejudice **Prejudice** is making

assumptions or judgments about someone or a group of people based on certain information or lack of information.

when they have no good reason. People can have prejudices about many things including: gender, race, class, religion, sexualtiy, disability and culture.



workplace Workplaces are different

settings where work is done, such as offices, hospitals, schools, shops or factories.

careers are available that require various skills and responsibilities. Jobs have different salaries which can be linked to the level of training needed for the job (such as a university degree). As people get older, it is common to change jobs, switch

sectors or develop new

interests.

In a workplace, different



How this connects with previous 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 began to understand how parliament works and what happens when laws are broken. We examined the risks associated with handling money online.



sound knowledge and

In KS3, we will develop a understanding of the role of law and the justice system in our society and how laws are shaped and enforced.

How this connects with future learning

In KS3, we will learn more about the development of the political system of democratic government in the UK. including the roles of citizens. Parliament and the monarch.

In KS3, we will further develop our understanding of the functions and uses of money. the importance and practice of budgeting, and managing risk.

This is your Year 6 PE Education Knowledge Organiser for Spring 2. Tag Rugby

Key Vocabulary	Key \	Vocabu	lary
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transition	agility	principle	support	analyse	turnover
The process or a period of changing from one state or condition to another.	Agility is the ability to move and change the direction/position of the body quickly while under control.	The basic principle of sports and games is to win.	To give assistance to someone to help them achieve a goal.	To study or examine something in detail in order to understand it.	When the opposition pick up a loose ball so then gain possession.
For each team to be successful, transition is key in tag rugby as the roles are constantly changing.	Agility is used to evade the opposition when running with the ball.	Each game has a set of principles that outline the approach a player needs to take.	Support is key in maintaining possession as it allows players to pass the ball to teammates.	Analysing your own, as well as the other team's, play will help you gain advantage.	A turnover occurs when the attacking team drop the ball behind them and the opposition quickly pick it up.

How this connects with previous learning

In year 3 you learnt to handle a rugby ball with confidence and evade attackers using footwork and body control.

In year 4 you learnt to consistently perform basic tag rugby skills, and skills such as catching implement rules and develop tactics in competitive situations.

In year 5 you learnt to combine basic tag rugby and quickly passing in one movement.



How this connects with future learning

use principles of attack and defence to plan strategy and tactics for tag rugby.

In year 7 you will learn to In year 7 you will learn to further develop your understanding and knowledge of the rules of tag rugby.

This is your Year 6 PE Education Knowledge Organiser for Spring 2. Orienteering

Key Vocabulary

		Rey vo	cubului y		
decypher	checkpoint	solve	adapt	knot	orient
To work out the meaning of a code and change it into ordinary language.	A checkpoint is a reference point that helps us know where we are and where we're going.	To find or figure out an answer to a problem or challenge.	To make something work by making small changes.	When you tie together two pieces of rope or string in a way that holds strong.	When you orient yourself towards something, you point yourself towards it.
You might need to decipher a message because it is unclear or written in code.	Checkpoints are sometimes known as waypoints.	You can use mapwork to help you solve orienteering challenges.	We will often need to adapt a plan or design when we meet challenges.	There are many different types of knot for different situations.	You can use a compass to help orient yourself accurately.
ITKTL @ LTEKTZ, O SGCT VHAHIGV!		SOLUTION OF O	carred	March 1	

How this connects with previous learning

In year 3 you learnt to differentiate between and when it is collaborative.

In year 4 you learnt to plan In year 5 you learnt to and refine strategies for when a task is competitive solving problems, and gain communicating in a an understanding of when to use maps, symbols and a compass.

explore ways of range of challenging activities, and to solve problems from memory.



How this connects with future learning

In year 7 you will learn to further develop your knowledge of problem solving strategies and effective mapwork.

In year 7 you will learn other types of orienteering challenges and the different team roles that are involved.

This is your Year 6 Religious Education Knowledge Organiser for Spring 2. Expressing Beliefs

Tier 2 Vocabulary

Key Vocabulary

legacy

Something that is a part of your history or remains from an

In Year 4, you learnt that the Guru Granth Sahib - the Sikh holy book is the **legacy l**eft by the 10 qurus.

earlier time.

In year 6 you will look at the **legacy** of religious buildings and art and understand their historical significance.

Your own personal **legacy** is what you leave behind and how people will remember you when you have gone.

mosque

A **mosque** is where Muslims go to pray and study teachings from the Qur'an.

Muslims are taught to pray five times a day, at home or at the mosque. **Mosques** are usually open for worship at any time. At the **mosque**, a special prayer service takes place every Friday.

When entering the mosque, women and girls cover their heads. Everyone washes certain parts of their body in a special way called wudu and people take off their shoes before going into the prayer hall.



How this connects with previous learning

In Year 3, you learnt about Muslim and Christian prayer and worship. In Year 5, you learnt about the 5 pillars of Islam and the 10 Commandments which are used to guide Muslims and Christians in their daily lives.

cathedral

A **cathedral** is a much larger place of worship than a church and is run by a bishop. The bishop usually resides on the cathedral premises.

A **cathedral** is a place of Christian worship that is also used for a wide range of community events and activities.

Christian worship involves praising God in music and speech, readings from scripture, prayers, a sermon, and various holy ceremonies.



99 names

Allah has many different descriptions and it is hard to represent him in a few words so the Qur'an teaches that Allah has **99 names**.

Each of the **99 names** relates to a particular attribute of Allah, making him easier to understand and relate to for Muslims.

Some of those names are:

- -The Creator, The Maker
- -The Most Loving:
- -The Most Merciful
- -The All-Knowing
- -The Provider



Christian Aid

Christian Aid is a charity that follows the teaching of Jesus Christ who commanded his followers to love their neighbour and work for a better world.

Christian Aid works with communities to fight injustice, respond to humanitarian emergencies, campaign for change and help people claim the services and rights they are entitled to.

Other religious charities which do similar work are Islamic Relief and Khalsa Aid.



Zakat

Zakat is the third pillar of Islam. The Five Pillars of Islam are duties that Muslims try to carry out. They help them to live a good and responsible life, and bring them closer to God (Allah) and their community. Each pillar has a different name: Shahada, Salah, Zakat, Sawm and Haii.

The third pillar, **Zakat**, involves looking after other people. Each Muslim gives up a share of their wealth each year to provide for those less fortunate.

The word Zakat means to purify or cleanse. As a person gives away a share of their wealth they become cleansed from selfishness and greed.

How this connects with future learning



In Year 7, you will continue to build upon your knowledge of the various religious and non-religious traditions by learning in different ways. You will continue to build an awareness of your own views and develop your own opinions and arguments about different religions and worldviews.

This is your Year 5 Science Knowledge Organiser for Spring 2. Evolution and Inheritance

Scientific Enquiry

researching

We will research using secondary sources to find out how the population of peppered moths changed during the industrial revolution. We will compare the ideas of Charles Darwin and Alfred Wallace on evolution. We will revisit the work of Mary Anning and explain how this provided evidence of evolution.

pattern seeking

Pattern seeking means looking for links between variables. We will identify features in animals and plants that are passed onto offspring and explore this process by considering the artificial breeding of animals or plants. We will use models to demonstrate evolution patterns.

Working Scientifically

Asking scientific auestions Plannina an enquiry **Observing** closely Taking measurements Gathering and recording results

Presenting results **Interpreting** results Drawing conclusions Predicting **Evaluating** an enquiry

adaptation

Plants and animals have When living things characteristics that make reproduce they pass on them suited (adapted) to characteristics to their their environment. Scientists such as Charles as inheritance. Darwin and Alfred Wallace observed with to sept environmen' Wallace observed how different environments to parents. These include become distinct varieties with their own characteristics.





style, are acquired.

Subject Specific Vocabulary inheritance

offspring. This is known There are some kev characteristics that we inherit from our birth vour eye colour, skin colour, shape of your ears may not suit the new and whether you can roll

your tongue or not.



Characteristics that living numbers to reproduce things develop during their lifetime. like hair

variation

All living things produce offspring of the same kind characteristics become but they are rarely identical to their parents, These are **variations** which make them different to their parents. If the environment changes rapidly, some variations of a species die. If the environment changes slowly, animals and plants with variations that are best suited survive in greater and pass their characteristics on to their young.

evolution

Over time, inherited more dominant within the able to reproduce population. Over a very long period of time, these able to reproduce when characteristics may be so adult. For example. different to how they were originally that a new and dogs are another **species** is created. This is **species**. the theory of evolution. Fossils give us evidence environment and they will of what lived on the Earth millions of year ago and provide evidence to support the theory of evolution.



species

A species is a group of similar organisms that are offspring which will be humans are one species



Things you learnt in previous topics

In Year 2, you identified that most living things live in habitats to which they are suited and described how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. You noticed that animals, including humans, have offspring which grow into adults. In Year 3, you described in simple terms how fossils are formed when things that have lived are trapped within rock. In Year 4, you recognised that environments can change and this can pose dangers to living things. In Year 5, you described the life process of reproduction in some plants and animals.



How this connects with future learning

In KS3, you will learn: heredity is the process by which genetic information is transmitted from one generation to the next; a simple model of chromosomes, genes and DNA in heredity; the variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural selection; changes in the environment may leave individuals within a species (and some entire species) less well adapted, which in turn may lead to extinction.

Lugares Places



playa playa s

mar mar<u>es</u>

desierto desierto s

bosque

bosque s

selva selva <u>s</u>

en - in de - from

y -and pero - but

There is There are

This is your Year 6 Spanish Knowledge Organiser for Spring 2. Países

Estar To be Temporary			S e To	Per	manent
yo (I)	estoy	I am	yo (I)	soy	l am
tu (you)	est <u>ás</u>	You are	tu (you)	eres	You are
él/ ella (he/she)	est <u>á</u>	He/ she is	él/ ella (he/she)	es	He/ she is

La bander <mark>a</mark> de España es roj <mark>a</mark> y amarill <mark>a</mark> .	The flag of Spain is red and yellow.
<u>Soy</u> de Inglaterra.	I am from England.
<u>Estoy</u> en Inglaterra	I am in England (right now).
María <u>es</u> de Francia pero <u>está</u> en Italia.	María is from France but she is in France (right now).
Es frances a.	She is French.
En España <u>hay</u> ríos, montañas, mar <u>es</u> , playas, desiertos y bosques.	In Spain <u>there are</u> rivers, mountains, seas, beaches, deserts and forests.
En Italia <u>hay</u> río <u>s</u> , montaña <u>s</u> , mar <u>es</u> , playa <u>s</u> y bosque <u>s</u> , <u>pero no hay</u> desierto <u>s</u> o selva <u>s</u> .	In Italy <u>there are</u> rivers, mountains, seas, beaches and forests <u>but there</u> <u>are no</u> deserts or jungles.

Países y nacionalidades Countries and nationalities



To help you remember and recall key information, you can make your own notes here.



At New Wave Federation, we demonstrate...

