



# Knowledge Organiser Booklet

## Year 6

## Summer 2



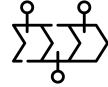




Name		Class	
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# Use your knowledge organisers to help you remember more.

	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 Summer 2. Sensing Movement

## Tier 2 Vocabulary

## Key Vocabulary

### process

A series of actions or steps taken in order to achieve a particular end.

Fundamental steps to programming are input, **process** and output in order for a code to run.

We need to **process** applications when families want to join the school.

You will be inputting, **processing** and outputting information so that a device can run a program.

### variable

Something (often a number) that can be changed or adapted.

A named piece of data (often a number or text) stored in a computer's memory, which can be accessed and changed by a computer program.

During this unit, you will be asked to change the value of a **variable** using selection.

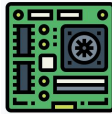


### accelerometer

A device that measures the vibration, or acceleration of motion of a structure.

When detected, changes are translated into signals which changes the outcome of a program.

Using an **accelerometer** you will be able to change how a programmable device interacts with the world.

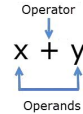


### operands

The quantity on which an operation is to be done.

Specifically, which data is to be manipulated or operated on in order to affect the outcome of a program.

You will be using **operands** in selection to determine the flow of your program.



### sensors

A sensor is a device that detects and responds to some type of input from the physical environment.

**Sensors** are input devices that record data about the physical environment around it.

You could design a step counter using **sensors** for the micro:bit.



### now if, then, else

Programming language statement that compares two or more sets of data and tests the results.

If the results are true, the **THEN** instructions are taken; if not, the **ELSE** instructions are taken.

You will apply your knowledge of these statements to create a program that features selection influenced by a random number.



### How this connects with previous learning

In Year 4, you learnt about repetition and how to use loops. In Year 3, you learnt about sequencing codes to ensure a program ran in the correct order.

In Year 5, you learnt about selection through the use of a Crumble controller where you learned to join various parts together in order to run a program.


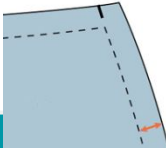



Earlier in Year 6, you learnt about **variables** and how you could modify them in real-world examples.

### How this connects with future learning



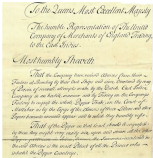


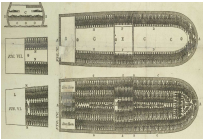


In KS3, you will continue to improve your programming skills through the concepts of sequencing, **variables**, selection, and count-controlled iteration. New concepts will be creating your own subroutines, developing an understanding of composition and creating lists in order to problem solve.

Some jobs that require these programming skills and concepts are: software engineer, data analyst, web design, video game engineer and many more.

# This is your Year 6 Design Technology Knowledge Organiser for Summer 2. Combining Fabric Shapes

DT Themes		Tier 2		Key Vocabulary		
textiles	innovative	mock-up	seam	seam allowance	reinforce	wadding
Types of cloth or fabric.	Something new and original.	A model built for display, study or testing.	A line of stitches which join two pieces of cloth together.	Extra fabric allowed for joining together.	To add strength to or increase the effect of something	Soft, thick material used to line garments or pack fragile items.
Our clothes are made from different <b>textiles</b> .	The wheel was an <b>innovative</b> product because it made it much easier to transport items or people quickly.	A <b>mock-up</b> can help us identify any issues with a product and make improvements.	Products will sometimes come apart at the <b>seam</b> .	In domestic patterns, the <b>seam allowance</b> is usually 15mm.	It is important to <b>reinforce</b> seams that are stretched a lot to ensure that the garment can maintain its shape.	Wadding can be used when making blankets enabling them to keep people warm.
Products can be made from one <b>textile</b> or a range of different <b>textiles</b> .	Mobile phones were an <b>innovative</b> product as they allowed people to be contacted outside of the home.	When producing a large product, the <b>mock-up</b> will often be smaller.	We will create <b>seams</b> when joining two pieces of fabric together.	We will include a <b>seam allowance</b> to our patterns to ensure our finished cases can hold our chosen item.	We will identify which seams in our product need <b>reinforcing</b> .	We will be using <b>wadding</b> to help keep the contents of our case safe and protected.
We will use <b>textiles</b> when creating a case for a chosen item.	<b>Innovation</b> enables us to solve new or existing problems.	We will use paper to create a <b>mock-up</b> of our cases so that we can identify any issues.				
How this connects with previous learning			How this connects with future learning			
In Year 1, you designed, made and evaluated a fabric doll.	In Year 2, you designed, made and evaluated a simple bag.	In Year 4, you designed, made and evaluated a pouch.		In KS3, you will use research and exploration to identify and understand the users needs.	In KS3, you will identify and solve your own design problems.	In KS3, you will investigate new and emerging technologies.

# This is your Year 6 History Knowledge Organiser for Summer 2. British Empire

Historical Themes		Tier 2	Key Vocabulary			
migration	empire	enquiry	colony	indigenous	slave trade	abolish
The process of moving from one place to another.	A group of nations that are all ruled by the same leaders.	The process of seeking information.	A <b>colony</b> is a country or an area that is governed (ruled) by people from another, more powerful, country.	<b>Indigenous</b> people or things belong to the country in which they are found.	The <b>slave trade</b> is the buying and selling of <b>slaves</b> , especially Black Africans, from the 16th to the 19th centuries.	If someone in authority <b>abolishes</b> a system or practice, they formally put an end to it.
In Year 5 you learnt that the Vikings <b>migrated</b> to the British Isles in AD 793 and stayed until AD 1066.	In Year 5 you learnt that The Viking <b>Empire</b> spread from modern day Iceland to parts of what we call Russia.	You may have looked at different sources of information about Islamic Civilisation to <b>enquire</b> about why they really valued education.	England, in what is now Britain, wanted more land overseas where it could build new communities, known as <b>colonies</b> .	Britain searched for 'undiscovered' lands to profit from, the lands they 'settled' had already been inhabited by <b>indigenous</b> people.	The transatlantic <b>slave trade</b> was the largest forced <b>migration</b> in history.	In 1780s London, Nigerian Olaudah Equiano told of his experienced as an <b>enslaved</b> person and fought for <b>abolition</b> .
The British <b>migrated</b> to the many countries around the world to trade goods like metals, sugar, spices, textiles, tea and tobacco.	The British <b>Empire</b> expanded due to a desire for power, a need for resources, to explore and to spread religion.	British <b>colonialists</b> who lived in other countries wrote to the reigning monarch to <b>enquire</b> about how to protect things that the British were trading.	<b>Colonies</b> also offered wealthy Englishmen money making opportunities plus provided England's poor and unemployed with jobs and places to live.	British 'settlers' pushed out <b>indigenous</b> people, leading to large scale decimation of heritage, art, culture, religion and language of <b>indigenous</b> communities.	From 1500 to 1800, around 12-15 million people were taken by force from Africa to be used as <b>enslaved</b> labour in North and South America.	Granville Sharp and William Wilberforce MP led changes to public opinion until <b>slavery</b> was <b>abolished</b> in law in Slavery Abolition Act of 1833.
						
Things you learnt in previous topics			How this connects with future learning			
The Roman <b>Empire</b> expanded to Britain in AD 43. Until AD 410 Romans <b>migrated</b> here.	Anglo-Saxons <b>migrated</b> to Britain in larger numbers after the Romans left Britain.	<b>Migrants</b> have come to the UK over the last 100 years from the 'windrush generation', Turkey etc.		In KS3 you will <b>enquire</b> about political power in the British <b>Empire</b> .	You will examine the impact through time of the <b>migration</b> of people to, from and within the British Isles.	You will also consider the development of Church, state and society in Medieval Britain.

# This is your Year 6 Physical Education Knowledge Organiser for Summer 2. Cricket

## Key Vocabulary

wide ball	tracking	short delivery	no balls	slip fielder	short leg
<p>A wide ball is a the term given to the bowl that is too far away from or bounces too high at the batter in front of the wicket.</p> <p>The batter should not strike the ball if the batter has to step sideways to reach it. The bowler has bowled a 'wide ball'.</p>	<p>A cricketer has to <b>track</b> the ball from the bowler's hand and down the wicket. Keeping their eye on the ball increase the accuracy of their hit.</p> <p>The fielders <b>track</b> the ball from the bat into the air so they can catch the ball or run for the ball to get the batter out at the wicket.</p>	<p>A <b>short delivery</b> is when the batter is bowled a ball that bounces close to them. A short delivery can be harder to hit and get runs.</p> <p>The bowler's delivery was a <b>short delivery</b> to stop the batter hitting the ball far. This delivery stops the opponents getting runs.</p>	<p>A <b>no ball</b> is a ball that is bowled in a way that is not allowed by the rules. It results in an extra run being given to the side that is batting.</p> <p>Bowlers need to practise their technique and accuracy to avoid <b>no balls</b> from being bowled.</p>	<p>A <b>slip fielder</b> is placed behind the batsman on the off side of the field. They are placed with the aim of catching an edged ball.</p> <p><b>Slip fielders</b> need to react very quickly to gameplay in order to catch the batsman out.</p>	<p>A fielding position intended to catch balls that unintentionally strike the bat/leg pad, and end up only a metre or two to the leg side.</p> <p><b>Short leg</b> fielders are often used to put increased pressure on the batsman.</p>
					

### How this connects with previous learning

In Year 4 you learnt to develop a range of skills in a competitive scenario and identify the different positions in cricket.

In Year 5 learnt to choose and use a range of cricketing tactics in isolation and game context.





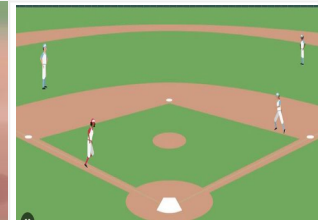
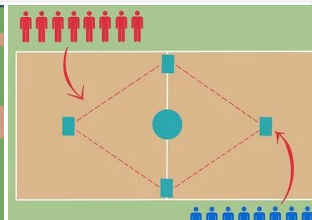


### How this connects with future learning

In Year 7 you will learn to apply with consistency the standard rules of cricket. You will attempt to track and catch high balls in isolation and gameplay. You will also learn new fielding positions and arrangements to limit the number of runs the opponent can score.

# This is your Year 6 Physical Education Knowledge Organiser for Summer 2. Rounders

## Key Vocabulary

defensive	offensive	predict	blocking	offside	base
The action of preventing the opposition from scoring points.	The action of attacking or engaging the opposing team with the objective of scoring points.	The action of making a decision based on what you think is going to happen in the future.	The action in which the defending player (fielder) <b>blocks</b> the path of the ball.	<b>Offside</b> is a rule in certain team sports that controls the positioning of players.	These are four posts which are laid out in a diamond shape on the field.
<b>Defending</b> in rounders involves the fielding team trying to limit the amount of points scored by the batting team.	The <b>offensive</b> team in rounders is the batting team whose aim is to score as many points as possible.	By looking at the batter's swing action, it gives fielders a better chance of <b>predicting</b> the direction in which the ball will travel.	In order to <b>block</b> the ball, fielders position themselves in its path before hitting the base.	There is no <b>offside</b> rule in rounders so the players are free to move in any direction.	Once a ball has been hit, the batter must try to run around as many <b>bases</b> as possible.
					

### How this connects with previous learning

In Year 4 you learned how to identify different roles in rounders.

In Year 5 you will learn to link a range of skills in both attacking and defensive plays.



### How this connects with future learning

In Year 7 you will learn to analyse your teams performance to suggest ways of improving.

In Year 7 you will learn to accurately replicate the long barrier and use it effectively in a game.

In Year 7 you will learn how to outwit an opponent and understand the importance of ball placement in relation to the fielders positioning.



# This is your Year 6 Science Knowledge Organiser for Summer 2. The Circulatory System

## Scientific Enquiry



### comparative & fair testing



**Comparative testing** means testing objects 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 test the effect of different activities on pulse rate and how long it takes for a heart rate to return to its resting rate after different types of activity and exercise.

### pattern seeking

**Pattern seeking** means looking for links in variables and results. We will explore which groups of people may have higher or lower resting heart rates.

### researching

We will **research using secondary sources** the positive and negative effects of drugs such as tobacco and paracetamol and the benefits of a healthy diet and exercise.

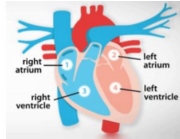
## Working Scientifically

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

**Presenting** results  
**Interpreting** results  
**Concluding** (drawing conclusions)  
**Predicting**  
**Evaluating** an enquiry

## heart

The **heart** is the organ that pumps blood through the body. The **heart** is made of very strong muscle.



## pulse

The heart pumps blood by squeezing and relaxing in a regular rhythm. This can be felt as a **pulse**. An average person's heartbeat beats 60-100 times a minute.



## blood

**Blood** transports and drops off oxygen around our bodies and picks up carbon dioxide.

## oxygen

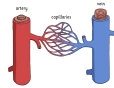
**Oxygen** is a gas that is naturally present in the air and is inhaled by humans.

## carbon dioxide

**Carbon dioxide** is a gas that is naturally present in the air and is exhaled by humans.

## blood vessels

**Blood vessels** are a series of tubes in your body that move blood to and from the heart.

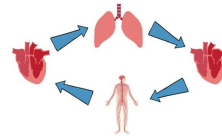


## circulatory system

The heart pumps blood in the blood vessels around to the lungs. Oxygen goes into the blood and carbon dioxide is removed. The blood goes back to the heart and is then pumped around the body. Nutrients, water and oxygen are transported in the blood to the muscles and other parts of the body where they are needed. As they are used, they produce carbon dioxide and other waste products. Carbon dioxide is carried by the blood back to the heart and then the cycle starts again as it is transported back to the lungs to be removed from the body. This is the **human circulatory system**.



The journey of blood around the body:



## lifestyle

**Lifestyle** is the way in which a person lives. Diet, exercise, drugs and lifestyle have an impact on the way our bodies function. They can affect how well our heart and lungs work, how likely we are to suffer from conditions such as diabetes, how clearly we think, and generally how fit and well we feel. Some conditions are caused by deficiencies in our diet e.g. lack of vitamins.



## Things you learnt in previous topics

In Year 2, you described the importance for humans of exercise, eating the right amounts of different types of food and hygiene. In Year 3, you identified that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. You identified that humans and some other animals have skeletons and muscles for support, protection and movement. In Year 4, you described the simple functions of the basic parts of the digestive system in humans. You also identified the different types of teeth in humans and their simple functions.



## How this connects with future learning

In KS3, you will study: the consequences of imbalances in the diet, including obesity, starvation and deficiency diseases; the effects of recreational drugs on behaviour, health and life processes; the structure and functions of the gas exchange system in humans, including adaptations to function; the mechanism of breathing to move air in and out of the lungs; the impact of exercise, asthma and smoking on the human gas exchange system.

# Year 6 Spanish Knowledge Organiser

## Mi Portfolio

### Comida

Food

	el queso
	el chorizo
	el gazpacho
	el pulpo
	el jamón
	la tarta
	la quesadilla
	la paella
	las patatas bravas
	las croquetas
	los churros
	los calamar <span>es</span>

### Preposiciones

Prepositions

con → with  
sin → without

qu - j - ce/ci - ñ - ll - z - y - h

¿Cómo estás? / ¿Qué tal?

¿Cómo te llamas?

¿Cuántos años tienes?

¿Cuál es tu \_\_\_\_ favorito?

### Preguntas

Questions

pero → but

y → and

porque →  
because

¿Dónde te gusta ir?

¿Qué comida te gusta?

¿Qué hora es?

### Verbos

Verbs

Quiero → I want

Quieres → you want

Quiere → he/she wants









comer → to eat

beber → to drink

querer → to want

### Mis rutinas

My routines

	desayunar
	comer
	cenar
	levantarse
	ducharse
	dormirse

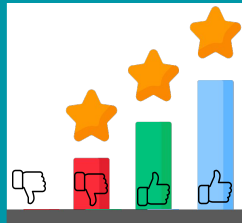
### Lugares

Places

	la playa
	la montaña
	la *ciudad*
	el pueblo
	el campo
	el río
	el lago

### Frases

Sentences



ir al  
ir a la

+ \*Lugar\*

+ con + \*compañía\*

+ solo/sola

Me gusta  
No me gusta + el  
Me encanta + la + \*comida\*

Me gusta  
No me gusta + los  
Me encanta + las + \*comidas\*



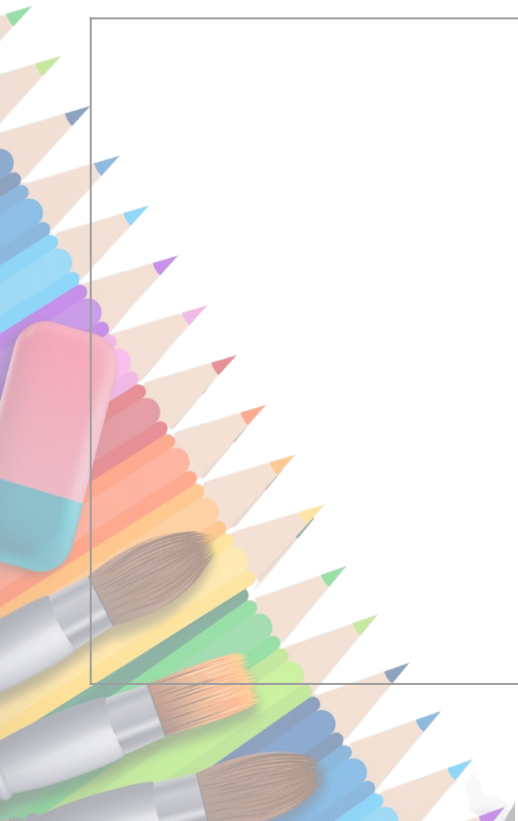
Es la  
Son las + \*horas\* +

en punto  
y media  
y cuarto  
menos cuarto

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



A large, empty rectangular box with a thin black border, intended for students to take notes. The box is positioned in the center of the slide, below the introductory text.



At New Wave Federation, we demonstrate...



new wave  
federation

Collaboration

Creativity

Focus

Kindness

Responsibility