



Knowledge Organiser Booklet

Year 4

Summer 2



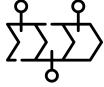




| | | | |
|------|--|-------|--|
| Name | | Class | |
|------|--|-------|--|

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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 4 Computing Knowledge Organiser for Summer 2. Repetition in Games

Tier 2 Vocabulary

Key Vocabulary

modify

infinite loop

count-controlled loop

animate

sequences

sprite

Make partial or minor changes to something.

A **sequence** that will continue endlessly

An action is repeated a given number of times

Give a character the appearance of movement using animation techniques

A series of related things or events and the order in which they follow each other

A **sprite** refers to a two-dimensional bitmap image that is integrated into a larger scene.

When algorithms are structured properly they can be **modified** without destroying an already existing part.

A command that repeatedly runs a defined section of code indefinitely.

A **count-controlled loop** is used when the number of iterations to occur is already known

A method by which still figures are manipulated to appear as moving images

The the order in which the statements in the algorithm are executed.

Sprites vary in different games and programs and can often be updated

People always **modify** their behaviour if they know they are being filmed.

To repeat some of the commands in your program- use the **infinite loop** feature

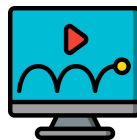
You might want your **sprite** to do a certain thing multiple times, this is when you would use a **count-controlled loop**.

During this topic, you will **animate** your **sprite** using different blocks.

The **sequence** of a program is extremely important so it carries out instructions in correct order

The **sprite** was the object in her program that performed the actions.

If you want to make changes to your code loop, you can **modify** it.



How this connects with previous learning

How this connects with future learning

In Year 1, you were introduced to Scratch Jr where you explored backgrounds and **sprites**.

In Year 3, you learnt about the concept of **sequencing** and the order in which codes need to be placed.

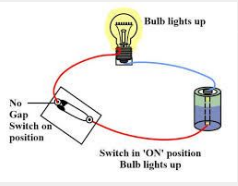

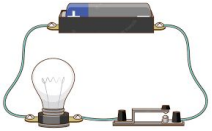



Earlier this year, you learnt about **repetition** and **loops** within a code.

In Year 5, you will use your knowledge of **repetition** and **loops** to understand programming.


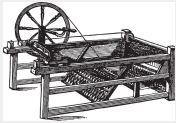




In Year 6, you will be exploring variables in programming through games.

In Year 6, you will combine all your programming knowledge to create codes and run multiples programs.

This is your Year 4 Design Technology Knowledge Organiser for Summer 2. Circuits and Switches

| DT Themes | | Tier 2 | | Key Vocabulary | | |
|--|--|---|--|---|---|--|
| electrical system | prototype | criteria | connection | fault | input device | output device |
| A set of electrical components that work together to achieve a desired outcome. | A model made to test whether a design will work. | A standard by which to judge or decide. | Something that connects | Something wrong with a thing or person that causes problems for someone or something else. | A component that is used to control an electrical circuit. | A component that produce an output. |
| A simple electrical system is also called an electrical circuit. | A prototype can help us to identify changes we want to make to a product. | Criteria help to guide our evaluation of a product. | An electrical connection conducts electricity, allowing it to travel between the input and output devices. | If there is a fault in an electrical system, the output device will fail. | A switch is an example of an input device . | Examples of an output device include buzzers and bulbs.. |
| We will be designing, making and evaluating a lamp using a simple electrical system . | We will make a prototype of our lamp before making the final product. | We will use criteria to evaluate a range of lamps. | An electrical connection can't be made from an electrical inductor as electricity can't pass through these materials. | You can find the fault in an electrical system by exploring one component at a time. | We can use commercial input devices or make handmade versions. | Different output devices will produce different outcomes including light and sound. |
|  | We will explain why we have made changes from our prototype . | Design criteria will help to focus our design process |  |  |  |  |
| How this connects with previous learning | | | How this connects with future learning | | | |
| In Year 3, you used a range of tools with increasing accuracy. | In Year 3, you learned about the relationship between an input and an output. | In Autumn 2 Science, you explored how to make a simple circuit. |  | In Spring 2, you will use design criteria to design, make and evaluate a small pouch. | In Year 5, you will use prototypes to design, make and evaluate a playground structure. | In Year 6, you will design, make and evaluate an electrical board game.. |








This is your Year 4 History Knowledge Organiser for Summer 2. Leisure and Entertainment

| Historical Themes | | Tier 2 | Key Vocabulary | | | |
|---|--|---|--|--|---|--|
| <p>innovation</p> <p>A new idea, a new product or a new way of doing something.</p> <p>In Year 3 you learnt about the innovative writing systems that were used by each Ancient Civilisations.</p> <p>The Industrial Revolution was a period of innovation that led to inventions including the assembly line, telegraph and the sewing machine.</p>  | <p>society</p> <p>How people in a specific area live their lives.</p> <p>In Year 3 you learnt about Ancient Egyptian Gods and Goddesses and their role in Egyptian society.</p> <p>The Victorian era included lots of new discoveries, inventions and technological developments that changed society.</p>  | <p>contrast</p> <p>To show the differences between two or more things.</p> <p>Whilst there are many similarities between life now and in the Victorian era, there are also many contrasts.</p> <p>There was a stark contrast between the lives of the rich and poor during the Victorian era. Many of the innovations benefited the rich families but not the poor.</p> <p>There was a contrast in the amount of money people earned and this influenced how they spent their leisure time.</p> | <p>leisure</p> <p>The time when you are free from work or other duties and can relax.</p> <p>Changing working hours meant that people had more free time which led to the invention of many new leisure activities</p> <p>Victorian children had many leisure activities, including Snakes and Ladders, skipping and marbles.</p>  | <p>entertainment</p> <p>Public shows, film or other performances and activities that entertain people.</p> <p>Music halls were one of the most popular forms of affordable entertainment in the Victorian era.</p> <p>Entertainment at music halls included sing alongs, acrobats, trapeze artists and can-can dancers.</p>  | <p>Victorian era</p> <p>The period of British history during the rule of Queen Victoria (1837-1901).</p> <p>Queen Victoria ruled Great Britain and Ireland for 63 years. The queen's reign is known as the Victorian era.</p> <p>At the start of Queen Victoria's reign most children had to work, by the time the queen died, more children were able to go to school.</p>  | <p>Industrial revolution</p> <p>The period during the 18th and 19th centuries when work began to be done more by machines in factories.</p> <p>The Industrial Revolution began in the cloth industry as new machines made processing yarn and wool quicker.</p> <p>The Industrial Revolution spread to all kinds of production. Farmers, began to invent new machines to plough fields and plant crops.</p>  |
| <p>How this connects with previous learning</p> <p>In Year 1 you learnt about monarchy and significant Kings and Queens. You learnt about the life of Queen Victoria.</p> <p>In Year 2 you learnt about transport. You know how people used horse-drawn carriages and bicycles how this changed to trains, ships and buses.</p> <p>Earlier in Year 4 you learnt about the different types of leisure and entertainment that the Romans would have taken part in.</p> | | | <p>How this connects with future learning</p> <p>In Year 5 you will learn about Islamic Civilisations and how innovation and new ways of thinking impacted and changed society.</p> <p>In Year 5 you will be learning about the Ancient Greeks and about the impact of art and sport on society.</p> <p>In Year 6 you will be learning more about how Britain has changed over time and how it became a powerful empire.</p> | | | |



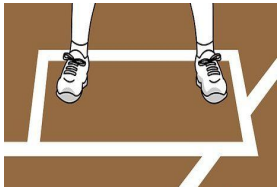



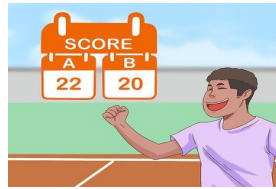

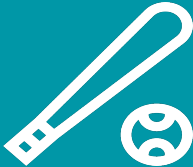
This is your Year 4 Physical Education Knowledge Organiser for Summer 2. Cricket

Key Vocabulary

| crease | overarm | underarm | ground ball | intercepting | conditioned game |
|--|---|---|--|---|--|
| <p>The crease is a certain area marked by white lines painted or chalked on the pitch.</p> | <p>Overarm bowling is when the bowler releases the ball with their hand above shoulder height.</p> | <p>Underarm bowling is when you throw the ball by releasing it when it is below shoulder height.</p> | <p>A batted ball that rolls or bounces along the ground without having first risen in the air.</p> | <p>This is when the fielders work together to intercept the ball and get it back to the wicket, to stop further runs being scored.</p> | <p>Conditioned games are fun and competitive ways to practise drills and sessions in cricket.</p> |
| <p>To score a run you need to tap your bat inside the crease at the other end of the pitch.</p> | <p>Bowling overarm allows you to throw with more power than an underarm throw.</p> | <p>The underarm technique is not as powerful, but you can get good accuracy with practice.</p> | <p>Ground balls can still travel a good distance if hit with enough power.</p> | <p>There are lots of different fielding arrangements to intercept balls more effectively.</p> | <p>Conditioned games are used to practise particular skills or techniques in batting or fielding.</p> |
|  |  |  |  |  |  |
| <h3>How this connects with previous learning</h3> | | | <h3>How this connects with future learning</h3> | | |
| <p>In Year 2 you learnt to hit balls with a variety of bats and to work in a team to field.</p> | <p>In Year 3 you learnt some of the basic vocabulary for cricket and practised simple game play.</p> |  | <p>In Year 5 you will apply some aspects of fitness to the game of cricket and use a range of skills in combination.</p> | <p>In Year 5 you will choose and use a range of simple tactics in isolation and game context.</p> | <p>In Year 6 you will learn new skills and techniques and apply with consistency.</p> |

This is your Year 4 **Physical Education** Knowledge Organiser for Summer 2. Rounders

Key Vocabulary

| zones | directing | avoid | intercept | scoring system | stumped |
|---|--|---|---|--|--|
| An area that is divided from other areas because of a particular use or some other special quality. | To give instructions that lead or guide others. | To keep away from someone or something. | To stop or interrupt the movement or progress of something. | The way of recording how many points each team has earned. | The process of getting out in rounders from a base position. |
| When batting you must stand in a special zone to hit the ball. | Fielders direct each other to stand in certain places in order to get the batter out. | You must try and avoid getting caught out by the other team by making good judgements. | Fielders aim to intercept the ball and return it to first base very quickly. | The scoring system for rounders is: one point for a rounder and half a point for completing the circuit of bases. | Fielders try to stump the base as the batter runs towards it. |
|  |  |  |  |  |  |
| How this connects with previous learning | |  | How this connects with future learning | | |
| In Year 2 you learnt to work on a variety of ways to score runs in different hit, catch, run games. | In Year 3 you learnt to develop and use simple rounders skills. | | In Year 5 you will collaborate with a team to choose, use and adapt rules in games. | In Year 5 you will recognise how some aspects of fitness apply to rounders. | In Year 6 you will use a range of tactics for attacking and defending in the role of bowler, batter and fielder. |

This is your Year 4 Science Knowledge Organiser for Summer 2. Digestion and Food Chains

Scientific Enquiry

researching

We will **research using secondary** sources such as non-fiction books and dental records to find out what damages teeth and how to look after them.

We will research the function of the parts of the digestive system.

We will identify animals in a habitat and find out what they eat to assist us to classify them as carnivores, herbivores or omnivores.



Working Scientifically

Asking scientific questions

Planning an enquiry

Observing closely

Measuring (taking measurements)

Gathering and **recording** results

Presenting results

Interpreting results

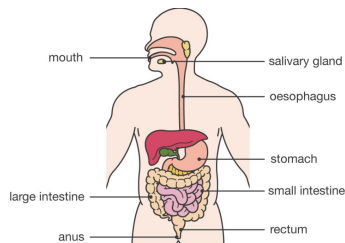
Concluding (drawing conclusions)

Predicting

Evaluating an enquiry

digestion

Food enters the body through the mouth. Digestion starts when the teeth begin to break the food down. Saliva is added and the tongue rolls the food into a ball. The food is swallowed and passes down the oesophagus to the stomach. The food is broken down further by being churned around and other chemicals are added. The food passes into the small intestine. Here nutrients are removed from the food and leave the digestive system to be used elsewhere in the body. The rest of the food passes into the large intestine where water is removed for use elsewhere in the body. What is left is then stored in the rectum until it leaves the body through the anus when you go to the toilet.



Subject Specific Vocabulary

canine

Canines are the pointed, sharp teeth at the front of the mouth, used for tearing and ripping food.



molar

Molars are teeth at the back of the mouth used for crushing or grinding food.



incisor

Incisors are teeth at the front of the mouth. used for biting off and chewing pieces of food.



carnivore

A **carnivore** is an animal that eats other animals.



herbivore

A **herbivore** is an animal that only eats plants.



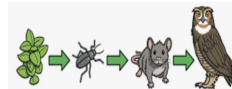
omnivore

An **omnivore** is an animal that eats both other animals and plants.



food chain

A **food chain** is a scientific model that shows how each living thing gets its food. A **food chain** will have a producer and consumers (prey and predators).



producer

A **producer** begins a food chain. Plants are **producers** as they make their own food.

predator

A **predator** is an animal that hunts other animals.

prey

Prey is an animal that is hunted by other animals.

Things you learnt in previous topics

In Year 1, you named a variety of common animals that are carnivores, herbivores and omnivores. In Year 2, you found out about and described the basic needs of animals for survival including having a balanced diet by eating different types of food. In Year 3, you identified that animals, including humans, need the right types and amount of nutrition to be healthy. You identified the benefits (and possible negatives) to the body of different food groups.



How this connects with future learning

In Year 6, you will identify and name the main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood. You will recognise the impact of diet, exercise, drugs and lifestyle on the way your body functions. You will also describe the ways in which nutrients and water are transported within animals, including humans.

Los números
Numbers






| | |
|----|------------|
| 1 | uno |
| 2 | dos |
| 3 | tres |
| 4 | cuatro |
| 5 | cinco |
| 6 | seis |
| 7 | siete |
| 8 | ocho |
| 9 | nueve |
| 10 | diez |
| 11 | once |
| 12 | doce |
| 13 | trece |
| 14 | catorce |
| 15 | quince |
| 16 | dieciseis |
| 17 | diecisiete |
| 18 | dieciocho |
| 19 | diecinueve |
| 20 | veinte |

Year 4 Spanish Knowledge Organiser
Mi Portfolio

qu - j - ce/ci - ñ - ll - z - y - h

Información personal

Personal information

| | | | | |
|--|---|--|--|---|
|  <p>¿Cómo estás?/ ¿Qué tal? Estoy</p> |  <p>¿Cómo te llamas? Me llamo.....</p> |  <p>¿Cuántos años tienes? Tengo años.</p> |  <p>¿Cuál es tu favorito? Mi favorito es.....</p> |  <p>¿Cuándo es tu cumpleaños? Mi cumpleaños es el de</p> |
|--|---|--|--|---|

Verbos
Verbs

hay → there is/there are

es → he/she/it is

tengo → I have

tiene → he/she/it has

voy → I go

Conectores




Connectives

pero → but

y → and

Los colores

Colours

| | | | |
|------------|---|--------|---|
| rojo/a |  | azul |  |
| amarillo/a |  | verde |  |
| naranja |  | rosa |  |
| morado/a |  | marrón |  |
| blanco/a |  | gris |  |
| negro/a |  | | |

Preguntas

Questions

¿Qué hay en tu casa?

¿Cuál es tu _____
favorito?

¿Cómo vas?

¿Qué _____ te gusta?

Frases

Sentences

Hay + **un** *habitaciones* *adjetivo*
una + *muebles* + (masc./fem.)
número



Mi animal favorito es
Mis animales favoritos + *animal*
son



Voy en + *medio de transporte*

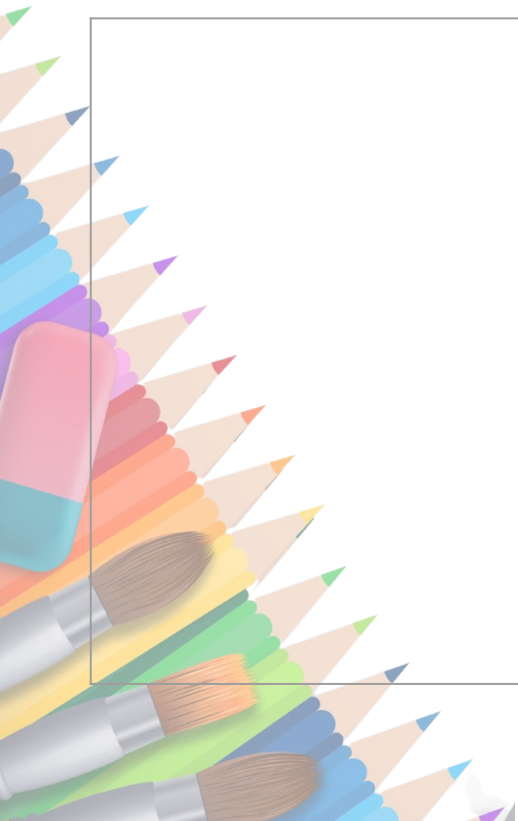


Me gusta/ n + **e/los** + *asignaturas*
No me gusta/ n **la/las** + *lugares*

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