# Knowledge Organiser Booklet Year 5

## Autumn 1

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

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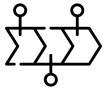
# Use your knowledge organisers to help you remember more.

| | 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 5 Art & Design Knowledge Organiser for Autumn 1 - Topography & Maps

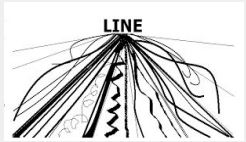
## Art Themes

### line

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

We can make different **lines** using pencil, paint, charcoal and pastels.

We will use a variety of **lines** to draw our own symbolic maps.




### shape

A form or outline of something.

We will use a range of **shapes** to create bold designs.

A balance of **shapes** is important within composition.

## Tier 2

### connections

A relationship in which a person or thing is linked or associated with something else.

We can create **connections** between ideas when we make art.

We will make **connections** between the real world and how we represent it in our work.

## Key Vocabulary

### visual language

Communicate through visual elements.

We will create our own **visual language** when creating our personal maps.

We can read the **visual language** of art just as we can read words.

### symbolism

The use of symbols to represent ideas, emotions or qualities etc.

We can use **symbolism** in art to express our own emotions.

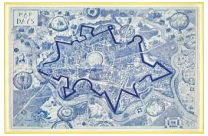
We can use simple **symbolism** to represent big ideas.

### mapping

Chart and connect places or even abstract ideas.

We will be **mapping** our own personal ideas and identities.

Grayson Perry uses **mapping** in most of his art works.

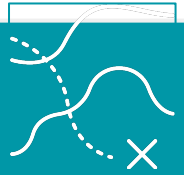


### identity

Who a person is and the qualities that make them unique.

We will be expressing different parts of our **identities** with our symbolic maps.

To create **balance** in a composition we make choices such as how far it is symmetrical or asymmetrical.



## How this connects with previous learning

In Year 2, you used pattern in printmaking.

In Year 3, you made collages by 'drawing with scissors'.

In Year 4, you made forms using a range of media.

## How this connects with future learning

In Year 5, you will explore architecture and create your own designs.

In Year 6, you will explore art and activism.

In Year 6, you will create your own designs based on installation art.

# This is your Year 5 Computing Knowledge Organiser for Autumn I - Systems and Searching

| Tier 2 Vocabulary | Key Vocabulary | | | | |
|---|---|---|---|---|---|
| **connection** | **search engine** | **refine** | **World Wide Web** | **webpages** | **system** |
| The act of joining or being joined to something else. | A program that **searches** for and identifies items in a database that correspond to keywords or characters specified by the user. | To make minor changes so as to improve or clarify. | A service provided via the internet that allows access to web pages and other shared files. | A HTML document viewed using a web browser. | A set of things working together as parts of a mechanism or an **interconnecting** network. |
| See how devices are **connected** to servers and systems. | The **search engine** will link results more closely to the person researching. | **Searches**, media, content, even data needs to be **refined** in order to have best possible output and information. | The **World Wide Web** has made it easier for people to access information. | Visit a **webpage** to see what products, services and information are being offered. | **Systems** are built using a number of parts. |
| If this train is delayed any longer, we will miss our **connection** to London. | You will be introduced to a range of **search engines** to see which presents needed information. | You will need to **refine** your searches in order to find the information you need. | You will be using the **World Wide Web** to search and find information. | You will learn how a **webpage's** content can influence where it is in search ranks. | Will understand that digital **systems** use input and outputs to communicate to each other. |
| You will learn to understand the physical and electronic **connections**. | | | | | |

| How this connects with previous learning | | | How this connects with future learning | | |
|---|---|---|---|---|---|
| In Year 2, you learnt how information technology is used in your home, how it benefits society in places like shops, libraries and even hospitals. | In Year 3, you began to develop your understanding of digital devices, inputs, processes, and outputs. | In Year 4, you learnt that the **World Wide Web** is part of the internet, and learnt who owns content and what you can access, add, and create. | In Year 6, you will learn how data is transferred over the internet. You will focus on addressing, before moving on to the structure of data packets. | In Year 6 you will also begin to develop an understanding of communication and collaboration whilst completing projects online with others. | In KS3, you will gain a stronger understanding of computer networks such as YouTube, Google and Netflix and how networks are used, the benefits of them and how data is transmitted across networks using protocols. |

# This is your Year 5 Geography Knowledge Organiser for Autumn 1 - Map It

## Tier 2 Vocabulary

### locate

To find the exact place or position of something.

The longitude of a place enables us to **locate** it on a map.

Ordnance Survey grid references help us to **locate** places when orienteering.

I **located** the Amazon rainforest on the map.

### contrast

To show the differences between two or more things.

The climate in the topics is a huge **contrast** to the climate in both the **Arctic** and **Antarctic Circles** .

The Arctic and Antarctic have **contrasting** minimum temperatures.

I like to ride my bike. In **contrast** my sister likes to play football.

## Key Vocabulary

### Tropic of Cancer

A significant line of latitude that is **located** above the equator.

The **Tropic of Cancer** marks the northern edge of the tropics.

The **Tropic of Cancer** lies 23° north of the equator.

### Tropic of Capricorn

A significant line of latitude that is **located** below the equator.

The **Tropic of Capricorn** marks the southern edge of the tropics.

The **Tropic of Capricorn** lies 23° south of the equator.

### Arctic Circle

A polar region around the North Pole and the most northerly circle of latitude.

The sub-soil in the **Arctic Circle** is permanently frozen so very few plants can grow here.

In the **Arctic Circle** , the minimum temperature is -43°C.

### Antarctic Circle

A polar region around the South Pole and the most southerly circle of latitude.

98% of land in the **Antarctic Circle** is covered in ice.

In the **Antarctic Circle** , the minimum temperature is -62°C.

### grid references

**Grid references** on ordnance survey maps help you to pinpoint the exact location anywhere on a map.

**Grid references** have at least four digits.

We can use **grid references** to help pinpoint a location when orienteering.

## How this connects with previous learning

In Year 3, you learned about the five major lines of latitude.

In Year 3, you learned about the 4 main climate zones.

In Year 3, you were introduced to orienteering.

## How this connects with future learning

In spring 1, you will learn the link between climate zones, biomes and vegetation belts.

In summer 1 you will learn about trade of natural resources across the world.

In Year 6, you will apply your knowledge when comparing 3 regions across the world.

# This is your Year 5 Personal, Social, Health, Economic Education Knowledge Organiser for Autumn 1 – My Healthy Self

## Key Vocabulary

### activity level

**Activity level** is how much movement is done in a given time.

There are different types or levels of physical activity. Light exercise is gentle movement that hardly changes breathing. Moderate exercise is movement that makes breathing faster but still allows talking. Vigorous exercise is movement that makes breathing hard and the heart beat very fast. Different activities have different health benefits for example walking can encourage calmness. Running can strengthen the heart.

### nutrients

**Nutrients** are substances found in food and drink that living things use for life and growth. They help the body grow, stay strong and work properly.

Labels on food and drink packaging include information about the nutrients they contain. Traffic light labels show the amount of salt, fat, sugars and saturated fat. The body does not need high amounts of these nutrients to stay healthy.

### movement

**Movement** is the action of moving or the way something moves.

Everyday movement might be walking to school or helping tidying up at home. Structured movement might be a PE lesson, riding a bike or dancing.

When we are physically active and exercise our bodies release endorphins. These are natural chemicals in the brain that create happy feelings.

### grief

**Grief** is a strong feeling often experienced following a loss.

Grief is commonly linked to sadness but can include other emotions. It is experienced differently by everyone and may include anger, anxiety, confusion or shock following a bereavement, the experience of loss after a death.

Grief can also be experienced following other significant losses or changes such as someone close to you moving far away.

### regulate

**Regulate** means to manage thoughts, feelings and actions to stay balanced.

Regulating can involve noticing a feeling and choosing something that helps the body and mind feel calmer and more in control.

Regulating feelings does not mean getting rid of them. It means recognising when feelings are becoming stronger and choosing a helpful response. You could: take deep breaths, count to ten, squeeze a stress ball, stretch, go outside or talk to a trusted adult or friend.

### response

A **response** is an action, thought or change that happens because of something else.

When we respond when we are regulated, we often make better choices, stay calm and avoid hurting others.

Asking for help when you or a friend need support is a healthy, positive action. Trusted adults can help. Childline is a free helpline for anyone under 19. You can call 0800 1111 or visit www.childline.org.uk

childline

## How this connects with previous learning

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.

In Year 4, we explored growth mindsets and understood that mistakes are useful. We identified how to take responsibility for our own happiness.

## How this connects with future learning

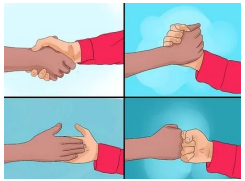
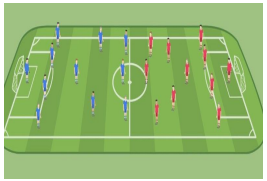
In Year 6, we will explore the potential impact of technology on physical and mental health. We will explore strategies to identify and respond to difficult situations.

In Year 6, we will understand ways that we help prevent ourselves and others becoming ill. We will explain how vaccination works and some of the benefits.

In KS3, we will learn that being healthy means having a positive state of physical, mental and social well-being.

# This is your Year 5 Physical Education Knowledge Organiser for Autumn 1 - Football

## Key Vocabulary

| goal-side | Fair play | possession | position | foul | step-over |
|---|---|---|---|---|---|
| **Goal-side** refers to the positioning of a player in relation to the opposing team's goal. | **Fair play** refers to set of ethical principles, sportsmanship, and respect for the rules and spirit of the game. | **Possession** refers to the amount of time a team has control of the ball during a game. | **Position** refers to the specific role or area of the field that a player occupies during a game | Football refers to an infraction or violation of the rules committed by a player called a **foul** | A **step over** is a skillful dribbling move performed by a player to deceive an opponent. |
| When an opposing player attempts a shot on goal, being the **gaol-side** allows a defender to position themselves between the shooter and goal. | Players should show respect towards referees, assistant referees, and other officials which is **fair play**  | **The opposition has lost the ball and the team has regained possession of the ball.** | There are several different **positions** in football, each with its own distinct set of duties and requirements.  | The referee blew the whistle and awarded a penalty shot to the opposing team after the player committed a **foul**. | The player reaches the opponent, they plant one foot next to the ball and swing the other foot around in a circular motion performing **step over.** |

## How this connects with previous learning

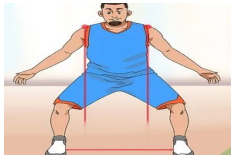
| | |
|---|---|
| In year 3 we learned how to defend against an opponent. | In year 3 we played football competitions with rules and regulations. |

## How this connects with future learning

| | | |
|---|---|---|
| In year 4 we were working in attacking positions to try and score goals. | In year 6 we will play matches against other team with rules. | In year 7 we will learn how to apply tactics and rules of a 11 a side football format. |

# This is your Year 5 Physical Education Knowledge Organiser for Autumn 1 -Handball

## Key Vocabulary

| dribble | block | screen | free throw | double fault | offensive foul |
|---|---|---|---|---|---|
| The action of a player bouncing the ball and catching it while moving forwards to attack the goal. | The action in which a defender uses their body usually arms to block a shot at goal. | This is when an offensive player stands beside or behind a defender in order to free a teammate to either shoot a pass or drive in to score | For minor fouls a free throw is awarded at the exact spot the foul took place. | This comes about when a player dribbles, stops, touches the ball with two hands and then dribbles again. | The act of one of the attacking players fouling the opposition while attacking. |
| If a player takes more than three steps without **dribbling** (bouncing the ball) or holds the ball for more than 3 seconds without bouncing it, shooting or passing, then that is deemed 'travelling' and possession is lost. | **Blocking** with the arms is used to stop an attacker`s shot at goal or to support the goalkeeper by covering a part of the goal | A **screen** is a great offensive move used to create space for the player in possession of the ball. | During a **free throw** , a player may either pass the ball to a teammate or have a shot at goal. | Players should focus on dribbling and passing or shooting to avoid the double fault. | A foul is awarded to the defending team when an **offensive foul** occurs. |
| |  | | | | |

## How this connects with previous learning

| | |
|---|---|
| In year 3 you learned basic passing and catching skills. | In year 4 you learned how to pass and move with the ball to set up attacks. |

## How this connects with future learning

| | | |
|---|---|---|
| In year 6 you will learn to work as a team to improve group tactics and gameplay. | In year 6 you continue to develop your defensive skills. | In year 7 you will learn about the 6 phases of handball. |

# This is your Year 5 Science Knowledge Organiser for Autumn 1 - Properties & Changes of Materials

## 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 explore adding a range of solids like sugar and salt to water and group solids based on observations.

### 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 investigate the properties of different materials in order to recommend them for particular functions. We will test and compare dissolving rates and irreversible changes such as rusting.

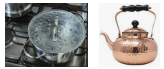
## Working Scientifically

**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

## Subject Specific Vocabulary

### conductor

A **conductor** is a material which electricity, heat or sound can flow through



### insulator

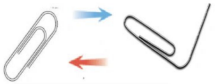
An **insulator** is a material that is a poor carrier of heat, electricity or sound.

Materials have different uses depending on their properties and state (liquid, solid, gas). Properties include hardness, transparency, electrical and thermal conductivity and magnetism.

### reversible

When materials can be changed back to their original state or form it is called a **reversible** change. When ice (solid) melts to form water (liquid). It can be frozen back to ice again. This is a **reversible** change.

W s bent, it changes shape. This is a **reversible** change as it can be bent back to its original shape.



### irreversible

Sometimes when materials are cooked, heated, burnt or mixed, a new material is formed. The new material cannot be changed back to how it was before. This is an **irreversible** change. Paper being burnt is an **irreversible** change. It is not possible to get the paper back.

Heating an egg to make a fried egg creates a new material. This change is **irreversible.**

### dissolving

When a solid is **dissolved,** it is mixed into a liquid creating a solution. Some materials do not **dissolve** . They are insoluble and form sediment.

salt solution

sediment in water

### evaporation

To recover a substance from a solution we can use different methods such as **evaporation** where a material is turned from its liquid state into a gas.

### filtering

One was to separate materials in a mixture is by **filtering** . This involves passing a liquid through a mesh to separate solids.

### sieving

**Sieving** separates solids from liquids or larger solids from smaller solids by passing them through a net.

filtering

sieving

## Things you learnt in previous topics

In Year 2, you identified and compared the suitability of a variety of everyday materials for particular uses and found out how the shapes of solid objects made from materials like plastic and rubber could be changed. In Year 3, you identified magnetic materials. In Year 4, you compared and grouped materials according to whether they were solids, liquids or gases and observed changes of state. You learnt about evaporation and condensation and the water cycle.

## How this connects with future learning

In KS3, you will learn about chemical reactions as the rearrangement of atoms. You will be able to represent chemical reactions using formulae and equations. You will learn about combustion, thermal decomposition, oxidation and displacement reactions. You will be able to define acids and alkalis in terms of neutralisation reactions. You will be able to use the pH scale for measuring acidity/alkalinity; and indicators.

# Year 5 Spanish Knowledge Organiser
## Todo sobre mí

### Saludos
Greetings

**Buenos días**
Good morning

**Buenas tardes**
Good afternoon

**Buenas noches**
Good night

### Preguntas
Questions

**¿Cómo estás?**
Estoy …….

**¿Cómo te llama s?**
Me llamo…….

**¿Cuántos a ños tienes ?**
Tengo …… años.

**¿Cuándo es tu cumplea ños?**
Mi cumpleaños es el ……
de ……

### Sentimientos
Feelings

| Estoy ……. | |
|---|---|
| | bien / mal |
| | feliz / triste |
| | hambriento |
| | cansado |
| | aburrido |

### Los números
The numbers

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | uno | 11 | once | 21 | veintiuno | 30 | treinta y uno |
| 2 | dos | 12 | doce | 22 | veintidos | 30 | treinta y dos |
| 3 | tres | 13 | trece | 23 | veintitres | … | … |
| 4 | cuatro | 14 | catorce | 24 | veinticuatro | 40 | cuarenta |
| 5 | cinco | 15 | quince | 25 | veinticinco | 50 | cincuenta |
| 6 | seis | 16 | dieciseis | 26 | veintiseis | 60 | sesenta |
| 7 | siete | 17 | diecisiete | 27 | veintisiete | 70 | setenta |
| 8 | ocho | 18 | dieciocho | 28 | veintiocho | 80 | ochenta |
| 9 | nueve | 19 | diecinueve | 29 | veintinueve | 90 | noveinta |
| 10 | diez | 20 | veinte | 30 | treinta | 100 | cien |

### Enfermedades
Illnesses

Me duele la cabeza.

Me duele la tripa.

Me duele el pie.

Tengo tos.

Tengo fiebre.

# At New Wave Federation, we demonstrate...

new wave federation

- Collaboration
- Creativity
- Focus
- Kindness
- Responsibility