

# DYSON PERRINS CE ACADEMY

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LIFE IN ALL ITS FULLNESS



**Year 7**

## **Knowledge Organiser**

**Learning Cycle 1**

**2024-25**

**Name:** \_\_\_\_\_ **Form:** \_\_\_\_\_

This document should be stored in your Knowledge Organiser folder and taken to every lesson.

<b>What is a Knowledge Organiser?</b>	<b>Why do I have to carry my Knowledge Organiser around with me?</b>
A knowledge organiser is a document that sets out the key information you need to understand, learn and memorise in each of the topics you study in this learning cycle. You will be given 3 Knowledge Organisers over the academic year.	Your teachers may use your Knowledge Organisers in lessons. They are yours forever and you should annotate or highlight them if it helps you remember the information. They will be used in lessons when you have a cover teacher, during form time and as part of homework.
<b>How should I use my Knowledge Organiser?</b>	<b>What do I do with my Knowledge Organiser at the end of the cycle?</b>
You should use your Knowledge Organiser to learn this key information and commit it to memory. Your teachers will often quiz you on the information in the Knowledge Organiser and the content will be useful for your exams at the end of the year. The best way of using it is to use the <b>look, cover, write, check</b> method.	You need to keep your knowledge organisers your Knowledge Organiser folder and keep taking them to lessons. Your teachers may refer back to key learning earlier in the year and use them for revision. By the end of Year 9 you will have been given 9 Knowledge Organisers.
<b>Why is a Knowledge Organiser important?</b>	
New GCSE specifications mean that students have to memorise more facts, equations, quotations and information than ever before and there are things you will learn right from the start of Year 7 that you will need to know in Year 11 when you sit your GCSE exams – the Knowledge Organiser helps you identify the things that you will need to try to commit to your long-term memory and return to over and over again during your time at secondary school. There are also things that we think it is important you learn about and remember that might not be in a GCSE exam but represent useful knowledge for life.	
<b>Knowledge Organisers – A User's Guide</b>	
Your Knowledge Organiser is a vital document. It contains all the key things from your lessons that you will need to work on committing to your long-term memory.	
The best method to use when you are working on memorising things from your Knowledge Organiser is to self-quiz, or quiz with a partner, using the look, cover, write, check technique:	
<ul style="list-style-type: none"> <li>• <b>Look.</b> Read the piece of information carefully, two or three times.</li> <li>• <b>Cover.</b> Now cover what you have just read up.</li> <li>• <b>Write.</b> Now try and write down the piece of information you read.</li> <li>• <b>Check.</b> Did you write the information down correctly? If not, correct with a different coloured pen and then repeat!</li> </ul>	

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# 1. ART

## Year 7 term 1 Symbolism Klimt

## The Big Question – How can symbolism help us to understand the world around us?

**Symbolism** Is to represent something by the use of symbols  
Is an art movement involving the use of symbols to express ideas  
Symbolism has been used in many different ways throughout art history to communicate many different stories, messages, meanings.

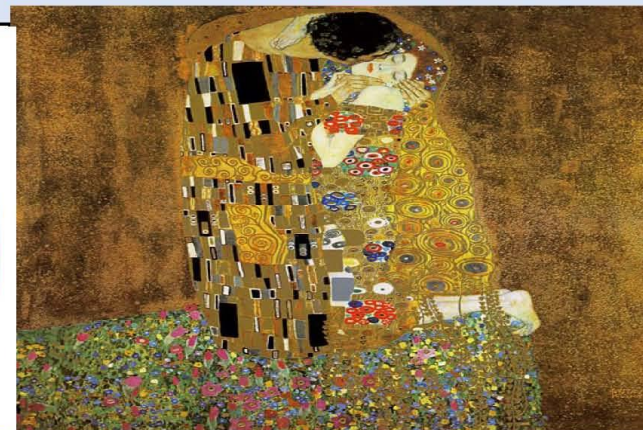
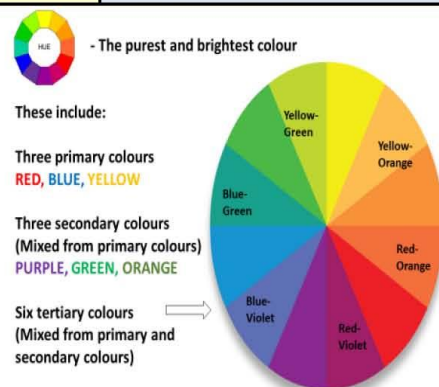
**Symbols in our school crest tell the world what to expect from our school**

**The Talbot dog** symbolises good manners

**The burning basket** symbolises the Worcestershire beacon bright and alight

**The Cross** symbolises we are a church school

If you were designing a crest for **you** what symbols would you use to tell the world about you?



**Gustav Klimt** (July 14, 1862 – February 6, 1918) was an **Austrian Symbolist painter**. His major works include **paintings, murals, sketches,** and other art objects, many of which are on display in Vienna. Klimt began his professional career painting interior murals and ceilings in large public buildings. Klimt's primary subject was the female body. His father, Ernst Klimt was a **gold** engraver. Klimt lived in **poverty** for most of his childhood.



### Colour symbolises:

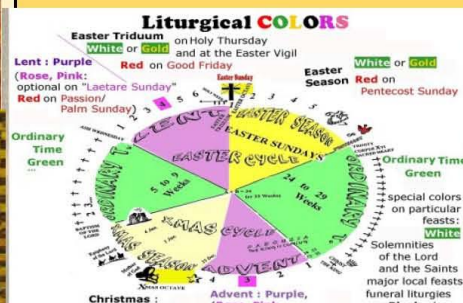
Red means anger, passion, love

Blue means sad, cool cold

Yellow means sickly, cowardice

The **church year** or **Christian year** known as the **Liturgical year** ;

Distinct **liturgical colours** may appear in connection with different seasons of the liturgical year. The dates of the festivals vary somewhat between the different churches, though the sequence



### THE KISS by Gustav Klimt

#### Understanding the symbolism in Klimt's work

##### Woman gown

Colourful flowers symbolise fertility and link to the bed of flowers she kneels on

Geometric shapes symbolise her union with the male

##### Male gown

Geometric masculine shapes

Black and white but also curved flowing pattern in-between

Shapes and marks can express or symbolise an emotion.

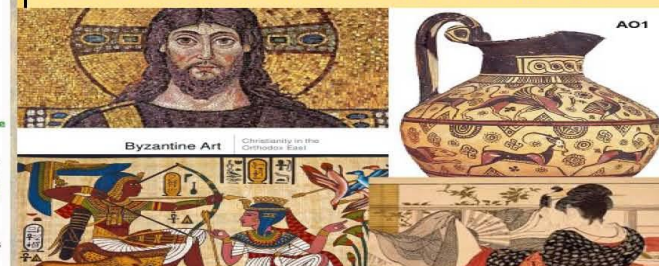
#### Symbolism and emotion

Music suggests colour and mood

Shape suggests meaning

Colour suggests meaning

**Influences** - How do the art forms below link to Klimt's work?





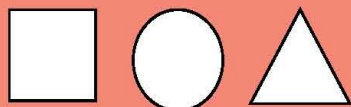
## Art KS3 What are the formal elements?

The **formal elements** are the key ingredients when creating any piece of artwork. They are known as **line, tone, texture, shape, form, pattern, space** and **colour**.

**Line:** a mark or stroke, such as dashed, dotted, straight, curved etc.



**Shape:** the outline of something.

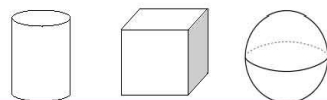


**Texture:** the look or feel of a surface such as rough, smooth, bumpy etc.



**PIXL**  
SPINE

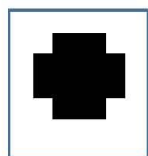
**Form:** a three dimensional object.



**Tone:** the lightness or darkness of a colour. This can be used to show shadows and highlights.



**Space:** the area an object takes up.



**Positive**  
The inside  
of a shape.



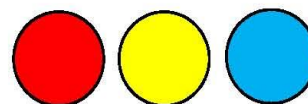
**Negative**  
The area  
surrounding  
a shape.

**Pattern:** a repeated or decorative design.

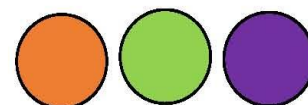


**Colour:** the quality of something created by the reflection of light.

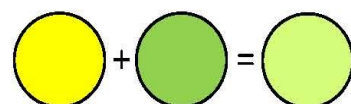
**Primary:** a colour that cannot be made (Red, yellow and blue).



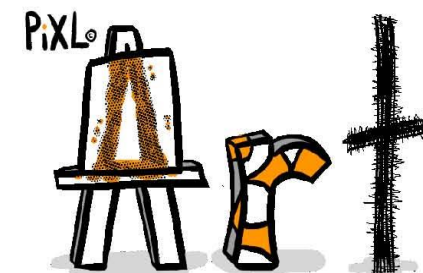
**Secondary:** a colour made by mixing two primary colours together.



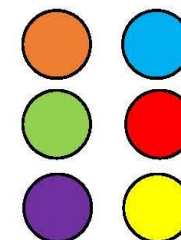
**Tertiary:** a colour made by mixing a primary and secondary colour together.



Yellow + green = yellow green



**Complimentary:** colours that are opposite each other in the colour wheel that compliment one another. The pairs are:



**Cool:** colours that remind us of cool, calm and peaceful things.



**Warm:** colours that remind us of warmth, fire and anger.

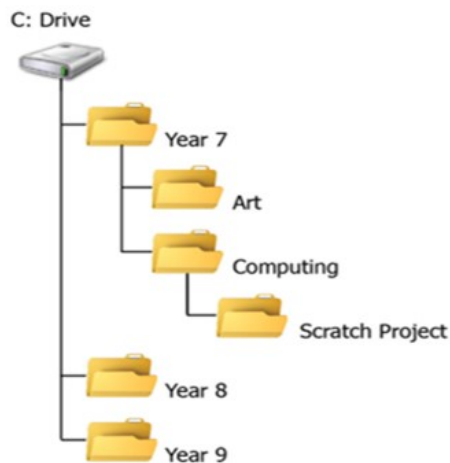


## 2. COMPUTING

# 1 - Using Computers Safely, Effectively & Responsibly (UCSER)

## 1 **Directory structure**

- Tree structure
- Root directory
- Pathname





The internet is a fantastic resource that helps us learn, share, communicate and find entertainment. It has billions of users who use it for legitimate reasons. However, there are others who use the internet for illegal and unsavoury purposes.

**Keywords for types of e-safety :**

<b>Cyberbullying</b>	The bullying of another person using the internet, mobile phones and other digital devices, with the intent to deliberately upset them.
<b>Netiquette</b>	Correct or acceptable way of communication on the internet.
<b>Cyberstalking</b>	Repeated use of electronic communication to harass or frighten someone.
<b>Online Grooming</b>	Deliberate act taken to befriend and create an emotional connection with a child, resulting in not good intentions.
<b>Cyberpal</b>	A friend who you only communicate with through the internet or cyberspace.
<b>Password</b>	A secret word or phrases that must be used to gain access to something.
<b>Emoji</b>	Small digital image or icon used to express an idea, emotion, etc.
<b>Hacking</b>	Gaining access to a computer, with the intention of stealing data or causing damage.
<b>Download</b>	Copying data from one computer system to another, typically over the internet.
<b>Chat room</b>	A website, or part of a website which allows people to communicate via a computer network in real time.
<b>Spam</b>	An email that is sent to a large number of people and mostly consists of advertising.
<b>SNS</b>	An online platform that allows users to create a public profile and interact with others.

<b>IM</b>	Instant messaging.
<b>Block</b>	Action taken to stop interactions from certain people via online communication.
<b>Social network</b>	An online platform that allows users to create a public profile and interact with other users on the website.
<b>Online profile</b>	A social identity that an Internet user establishes in online communities and on websites.
<b>Privacy settings</b>	The part of a social networking website, internet browser, piece of software, etc. that allows you to control who sees information about you.
<b>Virus</b>	A program or piece of code that is loaded onto your computer without your knowledge and runs against your wishes and has a detrimental effect.
<b>Phishing</b>	Trying to get you to follow a link and provide information to the sender, like a password or an account number.
<b>Plagiarism</b>	The act of presenting another's work or ideas as your own.

### How do you stay safe on the Internet?

1. Create complex passwords
2. Boost your network security
3. Use a firewall
4. Click smart
5. Keep up to date

Three Laws to protect against computer crimes:

1. Sexual Offences Act 2003
2. Criminal Justice and Immigration Act 2008
3. Racial and Religious Hatred Act 2006

### Protection from online bullying and harassment

Cyberbullying is an extremely unpleasant and upsetting experience. There are several authorised websites that offer advice on how to stay safe online and what to do if Cyberbullying occurs:  
BBC Webwise ([www.bbc.co.uk/webwise](http://www.bbc.co.uk/webwise))  
Childline (<http://www.childline.org.uk>)  
ThinkUKnow run by the Child Exploitation and Online Protection centre (CEOP)  
([www.thinkuknow.co.uk](http://www.thinkuknow.co.uk))

The Bullying UK helpline is available on 0808 800 2222, and Childline can be contacted on 0800 1111.



**ZIP IT**  
Keep your personal stuff private and think about what you say and do online.



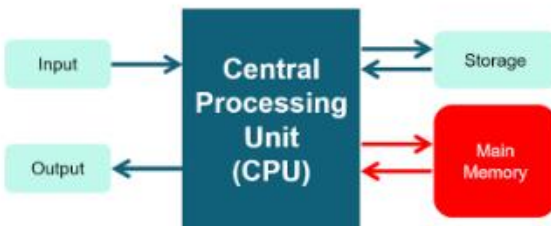
**BLOCK IT**  
Block people who send nasty messages and don't open unknown links and attachments.



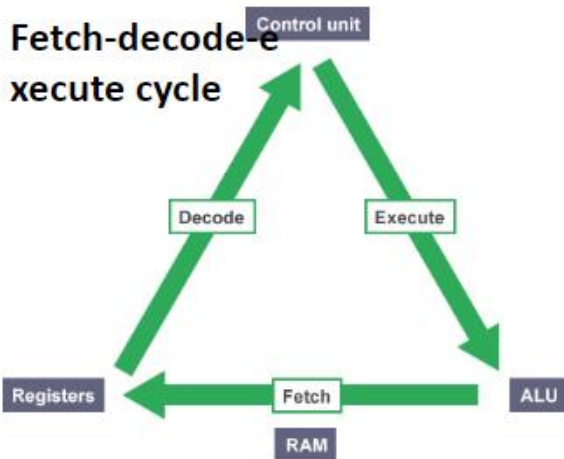
**FLAG IT**  
Flag up with someone you trust if anything upsets you or if someone asks to meet you offline.



## The components of a computer



## Fetch-decode-execute cycle



### Fetch-decode-execute cycle

The main job of the **CPU** is to **execute** programs using the **fetch-decode-execute cycle** (also known as the **instruction cycle**). This cycle begins as soon as you turn on a computer.

To execute a program, the program code is copied from secondary storage into the main memory. The CPU's **program counter** is set to the memory location where the first instruction in the program has been stored, and execution begins. The program is now running.

In a program, each **machine code** instruction takes up a slot in the main memory. These slots (or memory locations) each have a **unique memory address**. The program counter stores the address of each instruction and tells the CPU in what order they should be carried out.

When a program is being executed, the CPU performs the fetch-decode-execute cycle, which repeats over and over again until reaching the STOP instruction.

#### Summary of the fetch-decode-execute cycle

1. The processor checks the program counter to see which instruction to run next.
2. The program counter gives an address value in the memory of where the next instruction is.
3. The processor fetches the instruction value from this memory location.
4. Once the instruction has been fetched, it needs to be decoded and executed. For example, this could involve taking one value, putting it into the **ALU**, then taking a different value from a **register** and adding the two together.
5. Once this is complete, the processor goes back to the program counter to find the next instruction.
6. This cycle is repeated until the program ends.



# 2 – Office Skills

2

## Using Word/Google Docs to write letters

### LETTER LAYOUT

**Right Aligned** (points to date)

**Left Aligned** (points to recipient address)

**ADDRESS – who you are sending the letter to** (points to sender address)

**Company ADDRESS** (points to company name)

**Date (in FULL)** (points to date)

**Dear...the name of the person who the letter is being sent to** (points to salutation)

**TOPIC of the letter (centralised)** (points to subject line)

**Body of TEXT/Letter (Justified)** (points to main text)

**5 line spaces between Yours sincerely and your name/job title. Space to SIGN** (points to signature area)

**Ending the letter RULE:**  
**Dear Sir/Madam = Yours faithfully**  
**Dear Mr Bloggs = Your sincerely**

**Sample Letter Content:**  
 25 Southfields  
 Penistone  
 Moreside  
 FE2 5RM  
 Dear Claire Rogers  
 Introduce a Friend – Free Streams  
 I am writing to inform you of the fantastic promotional offer we have. If you introduce a friend or relative to Moreside, they will receive three recently released movies free to stream with their first month's subscription. We will also give you three free movies to stream according to the 15 certificate age block stated on your membership.  
 This offer is only available for a short time and will expire at the end of the month. To qualify for this offer contact one of our sales team on 01632 960044. Friends should quote reference IF3 when they register and remember they must give your details so that your free streams will be added to your membership account.  
 You have been one of our valued customers since 2/1/2018 and we hope you are enjoying the wide range of movies we have available – remember to tell your friends about us.  
 Yours sincerely  
 Adam Weinberg  
 Director

### Formatting your work

You can format your work by underlining text, using bullet points, numbering, changing text style, colour and size. You can align the text so it is either in the middle, left or right. You can include Titles, headers and footers (dates/page numbers) and you can change the orientation of the page.

All decent word processors have a **formatting toolbar** like this. Almost all the formatting you'll need to do can be done from here.

**FONT** (points to font face dropdown)

**TEXT SIZE** (points to font size dropdown)

**TEXT HIGHLIGHTING — BOLD, ITALIC AND UNDERLINE** (points to B, I, U buttons)

**COLOURS AND BORDERS** (points to color and border icons)

**PARAGRAPH STYLES** (points to style dropdown)

**ALIGNING AND TEXT JUSTIFICATION** (points to alignment buttons)

**BULLETS, NUMBERING AND INDENT** (points to bullet and numbering icons)

### Mail Merge

**File Home Insert Design Layout References Mailings Review View Tell me what you want to do...**

**Mailings Tab Options:**  
 Envelopes Labels | Start Mail Merge | Select Recipients | Edit Recipient List | Highlight Merge Fields | Address Block | Greeting Line | Insert Merge Field | Rules | Match Fields | Update Labels | Preview Results | Find Recipient | Check for Errors | Preview Results

### Shortcut Keys – Learn Them

<b>COPY</b>	<b>Ctrl + c</b>
<b>CUT</b>	<b>Ctrl + x</b>
<b>PASTE</b>	<b>Ctrl + v</b>
<b>SAVE</b>	<b>Ctrl + s</b>
<b>PRINT</b>	<b>Ctrl + p</b>
<b>UNDO</b>	<b>Ctrl + z</b>
<b>REDO</b>	<b>Ctrl + y</b>
<b>BOLD</b>	<b>Ctrl + b</b>
<b>ITALIC</b>	<b>Ctrl + i</b>
<b>UNDERLINE</b>	<b>Ctrl + u</b>

# Spreadsheets –Knowledge Organiser

## Why do we use Spreadsheets?

Spreadsheets are used to store information and data. Once we have our information in a spreadsheet we can run powerful calculations, make graphs and charts and analyse patterns.

### Uses of spreadsheets:

- Budget tracker
- Stock tracking of a business
- Money use in a business
- Teacher may use it to keep a record of students grades

## Layout of a Spreadsheet



## Cell reference

A cell reference is the name given to a cell to uniquely identify it. E.g. E4

An absolute cell reference ensures that 1 cell always remains constant even when autofill is used.

E.g. \$E\$4

## Sort & Filter

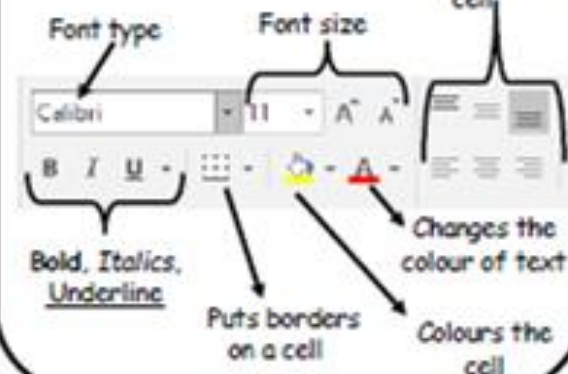
Sorting data organises it in a specific way e.g. alphabetically



Filtering data makes it easy for us to find one specific piece of data without having to look through every piece of data

## Formatting Cells

Changes the way text is displayed in a cell.



## Formulas

Only use when creating a calculation between 2 cells.

E.g.

= A1 + B1 (adds)

= A1 - B1 (subtracts)

= A1 \* B1 (multiplies)

= A1 / B1 (divides)

## Functions



Click on this button to insert a function

MAX  
IF  
COUNT  
COUNTIF  
MIN  
SUM  
AVERAGE

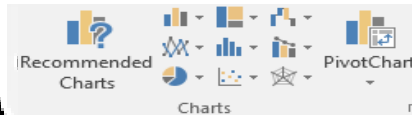
Click on the function you need or type it in to find it

## Graphs

Insert

Click on the insert tab at the top of Excel

Pick the chart that you need:

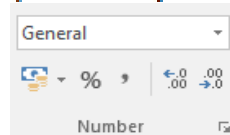


## Autofill

Click on the cell you want to duplicate, grab the black cross in the bottom right-hand corner and drag it down to the remaining cells.

## Data Types

You can format the cell to match the type of data you are inputting.



Click on the arrow where it says general, then from the options given select the right data type for your data.

ABC 123 General No specific format  
12 Number  
Currency  
Accounting  
Short Date  
Long Date  
Time  
Percentage  
Fraction  
Scientific  
ABC Text

More Number Formats...

## Data Validation

Data

Click on the Data tab at the top of Excel

Data Validation

Click on this button to get the data validation window

Use these headings to set up your data validation.

Settings

Input Message

Error Alert

## Conditional Formatting



Conditional Formatting

Click on this button to add conditional formatting



Highlight Cells Rules

Then click on highlight cell rules, depending on what your rule is select the next option that matches the rule you want to create.



### 3. DESIGN AND TECHNOLOGY

#### 1. Woods

##### Man-Made Woods

<b>Medium density fibreboard (MDF)</b>	<b>Description</b> •Has a smooth, even surface •Easily machined and painted •Available in water and fire-resistant form •Often veneered or painted to improve its appearance	<b>Uses</b> •Furniture and interior panelling
<b>Chipboard</b>	<b>Description</b> •Made from chips of wood glued together with urea formaldehyde (glue) •Usually veneered with an attractive hardwood or covered in plastic laminate	<b>Uses</b> •Kitchen and bedroom furniture •Shelving and general DIY Work
<b>Plywood</b>	<b>Description</b> •A very strong board, constructed of layers of veneer or plies, which are glued together with the grains at 90° to each other •Interior and exterior grades available.	<b>Uses</b> •Furniture making •Boat building and exterior work
<b>Hardboard</b>	<b>Description</b> •A very cheap particle board •Can have a laminated plastic surface	<b>Uses</b> •Kitchen unit and furniture back panels






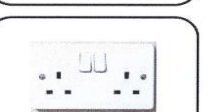
##### Hard Woods

<b>Oak</b>	<b>Description</b> •A very strong, light-brown wood •Open grained •Very hard, but quite easy to work with	<b>Uses</b> •High quality furniture •Beams used in building •Veneers
<b>Mahogany</b>	<b>Description</b> •Reddish-brown in colour •Easy to work with	<b>Uses</b> •Indoor furniture •Shop fittings •Bars •Veneers
<b>Beech</b>	<b>Description</b> •A straight-grained hardwood with a fine texture •Light in colour •Very hard but easy to work with •Can be steam bent	<b>Uses</b> •Furniture •Toys •Tool handles
<b>Ash</b>	<b>Description</b> •Open grained •Easy to work with •Pale cream colour, often stained black •Can be laminated (i.e. sliced into veneers which are glued together)	<b>Uses</b> •Tool handles •Sports equipment •Furniture •Ladders •Veneers

##### Soft Wood

<b>Pine</b>	<b>Description</b> •Pale-yellow coloured with dark lines and a fine, even texture. •Medium in weight •Stiff and stable •Inexpensive	<b>Uses</b> •Readily available for DIY work •Mainly used for constructional work and simple joinery •Furniture
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#### 2. Plastics

<b>Acrylic</b>		<b>Properties:</b> • Hard wearing • Will not shatter • Can be coloured • Bathtubs, School Projects, Display signs
<b>Polypropylene</b>		<b>Properties:</b> • High Impact strength • Softens at 150°C • Can be Flexed many times without breaking • School chairs, Crates
<b>High Impact Polystyrene (HIPS)</b>		<b>Properties:</b> • Light but strong • Widely available in sheets • Used for casings of electronic products
<b>Polythene (LDPE)</b>		<b>Properties:</b> • Weaker and softer than HDPE. • Lightweight • Carrier Bags + Squeezy Bottles
<b>Polythene (HDPE)</b>		<b>Properties:</b> • Stiff strong plastic • Used for pipes and bowls • Buckets
<b>Urea formaldehyde</b>		<b>Properties:</b> • Colourless plastic • Can be coloured • Door and cupboard handles, Electrical fittings



#### 3. Material Properties

<b>Strength</b> The ability of a material to stand up to forces being applied without it bending, breaking, shattering or deforming in any way.
<b>Elasticity</b> The ability of a material to absorb force and flex in different directions, returning to its original position.
<b>Ductility</b> The ability of a material to change shape (deform) usually by stretching along its length.
<b>Malleability</b> The ability of a material to be reshaped in all directions without cracking.
<b>Hardness</b> The ability of a material to resist scratching, wear and tear and indentation.
<b>Toughness</b> A characteristic of a material that does not break or shatter when receiving a blow or under a sudden shock.

#### 3. Metals

<b>Aluminium</b>	<b>Properties:</b> • Light Weight • Light grey in colour • Can be polished to a mirror like appearance • Rust resistant	
<b>Mild Steel</b>	<b>Properties:</b> • Heavy • Dark grey in colour • Rusts very quickly if exposed	
<b>Stainless Steel</b>	<b>Properties:</b> • Heavy • Shiny appearance • Very resistant to wear / rust.	
<b>Cast Iron</b>	<b>Properties:</b> • Re melted pig iron with some quantities of other metals • Strong in compression. • Brittle	
<b>Copper</b>	<b>Properties:</b> • Reddish brown metal. • Soft • Excellent conductor of heat and electricity	
<b>Brass</b>	<b>Properties:</b> • Yellow metal • Hard • Alloy	

#### 4. Composites

<b>Carbon Fibre</b>	<b>GRP Fibreglass</b>
Expensive in comparison to other materials.	GRP is composed of strands of glass which are woven to form a flexible fabric. The fabric is normally placed in a mould and polyester resin is added.
Very good strength to weight ratio.	
Used in the manufacture of high end sports cars and sports equipment.	Glass reinforced plastic is lightweight and has good thermal insulation properties. It has a high strength to weight ratio
	



## 4. DRAMA

### Drama Year 7 Learning Cycle 1 Silent Movies



**Slapstick:** Comedy that includes CLUMSY actions and EMBARRASSING events



**Suspense:** Creating a feeling of excitement or nervousness about what might happen next

#### What is mime?

Acting without speaking

#### Facial expression:

This is using your face to show emotion to the audience. These need to be very over the top in a mime performance



#### Gestures:

Moving part of the body in a way that expresses meaning e.g. waving to say hello. These need to be big and clear in a mime performance.

#### Captions:

##### Dialogue:

Speech

##### Sound effect:

A noise that is happening within the performance

“Oh no! Not again!”

Bang! Crash!

### Jacques Lecoq's 7 Levels of Tension

1 Exhausted



2 Laid Back



3 Neutral



4 Alert



5 Suspense



6 Passionate



7 Tragic



## 5. ENGLISH

### Learning Cycle 1

### **The Dramatic World of Shakespeare**

Subject terminology	Definitions
Archetype	an idea, symbol, pattern, or character-type, in a story.
Genre	a style or category of art, music, or literature.
Character	a person in a novel, play, or film. The traits and features of a person
Plot	the sequence of events in a play, novel, film,
Era	a long and distinct period of history.
History	Shakespearean play that cover English history from the twelfth to the sixteenth centuries
Tragedy	Shakespearean play with a sad ending where the main character has a flaw that causes them to suffer
Comedy	Shakespearean play the focuses on love and romance with mistaken identity, confusion and coincidence
Hero	a person who is admired for their courage, outstanding achievements, or noble qualities.
villain	a character whose evil actions or motives are important to the plot

In this learning cycle we will be exploring the world of heroes and villains throughout literature, reaching back to ancient times with Homer and mythical heroes such as Odysseus, discovering Shakespearean heroes and villains in 'The Winter's Tale' and exploring how these characters influenced the modern works of Rick Riordan and J.K Rowling in the characters of Percy Jackson, Harry Potter and Voldemort! We will also be exploring the portrayal of heroes and villains in our everyday lives through a series of non-fiction articles and real life stories of heroism, helping us to identify what it is to be a 'hero' today. So, hold onto your hats for an adventure through time, a brush with baddies and a more than generous helping of heroics!

#### Key ideas:

Harry Potter and Lord Voldemort. Sherlock and Moriarty. Whatever the genre – be it romance, fantasy or detective fiction – many of our favourite stories involve a double act of a hero and villain, characters that inhabit our minds and linger in the imagination long after the tale is over.

Where would our stories be without these shades and light and dark? For us to understand what makes a hero, we need the villainous counterpart for comparison.

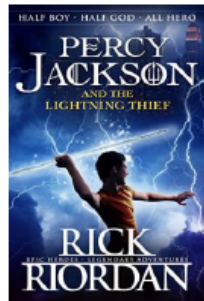
What is a hero? If you look up the definition of a "hero," you're likely to find something like "a person admired for his or her courage, outstanding achievements, or noble qualities." Someone like King Arthur immediately comes to mind – a true literary hero, a larger-than-life character, a defender, and a protector. But not all heroes in literature are created equal, which is why

there shouldn't be a single, idealized definition of a hero. Heroes and heroines in literature aren't always the paragons of virtue; in fact, they can be the exact opposite – flawed and lost souls who fail many times along their hero journey. Heroic deeds aren't limited to noble knights, dragon-slayers, soldiers, warriors, prodigies, or fantastical beings. Much like in real life, a hero in literature can also be someone without apparent heroic qualities, an ordinary boy or a girl trying their best in extraordinary circumstances.

Shakespeare's Theatre. Many believe that Shakespeare was the greatest creator of characters but where did he get his inspiration from? His characters entertain, enthrall, frighten, shock; move us to laughter or to tears. Politics, religion, monarchy, war, plague, censorship, and social traditions and conventions all played their part in shaping Shakespeare's work. Theatre construction, staging, costumes, and props all played a part in creating the magic. Shakespeare was also working to give audiences what they wanted to see, from the "groundlings" who paid a penny for a standing place in front of the stage, to Queen Elizabeth herself, who loved the theatre.

Shakespeare's company built the Globe in 1599 in Southwark on the south bank of the Thames. The Globe was an open-air theatre shaped like a doughnut. There were shelters over the seats and the stage, but the middle section was open to the sky. The sun was the only source of light – performances took place during the day, not at night like they do now. The building was made of wood and plaster, like most Tudor buildings, which meant it was vulnerable to fire. No candles!

Some further reading if you enjoyed our class texts:



The first novel of a new series that mixes classic Greek mythology with modern adventure. After learning he is a demigod, Percy Jackson is sent to a summer camp on Long Island, where he meets the father he never knew--Poseidon, god of the sea.



Fourteen-year-old Alex is forcibly recruited into MI6. Armed with secret gadgets, he is sent to investigate Herod Sayle, a man who is offering state-of-the-art Stormbreaker computers to every school in the country. But the teenage spy soon finds himself in mortal danger.



Bilbo Baggins enjoys a quiet and contented life, with no desire to travel far from the comforts of home; then one day the wizard Gandalf and a band of dwarves arrive unexpectedly and enlist his services on a dangerous expedition to raid the treasure-hoard of Smaug the dragon. Bilbo's life is never to be the same again.



## 6. FOOD AND NUTRITION

## Food & Nutrition Knowledge Organiser

Key Words			
	<b>Teaspoon (tsp):</b> used as a measure for small quantities such as spices or salt.		<b>Dishcloth</b> used to wash the dirty equipment.
	<b>Grams (g):</b> used as form of measuring solids.		<b>Tea towel</b> used to dry the washed equipment.
	<b>Tablespoon (tbsp.):</b> used as a measure for larger quantities such as flour		<b>Oven gloves</b> used to protect your hands from burns
	<b>Millilitres (ml):</b> used as a form of measuring liquids.		<b>Palette knife</b> used to spread icing on cakes and lift food items as very flexible. Not at all sharp.
	<b>Grater</b> used to prepare cheese, vegetables or fruit		<b>Seasoning</b> adding different herbs and spices to improve the flavour of a dish.
	<b>Bridge hold</b> used to protect your fingers when cutting. Pass the knife through the bridge made by your fingers and thumb		<b>Plastic spatula</b> used to scrape bowls clean, spread mixtures and fold in flour
	<b>Fish slice</b> used to lift and turn over foods e.g. fried eggs		<b>Rubbing in method</b> using your fingers rub together fat and flour to create a breadcrumb like mixture, used for pizza, crumble, scones, pastry
	<b>Pastry brush</b> used to brush glazes onto foods or grease trays and tins		<b>Hand whisk</b> used to whisk ingredients like cream and egg whites to trap air

## Healthy Eating and Nutrition



**How the body uses nutrients:**  
**Protein** – growth and repair – found in pulses/eggs/fish/meat  
**Carbohydrates** – energy – found in bread/pasta/rice/potatoes  
**Calcium** – strong bones and teeth – found in milk/cheese/yogurt  
**Vitamins and Minerals** – boost immune system – found in fruit/vegetables  
**Fats** – protect vital organs and keep us warm – found in oils and spreads

## 8 Tips For Healthy Eating

1. Base your meals on starchy foods - bread, cereals, rice, pasta & potatoes
2. Eat lots of fruit and vegetables
3. Eat more fish
4. Cut down on saturated fat and sugar
5. Try to eat less salt
6. Get active and try to be a healthy weight
7. Drink plenty of water
8. Don't skip breakfast

## Safety and Food Hygiene



### Health & Safety when using the cooker:

Turn saucepan handles in away from edge of cooker  
Always turn hob off when not in use.  
Never leave food cooking on the hob unattended.  
Be careful not to let food boil dry.

Never touch an electric hob when turned off, it may still be hot.  
Do not leave metal spoons in pans when cooking as they can become very hot.

Always use oven gloves when removing food from the oven.  
**Working with high risk foods:**  
 High-risk foods are foods that help support the growth of bacteria  
 Examples are meat, eggs, shellfish, cooked rice, fish, dairy and  
 sauces.  
 Always keep high-risk foods in the fridge.  
 Always check use by dates before use.  
 Ensure high risk foods are cooked to a core temperature of 75°C.  
 Always prepare high-risk foods on correct chopping board.  
 Always wash hands after handling high-risk foods.

### Health & Safety in the Food Room: Personal Hygiene

- Wash hands in hot, soapy water
- Tie long hair back
- Wear a clean apron
- Tuck in tie
- Remove blazer and jumper



## Recipe Adapting




Sometimes we adapt/change recipes because:-

- We don't like some of the ingredients
- We have an allergy/intolerance
- We do not have the ingredients available
- We want to make a recipe better for our health

There are **3** main ways to adapt a recipe:-

1. **Reducing** – using a smaller/larger quantity of an ingredient which is unhealthy/healthy
2. **Substituting** – swapping unhealthy ingredients for healthier versions
3. **Changing** the method of cooking – using a cooking method that doesn't require added fat/oil e.g. steaming, grilling, baking, boiling

## Practical Skills



## 7. FRENCH

### Knowledge Organiser – Français – Year 7 – Learning Cycle 1.1 – Vocabulaire



#### On se rencontre

Bonjour!  
Salut!  
Comment t'appelles-tu?  
Je m'appelle ...  
Ça va?  
Oui, ça va bien, merci.  
Pas mal.  
Non, ça ne va pas.  
Au revoir.

#### Meeting people

Hello!  
Hi!  
What's your name?  
My name's ...  
How are you?  
Yes, I'm OK, thanks.  
So-so.  
No, I'm not OK.  
Goodbye.

#### Les affaires pour le collège

Qu'est-ce que c'est?  
C'est ...  
un cahier  
une calculatrice  
un carnet de textes  
un crayon  
une gomme  
un livre  
un portable  
un porte-monnaie  
une règle  
un sac  
un stylo  
une trousse

#### School objects

What's this?  
It's ...  
an exercise book  
a calculator  
a homework diary  
a pencil  
a rubber  
a book  
a mobile phone  
a purse  
a ruler  
a bag  
a pen  
a pencil case

#### L'alphabet

Comment ça s'écrit?  
Ça s'écrit ...

#### The alphabet

How do you spell that?  
You spell it ...

#### Les nombres

##### 1-31

un 1  
deux 2  
trois 3  
quatre 4  
cinq 5  
six 6  
sept 7  
huit 8  
neuf 9  
dix 10  
onze 11  
douze 12  
treize 13  
quatorze 14  
quinze 15  
seize 16  
dix-sept 17  
dix-huit 18  
dix-neuf 19  
vingt 20  
vingt et un 21  
vingt-deux 22  
trente 30  
trente et un 31

#### Les âges

Quel âge as-tu?  
J'ai ... ans.

#### Les jours de

##### la semaine

lundi  
mardi  
mercredi  
jeudi  
vendredi  
samedi  
dimanche

#### Numbers 1-31

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
30  
31

#### Ages

How old are you?  
I am ... years old.

#### The days of the

##### week

Monday  
Tuesday  
Wednesday  
Thursday  
Friday  
Saturday  
Sunday

#### Les mois

janvier  
février  
mars  
avril  
mai  
juin  
juillet  
août  
septembre  
octobre  
novembre  
décembre

#### Les anniversaires

C'est quand, ton  
anniversaire?  
Mon anniversaire,  
c'est le cinq mai/  
le premier juillet.

#### En classe

Il y a ...  
la chaise  
les crayons  
la fenêtre  
les livres  
le magnétophone  
la porte  
le professeur  
les règles  
le rétroprojecteur  
la table  
le tableau blanc  
des cahiers  
des crayons  
huit crayons  
quatre fenêtres  
C'est le crayon de Luc.

#### The months

January  
February  
March  
April  
May  
June  
July  
August  
September  
October  
November  
December

#### Birthdays

When's your birthday?  
My birthday's on the 5th  
of May/the 1<sup>st</sup> of July.

#### In the classroom

There is/are ...  
the chair  
the pencils  
the window  
the books  
the tape-recorder  
the door  
the teacher  
the rulers  
the overhead projector  
the table  
the whiteboard  
some exercise books  
some pencils  
eight pencils  
four windows  
It's Luc's pencil.

#### Les instructions

Écoutez ...  
Fermez ...  
Ouvrez ...  
Prenez ...  
Regardez ...  
Travaillez à deux.

#### Instructions

Listen to ...  
Close ...  
Open ...  
Take ...  
Look at ...  
Work in pairs.

#### Les couleurs

blanc(he)  
bleu(e)  
gris(e)  
jaune  
marron  
noir(e)  
orange  
rose  
rouge  
vert(e)

#### Colours

white  
blue  
grey  
yellow  
brown  
black  
orange  
pink  
red  
green

# Français - Year 7 - Learning Cycle 1.1- **Grammaire** -



- All nouns (**les noms**) in French have a gender (**le genre**): masculine (**masculin**) or feminine (**féminin**).
- All males (e.g. father) are masculine nouns, all females (e.g. mother) are feminine.
- You can find the gender of other nouns in the dictionary: (m) means masculine, (f) means feminine.

	masculine	feminine	plural
definite article	le	la	les
indefinite article	un	une	des*

\*des usually means 'some'

Here are some examples for you to learn.

Can you explain the rule?

- 1 le cahier → Les cahiers
- 2 une règle → des règles
- 3 une banane → des bananes
- 4 la femme → les femmes
- 5 un garçon → des garçons

- Adjectives (**les adjectifs**) are describing words. Colours are adjectives.
- In French, most adjectives, including colours, come **after** the noun they are describing:  
e.g. a blue pen → **un stylo bleu**

- Adjectives usually add -e if the noun they are describing is **feminine**.  
**un stylo vert** → **une règle verte**
- Adjectives usually add -s if the noun they are describing is **plural**.  
**un stylo vert** → **des stylos verts**  
**une règle verte** → **des règles vertes**
- Adjectives which already end in -e don't add another -e for feminine.
- Some adjectives are irregular e.g. **blanc** → **blanche**  
**marron** never changes

The right adjective is underlined.  
Can you explain why?

- 1 J'ai un stylo vert / verte / verts / vertes.
- 2 J'ai une idée génial / géniale / géniales.
- 3 Il y a une porte jaune / jaunes.
- 4 C'est un cahier bleu / bleue / bleus / bleues.
- 5 C'est une trousse vert / verte / verts / vertes.
- 6 C'est des gomme blanc / blanche / blanches.

## Les adjectifs de couleur [Colour adjectives]

English	Masculine	Feminine	Plural Masc	Plural Fem
red	rouge	rouge	rouges	rouges
blue	bleu	bleue	bleus	bleues
green	vert	verte	verts	vertes
yellow	jaune	jaune	jaunes	jaunes
black	noir	noire	noirs	noires
white	blanc	blanche	blancs	blanches
pink	rose	rose	roses	roses
violet	violet	violette	violets	violettes
grey	gris	grise	gris	grises
brown	marron	marron	marron	marron

# Knowledge Organiser – Français – Year 7 – Learning Cycle 1.2 **Vocabulaire**

## Ma famille et mes copains

J'ai ...  
Je n'ai pas ...  
Tu as ...?  
As-tu ...?  
un frère  
une sœur  
un frère qui s'appelle  
deux sœurs qui s'appellent ...  
Je suis ...  
fils unique (m)  
fille unique (f)  
mon ami  
mon copain  
mon demi-frère  
  
mon frère  
mon grand-père  
mon oncle  
mon père  
mon amie  
ma copine  
ma demi-sœur  
  
ma grand-mère  
ma mère  
ma sœur  
ma tante  
ma famille  
mes parents  
mes grands-parents  
Voici ...  
Voilà ...

## My family and friends

*I have ...  
I don't have ...  
Do you have ...?  
Do you have ...?  
a brother  
a sister  
a brother called ...  
two sisters called ...  
  
I am ...  
only child (male)  
only child (female)  
my friend (male)  
my friend (male)  
my half-brother/  
stepbrother  
my brother  
my grandfather  
my uncle  
my father  
my friend (female)  
my friend (female)  
my half-sister/  
stepsister  
my grandmother  
my mother  
my sister  
my aunt  
my family  
my parents  
my grandparents  
Here is/are ...  
That is/Those are ...*

## Les animaux

J'ai ...  
un animal (des animaux)  
une araignée  
un chat  
un cheval (des chevaux)  
un chien  
un cochon d'Inde  
un hamster  
un lapin  
un oiseau (des oiseaux)  
un poisson  
un serpent  
une souris (des souris)  
une tortue  
Je n'ai pas d'animal.

## Les adjectifs

Je suis ...  
Tu es ...  
Il est ...  
Elle est ...  
petit (petite)  
grand (grande)  
de taille moyenne  
actif (active)  
bavard(e)  
gourmand(e)  
marrant(e)  
paresseux(paresseuse)  
sportif (sportive)  
sympa  
timide  
un peu  
assez  
très

## Pets

*I have ...  
an animal (animals)  
a spider  
a cat  
a horse (horses)  
a dog  
a guinea pig  
a hamster  
a rabbit  
a bird (birds)  
a fish  
a snake  
a mouse (mice)  
a tortoise  
I don't have any  
pets.*

## Adjectives

*I am ...  
You are ...  
He is ...  
She is ...  
small  
tall  
of medium height  
active  
chatty  
greedy  
funny  
lazy  
sporty  
nice  
shy  
a bit  
quite  
very*

## Les yeux et les cheveux

J'ai ...  
Tu as ...  
As-tu ...?  
Il a ...  
Elle a ...  
  
les yeux bleus/gris/  
marron/verts  
les cheveux blonds  
les cheveux bruns  
les cheveux noirs  
les cheveux roux  
les cheveux courts  
les cheveux longs  
les cheveux mi-longs  
les cheveux frisés

Je n'ai pas de  
cheveux.

## Eyes and hair

*I have ...  
You have ...  
Do you have ...?  
He has ...  
She has ...  
  
blue/grey/brown/  
green eyes  
fair hair  
brown hair  
dark hair  
red hair  
short hair  
long hair  
medium-length hair  
curly hair  
  
I don't have any  
hair.*





# Year 7 - Learning Cycle 1.2 - Grammaire -

- The usual way to form the plural of a French noun is to add -s on the end - just as in English.
- You also have to remember that the article before the noun (e.g. le, un) changes according to whether the noun is singular or plural.

**A** Exemple: la sœur → les sœurs (the sisters)  
un crayon → des crayons (some pens)

- |   |              |                      |
|---|--------------|----------------------|
| 1 | le zèbre     | <u>les zèbres</u>    |
| 2 | la tortue    | <u>les tortues</u>   |
| 3 | un chien     | <u>des chiens</u>    |
| 5 | une araignée | <u>des araignées</u> |
| 6 | un cheval    | <u>des chevaux</u>   |
| 7 | un jumeau    | <u>des jumeaux</u>   |
| 8 | un cheveu    | <u>des cheveux</u>   |

Irregular plurals  
-al → -aux  
-eau → -eaux  
-eu → -eux

- 'My', 'Your', 'his', 'her', etc. are called possessive adjectives (les adjectifs possessifs):

	singulier		pluriel
	masculin	féminin	
my	mon frère	ma sœur	mes parents
your	ton frère	ta sœur	tes parents
his/her	son frère	sa sœur	ses parents

Attention !!  
With feminine singular nouns which begin with a vowel or h, you use **mon, ton or son**  
e.g. **mon amie**

The correct French possessive adjective is underlined.  
Can you explain the rule

- |   |                                     |    |                                     |
|---|-------------------------------------|----|-------------------------------------|
| 1 | C'est mon/ <u>ma</u> /mes mère.     | 6  | Ce sont ton/ta/ <u>tes</u> frères?  |
| 2 | Où sont mon/ma/ <u>mes</u> parents? | 7  | Où est <u>ton</u> /ta/tes portable? |
| 3 | Tu as <u>ton</u> /ta/tes sac?       | 8  | J'ai <u>mon</u> /ma/mes stylo.      |
| 4 | Où est <u>ton</u> /ta/tes chien?    | 9  | C'est <u>ton</u> /ta/tes animal.    |
| 5 | Où sont mon/ma/ <u>mes</u> sœurs?   | 10 | Où sont ton/ta/ <u>tes</u> devoirs? |

1 <sup>st</sup> Person ->	Most important = I	3 <sup>rd</sup> Person ->	He - She - It
Je m'appelle	My name is ...	Il/elle s'appelle	He/she/it is called
J'ai	I have	Il/elle a	He/she/it has
Je suis	I am	Il/elle est	He/she/it is
J'habite	I live	Il/elle habite	He/she/it lives
Je parle	I speak	Il/elle parle	He/she/it speaks
J'adore	I love	Il/elle adore	He/she/it loves
J'aime	I like	Il/elle aime	He/she/it likes
Je n'aime pas	I don't like	Il/elle n'aime pas	He/she/it doesn't like

Attention!!

Ils s'appellent	They are called
elles s'appellent	They [girls] are called



## 8. GEOGRAPHY



### Direction

You need to know the 8 point compass for giving directions, saying which way long shore drift is going or if it says look at the headland in the northwest corner of the map.

**The compass**

On most maps the direction 'north' will be straight up the map but check the compass carefully.

### Map Symbols

Generally if you are given an OS map it will have a key telling you what the symbols mean. However, it's a good idea to learn some of the most common ones which are shown below.

Motorway	County boundary	Footpaths
Main (A) road	National Park boundaries	Viewpoint
Secondary (B) road	Building	Tourist information centre
Bridge	Bus station	Parking
Railway	Places of worship	

### Scale and Distance

Maps should always have a scale which can be shown with a ratio e.g 1:50,000 (which means 1 cm on the map equals 50,000cm (or 0.5km) in real life or a scale line which you can put your ruler alongside to see what distance is represented by 1cm on the map.

#### On the paper's edge

One method of measuring distance is to take a sheet of paper and place the corner of a straight edge on your starting point. Now pivot the paper until the edge follows the route that you want to take.

#### Step 1

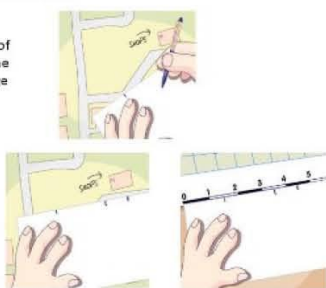
Every time the route disappears or moves away from the straight edge of your paper, make a small mark on the edge and pivot the paper so the edge is back on course.

#### Step 2

Repeat this process until you reach your destination.

#### Step 3

You should be left with a series of marks along the edge of your paper. You can now place the sheet against the scale bar on your map. The last mark you made will tell you the real distance you need to travel.



### 4 Figure Grid References

Ordnance Survey maps have numbered gridlines drawn on them. The lines running up and down the page are called eastings (because their numbers get higher as you move eastwards) and the ones running across the map are known as northings (because their numbers get higher as you move northwards).

#### Four-figure grid references

To give the 4 figure grid reference for the information centre give the number of the line that runs up the left hand side of the square (47). Then give the number of the line that runs across the bottom of the square (33). This gives a four figure grid reference of 4733.

#### Six-figure grid references

To give a 6 figure grid reference for the information centre start by finding the line that runs up the left hand side of the square (47) then imagine that the square is divided into tenths (this has been done for you on the diagram) and count across the tenths (6). Then give the line that runs across the bottom of the square (33) and count up the tenths (4). Put it altogether to give a grid reference of 476 334

## Year 7 GEOGRAPHY

### Map and Atlas skills

### Relief

#### Contours

Contours are orange lines found on an OS map that join places of equal height above sea level. They show the height of the land in metres by the numbers marked on them. They also show the steepness of the land by how close they are together (the closer the lines the steeper the slope).

#### Spot Heights

Spot heights are black dots with a number next to them that give the height of that particular spot.

### Inferring things from maps

**As a geographer you should be able to describe and interpret a map.**

#### Describing locations

When you are asked to describe the location of something then write about what it is near. Use the scale calculate exactly how far away it is and also use compass points to describe the direction.

#### Inferring things from map evidence

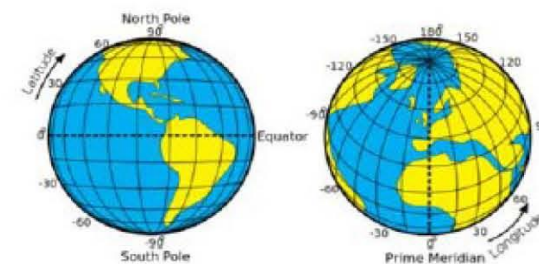
You also need to be able to work something out using map evidence. For example you might be asked what evidence there is that tourism is important along a particular section of the coast, so you might look for a sandy beach, a cliff top path and blue symbols which show tourist facilities e.g. a tourist information centre or a campsite.

#### Drawing a field sketch

A field sketch is used to show the main geographical characteristics of a landscape. It should be an accurate outline sketch and include labels and annotations.

#### Latitude and Longitude

Latitude lines on an atlas map run horizontally around the earth and tell us how far north or south of the Equator (0°). So for example London is 51°N. Longitude lines run vertically around the earth and they measure how far east or west of the Prime Meridian (a line of longitude that runs through Greenwich in London). So for example London would be 0° W.







## Dyson Perrins C of E Academy

The 5 countries of the **British Isles** are England, Scotland, Wales, Northern Ireland and the Republic of Ireland.



### The Physical Geography of the British Isles

The highland is located more to the North and West of the British Isles.

The areas that receive the highest rainfall are in the North and West. There is a link between rainfall and relief.



### Advantages of a multicultural society

More varied food available from different countries.

People have more understanding and tolerance of other peoples beliefs and religion.

### Disadvantages of a multicultural society

Ethnic minority groups may feel isolated living in parts of Britain.

Resentment and conflict could occur between different ethnic groups.

Britain can be described as **Multi Cultural**. This means that there are many different ethnic groups and cultures that live/exist in Britain in 2019. This has influenced many things such as the type of food people eat, the music we listen to, Sporting stars and the people who work in Britain.

## Year 7 Knowledge organiser Who do you think you are!

### FAMOUS PLACES TO VISIT IN BRITAIN

Many people come on holiday each year to Britain. This is because there are many places to visit that appeal to lots of people.



People interested in History may visit Stonehenge in Wiltshire, lots of people visit the capital city of London and Big Ben. Also, the Eden Project is a popular destination for tourists going to Cornwall.



### WHY DO PEOPLE MOVE TO BRITAIN?

People from other countries move to Britain for different reasons. **PUSH** factors are negative factors that make them leave a place and **PULL** factors are positive factors that attract them to a place such as Britain.

### **PUSH FACTORS (Negative)**

Natural disasters such as Earthquakes, Volcanic Eruptions.

War or conflict in an area e.g. people left Syria due to the war.

### **PULL FACTORS (Positive)**

More varied type of jobs.

Family and Friends living in the area.



## 9. HISTORY

Year 7 History LC1.1 The Pursuit of History	
Historical Time Periods	
Pre-History	The period between the use of stone tools 3.3 million years ago and the invention of writing systems roughly 5,300 years ago.
Ancient History	The period from the beginning of writing roughly 5,300 years ago and the end of the Roman Empire in 467 CE
Middle Ages/Medieval period	From the 5 <sup>th</sup> century and the fall of the Roman Empire to the 15 <sup>th</sup> century (400 BCE – 1499 CE)
Renaissance period	Renaissance means 'rebirth of learning' and the period began in the 15 <sup>th</sup> century and lasted until the 17 <sup>th</sup> century. (1400-1699)
Age of Revolutions	The period during the 18 <sup>th</sup> century up to the end of the Industrial Revolution at the beginning of the 20 <sup>th</sup> century (1700-1899)
Modern History	The 20 <sup>th</sup> century right up to the present day. (1900-present)

### Primary Sources

Primary sources are original first-hand accounts of or objects from an event, topic or historical time period.

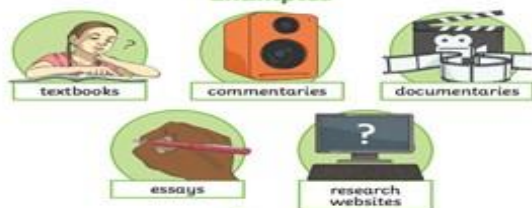
#### Examples



### Secondary Sources

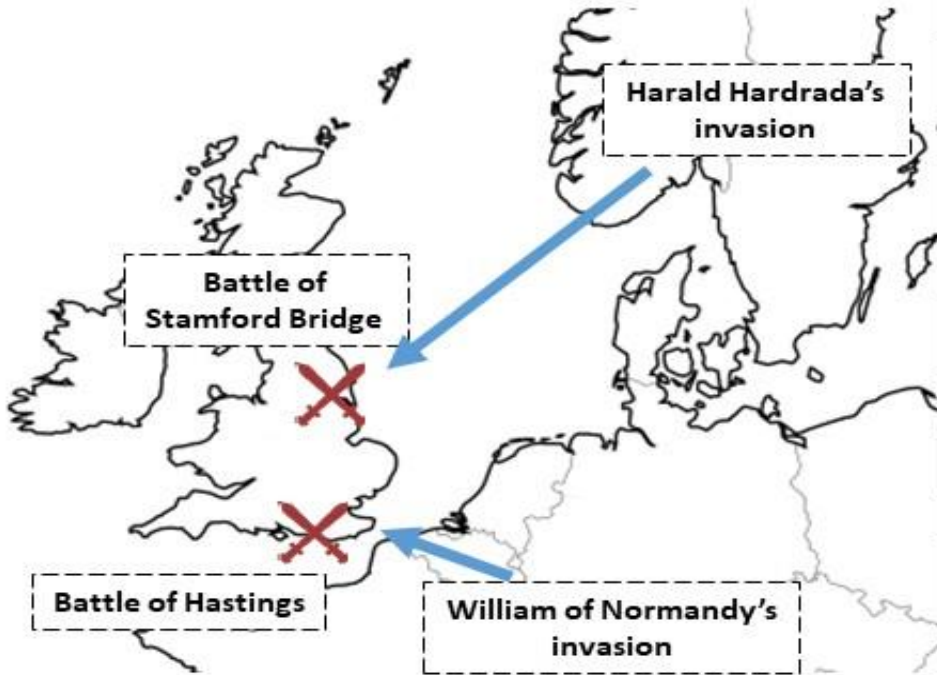
A secondary source is a second-hand account that interprets primary sources. They often use primary sources as the basis for their content.

#### Examples



Key vocabulary	
Anachronism	An object which appears in the wrong time period
Artefact	An object from the past made by a human being
BCE/BC	Before Common Era/Before Christ
CE/AD	Common Era- The years since the time of Jesus
Century	100 years
Cause	The reason why an event happened
Chronicle	A book recording events that happened year by year.
Chronological order	Putting events into the order they happened
Consequence	What happens after an event.
Contemporaries	People who were alive at the same time as the person being described.
Continuity	When things stay the same
Decade	10 years
Document	A record of something that is written/photographed/printed or other form
Empathy	To understand and share the feelings of another
Evidence	Facts or information that indicates if something is true
Enquiry	An investigation that involves asking questions and using evidence.
Interpretation	How something is understood. Historians often have different interpretations about the past.
Historian	Someone who researches the past and tries to explain what happened in the past.
Significant	Something that is seen to be important.
Source	An object, image or a piece of writing that helps historians answer questions about the past.



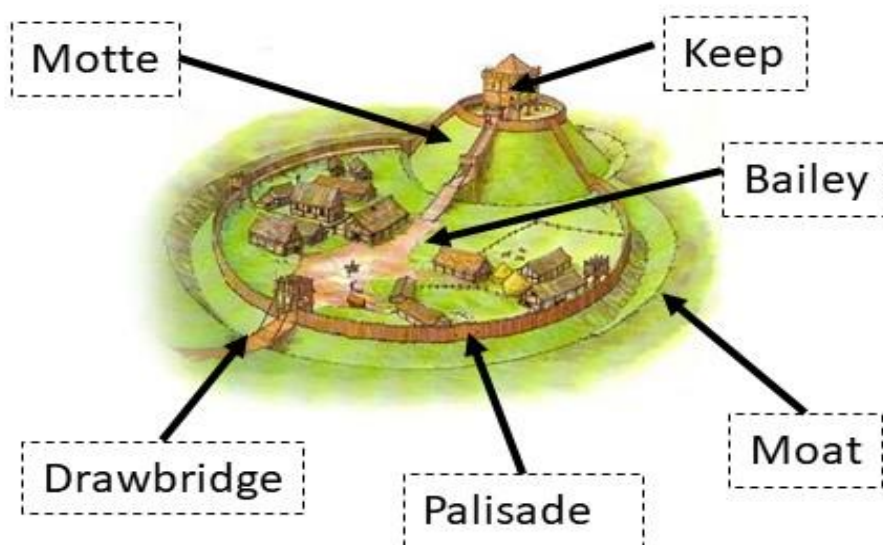
Year 7 History LC1.2 1066 and the Battle of Hastings		Key Vocabulary	
Timeline		Stamford Bridge	The place in the North of England where Harold Godwinson defeated Harald Hardrada.
5 <sup>th</sup> Jan 1066	Edward the Confessor dies without an heir	Hastings	The place in the South of England where William of Normandy defeated Harold Godwinson.
6 <sup>th</sup> Jan 1066	Harold Godwinson crowned King of England by the Witan Council	Shield Wall	A tactic used by the Saxons where they locked shields together and formed a tight block. Very difficult to defeat if it stayed together.
Sept 1066	Harald Hardrada invades the North of England	Knights	Soldiers mounted on horses and heavily armoured.
25 <sup>th</sup> Sept 1066	Harold Godwinson defeats Harald Hardrada at Stamford Bridge	Archers	Soldiers who used a bow and arrow.
28 <sup>th</sup> Sept 1066	William of Normandy invades the South of England	Infantry	Soldiers who fought on foot and used swords/axes and shields.
14 <sup>th</sup> Oct 1066	William defeats Harold Godwinson at the Battle of Hastings in 1066	Invasion	Where one country sends its soldiers into another to take it over.
25 <sup>th</sup> Dec 1066	William is crowned King of England	Vikings	Harald Hardrada's people who came from Norway in northern Europe.
		Saxons	Harold Godwinson's people who ruled most of England.
		Normans	William of Normandy's people who came from Normandy in northern France.
		Heir	The person who will inherit the throne when the current king or queen dies.
		Monarchy	A country that has a King or Queen at the head of government.
		Absolute monarchy	A type of monarchy where the King or Queen has total power and is not restricted by laws.
		Authority	The power or right to give orders, make decisions and control other people.
		Campaign (military)	Several events and actions by a group of soldiers to achieve a particular goal (The Normans goal was to make William King of England).
		Illegitimacy	Not having the right or the authority to be King.
		Key Individuals	
		Edward the Confessor	King of England who died in 1066 without an heir.
		Harold Godwinson	Saxon King of England who took power after Edward the Confessor.
		Harald Hardrada	Viking King of Norway.
		William of Normandy	Norman Duke of Normandy.

## Year 7 History LC1 .3 William the Conqueror after 1066

### Timeline

1066	William immediately begins building castles to control his new country.
1069	Rebellions break out across the north of England.
1069-71	William carries out the Harrying of the North to subdue the rebellions.
1085-86	The surveys for the Domesday book are undertaken.

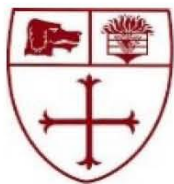
### Features of a Castle



### Key Vocabulary

Castle	A wooden or stone building created for defence.
Feudal System	The social structure created by William to control the population of England.
Harrying	The constant attacking of a civilian population
Hierarchy	The structure of a society based on power, wealth and status.
Nobility	Highest social class in the country.
Baron	The biggest landowners and military leaders in England. Part of the nobility
Knight	The soldiers in the Baron's armies.
Villein	The majority of England's population who were farmers who were tied to the land and could not leave without permission from the lord.
Motte and Bailey	Castles made of wood with a large open space (Motte) and a wooden fort built on a raised hill (Bailey)
Moat	The deep ditch dug around the Motte of a castle
Drawbridge	A bridge over to the moat, can be raised and lowered.
Census	When a government finds out who is in their country
Monk	A religious person, usually involved in writing records.
Rebellion	Where a group of people refuse to support the current government or monarch.
Gentry	People of a good social position just below the nobility.
peasants	Lowest social class in society.
Bishops	Senior member of the church and high social status.
Primogeniture	A feudal rule that ensures the eldest son inherits all the land
Authority	The power or right to give orders and make decisions.
Survey	To record information on an area of land and keep as a record

10. MATHEMATICS



Year 7

Mathematics

Learning Cycle 1

Weeks 1 to 6: Algebraic Thinking

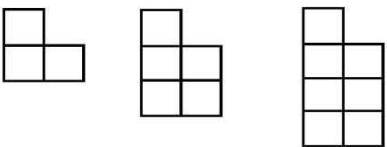
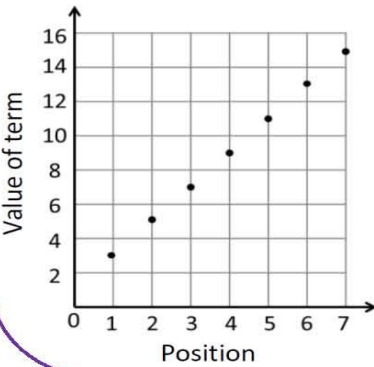
Weeks 7 to 12: Place Value & Proportion

Key terms:  
Sequence  
Rule  
Non-linear  
Arithmetic

Sequences

Term  
Term-to-Term  
Ascending  
Geometric

Position  
Linear  
Descending  
Fibonacci



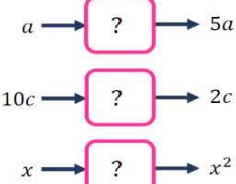
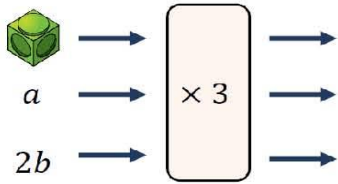
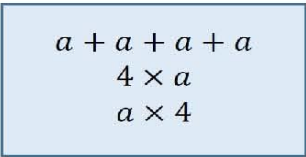
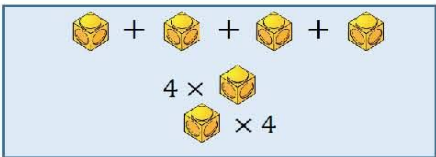
Position	1	2	3	4
Term	3	5	7	9

Key terms:  
Function  
Operation  
Expression  
Substitute

Algebraic Notation

Input  
Inverse  
Coefficient

Output  
Variable  
Order



Key terms:  
Equality  
Bar model  
Solution

Equality

Equation  
Solve  
Inverse

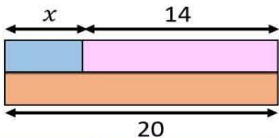
Equals  
Unknown  
Equivalent

$7 + 8 = 10 + ?$

$12 \times 5 = ? + 50$

$a + 47 = 93$

$4.8 + d = 11$



Like terms

$5a, 6a$   
 $10t, -3t$   
 $2xy, 4xy$   
 $10, -7$   
 $3a^2, 7a^2$

Unlike terms

$5a, 5b$   
 $-10t, -3$   
 $2xy, 4xz$   
 $10, 7a$   
 $3a^2, 7b^2$

$6x + 2x \equiv 8x$

$6x - 2x \equiv 4x$

$2x \equiv 8x \div 4$



## Place Value

Key terms:

Place value  
Approximate  
Less than  
Least  
Power

Digit  
Round  
Order  
Difference  
Index

Placeholder  
Compare  
Ascending  
Median  
Standard form

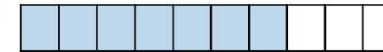
Integer  
Equal  
Descending  
Average

Interval  
Not equal  
Range  
Decimal point

Scale  
Greater than  
Greatest  
Significant figure

Billions			Millions			Thousands			Ones		
H	T	O	H	T	O	H	T	O	H	T	O
		●		●●●●●	●●	●●●●●	●●●●●		●●●	●●	●●●●●

Explain why these representations are all the same.



$$0.7$$

$$\frac{7}{10}$$

Ones	Tenths
	<div> <div>0.1</div> <div>0.1</div> <div>0.1</div> <div>0.1</div> <div>0.1</div> <div>0.1</div> </div>



Is it true that if  $a > b$  and  $b > c$  then  $a > c$ ?

## Fractions, Decimals and Percentages

Key terms:

Tenths  
Fifth  
Denominator  
Improper

Hundredths  
Quarter  
Part  
Mixed number

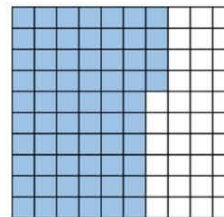
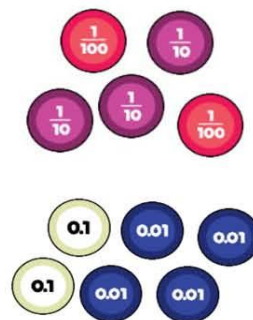
Fraction  
Tenth  
Whole  
Rational

Decimal  
Convert  
Division  
Recurring

Percentages  
Sector  
Quotient

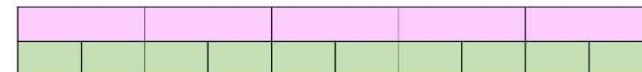
Equivalent  
Numerator  
Operator

Ones	Tenths	Hundredths
●	●●●●●	



$$\frac{\square}{10} > 0.5$$

$$\frac{\square}{100} < 0.\square 7$$



$$\frac{1}{5} = \frac{\square}{10} = 0.\square$$

$$\frac{\square}{5} = \frac{\square}{10} = 0.6$$

# 11. MUSIC



## Year 7 Music Knowledge Organiser



**PERFORMING**  
**COMPOSING**  
**LISTENING**

### The Elements of Music

**Silence:** The opposite of sound

**Timbre:** Each instruments' own unique tone quality/sound

**Pitch:** The highness or lowness of the note – HIGH/LOW

**Texture:** How many sounds can be heard at the same time – THICK/THIN

**Tempo:** The speed of the piece of music – FAST/SLOW

**Duration:** The length of a sound – LONG/SHORT

**Attack & Decay:** How a sound STARTS and STOPS.

**Dynamics:** The volume of a sound – LOUD/SOFT

**Melody:** Another word for melody is 'tune'. A melody is a mixture of moving by step, and moving by leap. If the tune goes up in pitch, it is called 'ascending'. If the tune goes down in pitch, it is called 'descending'

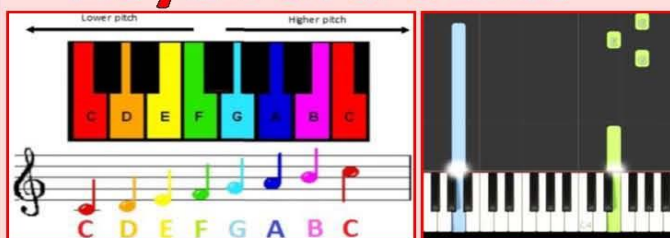
**Rhythm:** A pattern of long/short notes and silences. Rhythm Helps Your Two Hips Move



## Vocal Skills

<b>Breath Control</b>	Breathing correctly allows more control over <i>phrasing</i> and <i>tone production</i> .
<b>Phrasing</b>	Breaks the melody into 'sentences' and indicates when to take a breath.
<b>Diaphragm</b>	A muscular partition in your thorax which is used to draw in and expel air to support your breath control.
<b>Sustain</b>	To hold a note for a longer duration.
<b>Projection</b>	The way in which the voice is used to reach <u>every</u> member of your audience.
<b>Good Posture</b>	Standing/sitting in a way that allows full lung capacity and sound support.
<b>Diction</b>	The way you pronounce each consonant so that it can be heard clearly.
<b>Tone</b>	The <i>quality</i> of the note that is produced.

## Keyboard Skills

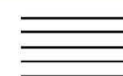


**PATIENCE**  
**and**  
**PERSEVERANCE**  
**lead to**  
**PROGRESS**



**Fingering**

## Reading Music



**Stave**

5 lines where notes are placed to determine pitch



**Treble Clef**

Symbol placed on the stave. Used for high pitch (right hand on the piano)

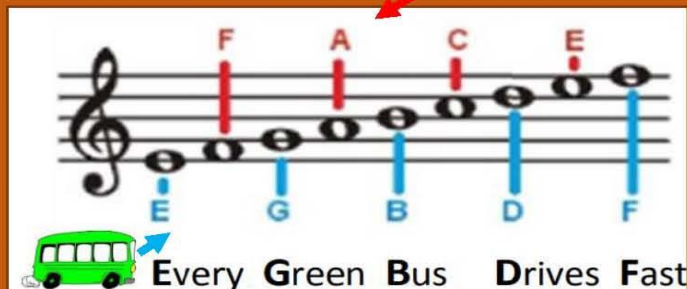


**Bass Clef**

Symbol placed on the stave. Used for low pitch (left hand on the piano)

## Notation

**FACE** in the space



Note	Name	Value
	Semibreve	4 beats
	Minim	2 beats
	Crotchet	1 beat
	Quaver	½ beat
	Semiquaver	¼ beat
	2 Quavers	TWO notes played in the space of 1 beat
	4 Semiquavers	FOUR notes played in the space of 1 beat



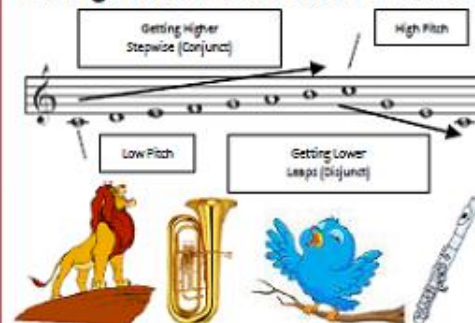
# BUILDING BRICKS

## Exploring the Elements of Music



### A. Pitch

The **highness or lowness** of a sound.



### B. Tempo

The **speed** of a sound or piece of music.

**FAST:** *Allegro, Vivace, Presto*  
**SLOW:** *Andante, Adagio, Lento*  
**GETTING FASTER –**  
*Accelerando (accel.)*  
**GETTING SLOWER –**  
*Ritardando (rit.) or Rallentando (rall.)*



### C. Dynamics

The **volume** of a sound or piece of music.

**VERY LOUD:** *Fortissimo (ff)*  
**LOUD:** *Forte (f)*  
**QUITE LOUD:** *Mezzo Forte (mf)*  
**QUITE SOFT:** *Mezzo Piano (mp)*  
**SOFT:** *Piano (p)*  
**VERY SOFT:** *Pianissimo (pp)*  
**GETTING LOUDER:** *Crescendo (cresc.)*  
**GETTING SOFTER:** *Diminuendo (dim.)*



### D. Duration

The **length** of a sound.



### E. Texture

How much sound we hear.

**THIN TEXTURE:** (*sparse/solo*) – small amount of instruments or melodies.



**THICK TEXTURE:** (*dense/layered*) – lots of instruments or melodies.

### F. Timbre or Sonority

Describes the **unique sound or tone quality** of different instruments voices or sounds.



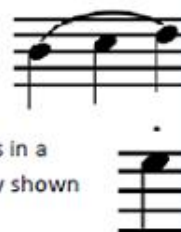
*Velvety, Screechy, Throaty, Rattling, Mellow, Chirpy, Brassy, Sharp, Heavy, Buzzing, Crisp, Metallic, Wooden etc.*

### G. Articulation

How individual notes or sounds are **played/techniques**.

**LEGATO** – playing notes in a long, smooth way shown by a **SLUR**.

**STACCATO** – playing notes in a short, detached, spiky way shown by a **DOT**.



### H. Silence

The opposite or absence of sound, **no sound**. In music these are **RESTS**.



### I. Notation

How music is **written** down.

**STAFF NOTATION** – music written on a **STAVE** (5 lines and spaces)



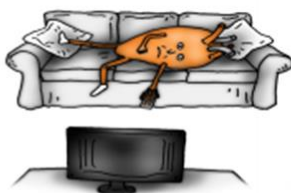
**GRAPHIC NOTATION/SCORE** – music written down using shapes and symbols to represent sounds.







## Health and Well-being



### What is health?

This is when a person is free from illness and disease. Exercising helps a person to be healthy as it makes our bones, ligaments, muscles and tendons stronger and therefore have a lower chance of getting injured. Illness can be prevented as blood cell production increases and therefore our bodies have a better chance to fight off disease using white blood cells.

### Why do we exercise?

There are lots of benefits to exercising; it helps us physically to become fitter and more healthy. It can also help us to have more social opportunities and also be better at dealing with emotional situations.

### What is well-being?

This is the state of being comfortable, content, healthy and happy. Exercise releases endorphins from the brain, which help to improve sleep patterns, energy levels and mood - these all have a positive effect on a person's wellbeing.

### What is a sedentary lifestyle?

This is a type of lifestyle with little or no physical activity. This lifestyle involves lots of sitting around, playing on games and mobile phones. Changes in work due to increased technologies have led to some jobs also causing more sedentary lifestyles.

### Task

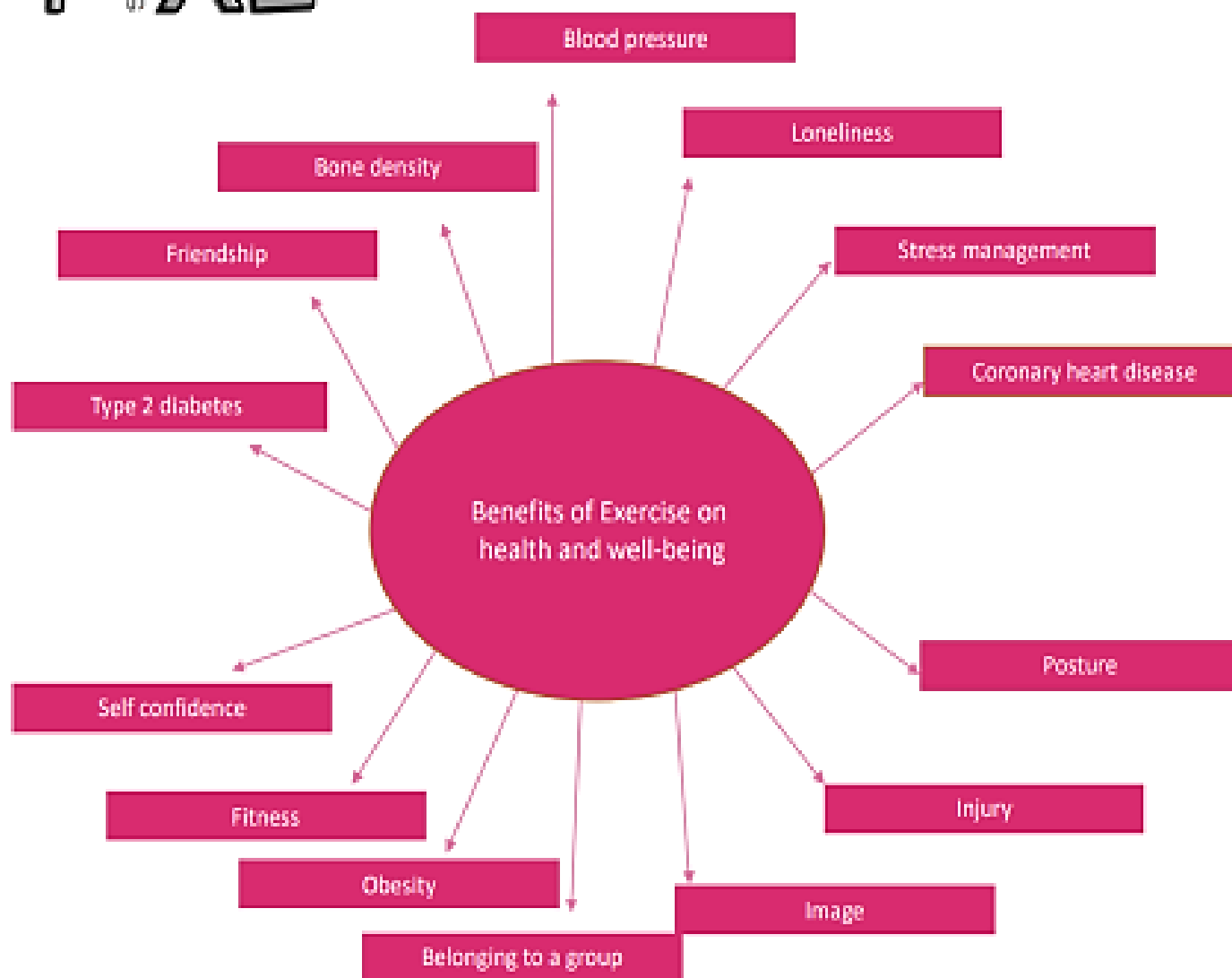
Write a newspaper article that outlines the benefits of sport and physical activity on a person's health and well-being.

Make sure you have a catchy headline to draw the reader's attention.

Use the internet to find some good facts and figures to support your writing.

## PE KS3 Health and Well-being

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### Task

Separate all the key terms into three categories; physical, emotional and social. Put the terms into a table explaining how exercise will help to benefit the factor. Describe what would happen to each factor if a person did not exercise.

### Task

Think of 10 statements about a person's thoughts and feelings; for example, 'I have been feeling relaxed'. Rate yourself on a scale of 1 to 5 on how you have been feeling in the past 2 weeks (1 being very positive) on the statements you have written. What can you do to change the negatives to a positive?

## 13. PERFORMING ARTS



# Performing Arts Knowledge Organiser

## Key Techniques

**Action Clip:** Bring freeze frames to life in just a few moments.

**Role on the Wall:** A collaborative activity for developing thoughts and ideas about a character.

**Marking the Moment:** A dramatic technique used to highlight a key moment in a scene or improvisation.

**Thought Tracking:** A way to speak aloud the thoughts or feelings of a character in a freeze-frame.

**Narration:** A technique whereby one or more performers speak directly to the audience to tell a story, give information

**Tableaux:** Participants make still images with their bodies to represent a scene.

**Freeze Frames:** The use of body-shapes and postures to represent characters or objects.

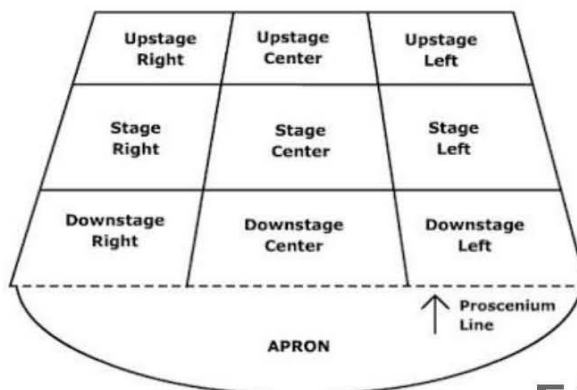
**Hot Seating:** A character is questioned by the group about his or her background, behaviour and motivation.

**Role Play:** The ability to suspend disbelief by stepping into another character's shoes.

**Cross-Cutting** (also called **split-screen**): is a drama technique borrowed from the world of film editing, where two scenes are intercut.



## Staging Positions



## Physical Skills

**Body Language:** Select appropriate use of body on stage, choosing to use the whole body or isolated parts of the body.

**Facial Expression:** Using the face to show mood, emotion, feeling and responses

**Interaction With Other Performers:** Where you work effectively to create a believable piece of drama for your audience

**Gesture:** Use of hand movements to illustrate the action or the intent of a character

**Posture:** Stance or way of standing.

## Vocal Skills

**Pitch:** The highness or lowness of a sound

**Volume:** How softly or loudly the dialogue (words) are spoken

**Accent:** Particular to a country/society/culture

**Pace:** The rate at which dialogue is spoken within a performance

**Projection:** The way in which the voice is used to reach every member of your audience

**Pause:** Where sound stops; how often and for how long

## Technical Features

Stage Make-up  
Set Design  
Props  
Lighting  
Sound  
Stage Management





## 14. RELIGIOUS EDUCATION

# What does it mean for Christians to believe in God as Trinity?

The concept of the Trinity is that there are three 'persons', all of which are God. These three 'persons' are God the Father, God the Son and God the Holy Spirit.

### God the Father:

Christians believe that the first person of the Trinity is God the Father. The Lord's Prayer, a prayer that Jesus taught his disciples starts:

*'Our Father, who art in heaven'.*

God the Father is believed to be the creator of the earth and all living things on it. As creator of life, he acts as a good father would towards his children. He is believed to be omnipotent, benevolent and omniscient and omnipresent (present everywhere)

### God the Son

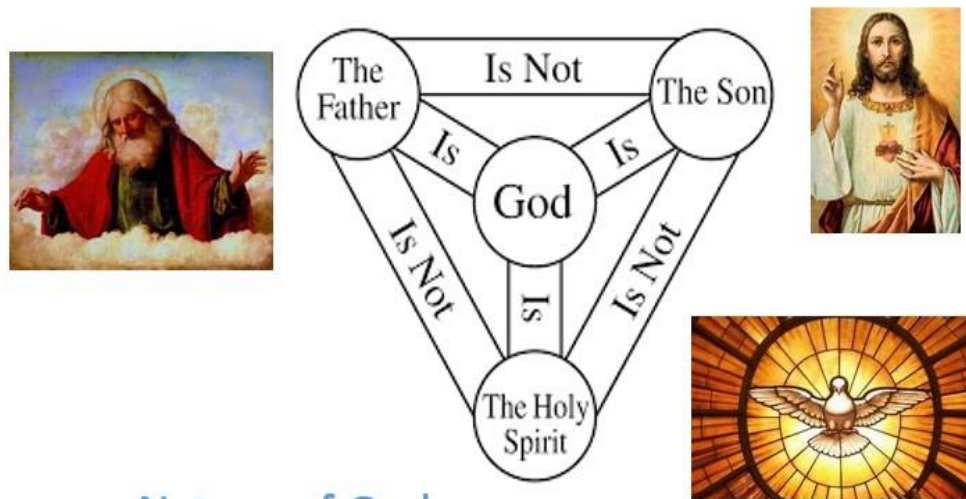
The second person in the Trinity is often referred to as the Son of God and became incarnate (embodied in human form) on earth. Christians believe that Jesus was both fully human whilst on earth and also fully God at all times.

*'He became incarnate of the virgin Mary and was made man'*

### God the Holy Spirit

Christians believe that once Jesus had left the earth, God sent the Holy Spirit to influence, guide and sustain the earth and all life on it. The work of the Holy Spirit is believed to be the unseen power of God at work in the world in the past, present and future.

*'By the power of the holy spirit'*



## Nature of God

Describing Word	Definition
Omnipotent	All Powerful
Benevolent	All Loving
Transcendent	Outside of Time and Space
Immanent	Working in the world
Omniscient	All knowing
Omnipresent	Always there

RELIGIOUS EDUCATION

# Should Christians be greener than everyone else? [Creation]



Creation Story found in the book of Genesis in the Bible



## Case Studies of ways that Christians can be stewards:



### The Assisi and Ohito Convention

Leaders from five different world religions were brought together in 1986 by the World Wildlife Fund, to celebrate its 25<sup>th</sup> anniversary. They met in Assisi to discuss how all faiths could care for the environment. Another meeting in Ohito in 1995 brought together religious leaders and environmentalist activists to continue this work.

### Pope Francis

Pope Francis challenged all humans to care for the world in an open letter to his Bishop's titled 'On the care of Our Common home'. He set out the need to tackle the challenge of pollution, poverty and climate change. He used St Francis of Assisi as a role model for Christians.



### Hope Project:

The Hope Project allows Christians to look after their local community. This means that they actively demonstrate their faith and show love of their neighbours by litter picking, tending to local gardens etc. They also protect God's creation by doing this. They actively live out the teachings of Jesus.



RELIGIOUS EDUCATION

Keyword	Definition
Wonder:	marvelling at the complexity and beauty of the universe
Awe:	feeling of devout respect, mixed with fear or wonder.
Responsibility:	a duty to care for, or having control over something or someone.
Stewardship:	the idea that believers have a duty to look after the environment on behalf of God.
Dominion:	Dominance or power over something, having charge of something or ruling over it.



## Science KS3 Rocks

### Keywords

**Rock cycle:** Sequence of processes where rocks change from one type to another.

**Weathering:** The wearing down of rock by physical, chemical or biological processes.

**Erosion:** Movement of rock by water, ice or wind (transportation).

**Minerals:** Chemicals that rocks are made from.

**Sedimentary rocks:** Formed from layers of sediment, and which can contain fossils. Examples are limestone, chalk and sandstone.

**Igneous rocks:** Formed from cooled magma, with minerals arranged in crystals. Examples are granite, basalt and obsidian.

**Metamorphic rocks:** Formed from existing rocks exposed to heat and pressure over a long time. Examples are marble, slate and schist.


**Strata:** Layers of sedimentary rock.

www.geolsoc.org/factsheet

### SEDIMENTARY

Rocks on the Earth's surface are gradually broken down into smaller pieces by water, ice, wind, plants and animals (known as weathering). These broken up pieces are called sediment and are transported away, or eroded, by rivers, glaciers and wind. Sediments often collect at the bottom of lakes and oceans. Over time they are squashed and compacted together to become a sedimentary rock such as sandstone, limestone or mudstone.

Sedimentary rocks are laid down in layers. They can contain fossils from animals and plants that become trapped in the sediment before it becomes a rock.




Beds of sandstone, mudstone and limestone in the Grand Canyon

Ammonite fossil in a sedimentary rock

Sedimentary rocks are made up of grains which can be rounded or angular. Under the microscope we can sometimes see gaps between the different grains – these gaps are called pores.

If the pores connect together, water, air or oil can flow through the rock, and the rock is called permeable. If a permeable rock is put in water you will see bubbles coming out as water pushes the air out.



Porous & permeable      Non-porous & impermeable

sercising science & profession

### IGNEOUS

When rocks are pushed deep enough down into the Earth, they can melt to form molten rock. Below the surface of the Earth, molten rock is called magma but when erupted above the ground, usually through volcanoes, it is called lava.

Igneous rocks form when either magma or lava cools down and turns from liquid to solid. When this happens, igneous rocks form crystals and are said to crystallise.

Lava cools down very quickly because the surface of the Earth is cold. This means that igneous rocks formed from cooling lava, such as basalt, only have time to grow tiny crystals. Often gas bubbles can get trapped in these rocks too. Obsidian, or volcanic glass, cools so quickly that you cannot see any crystals at all!



Obsidian

Magma deep within the Earth takes thousands of years to crystallise because it is much hotter below the surface. Crystals have more time to grow, so they grow larger. If you look closely at an igneous rock that has formed deep within the Earth, for example granite or gabbro, you will be able to see the different coloured mineral crystals.



Fast cooling Small crystals      Slow cooling Large crystals

Basalt      Granite

### METAMORPHIC

Metamorphic rocks are rocks that have been changed over time. When rocks are pushed deep down into the Earth, grains and minerals can become stretched, squashed and slightly melted from the extreme pressure and heat. This is called metamorphism and it causes new metamorphic rocks with different textures and/or minerals to form. Metamorphic rocks are crystalline like igneous rocks however the minerals in metamorphic rocks tend to line up to form layers like in this gneiss from NW Scotland.



Image © Robert Stalham /CC-BY-SA 2.0

The metamorphic rock you end up with depends on 1: the type of rock you start with, and 2: the amount of heat and pressure the rock is put under. Here are a few examples of metamorphism that can occur:

granite	gneiss	limestone	marble
mudstone	schist	sandstone	quartzite
shale	slate	basalt	eclogite



Rock images: © 2013 Imperial College London



## Science KS3 Organ Systems

### Keywords

**Joints:** Places where bones meet.

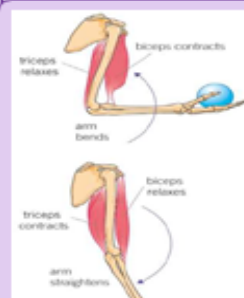
**Bone marrow:** Tissue found inside some bones where new blood cells are made.

**Ligaments:** Connect bones in joints.

**Tendons:** Connect muscles to bones.

**Cartilage:** Smooth tissue found at the end of bones, which reduces friction between them.

**Antagonistic muscle pair:** Muscles working in unison to create movement.



Muscles work in pairs called 'Antagonistic pairs'.

Muscles can only pull, these pairs work by one muscle contracting whilst the other relaxes.

The contracting muscle pulls the limb.

### What is a skeleton?

Together, all the bones in your body make up your **skeleton**. They are joined together to form a framework. The average adult human skeleton consists of 206 bones. Your skeleton is part of your **muscular skeletal system**.



◀ The main bones of the human body.

### Joints

A joint is a place in the body at which two bones meet.



#### Tendons

- Connect muscle to bone
- Allow muscles to pull on bones for movement
- Not elastic or stretchy



#### Ligaments

- Connect bone to bone
- Allow movement in the joint but keeps the bones in line
- Elastic or stretchy



#### Cartilage

- A soft tissue which covers the end of bones
- Reduces friction of bones rubbing together when moving
- Protects the end of bones



### Types of Joints



**Ball and Socket**  
Allows the greatest range of movement  
E.g. hip joint



**Fixed joint**  
Allows no movement at all  
E.g. top of the skull



**Hinge**  
Allows movement in one direction  
E.g. knee

### The skeleton



**Organism**  
Made up of several different organ systems which work together to allow a living thing to survive  
E.g. a whole human



**Organ system**  
A group of different organs that come together to perform a certain function  
E.g. digestive system, respiratory system



**Organs**  
Made up of different types of tissue that work together to perform a particular role  
E.g. heart, lungs, stomach, brain



**Tissue**  
A group of similar cells working together to perform a certain function  
E.g. muscle tissue, nervous tissue



**Cells**  
The building blocks of life, these can be specialised in order to perform specific roles  
E.g. red blood cells, muscle cells

### Functions of the skeleton



Produce blood cells



Protect organs



Support of the body



Allows movement

## Science KS3 Speed and Motion

### Keywords

**Speed:** How much distance is covered in how much time.

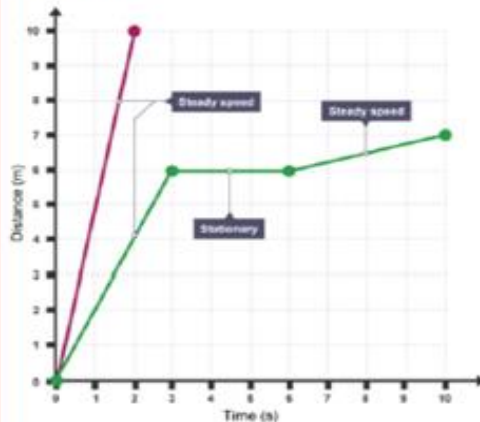
**Average speed:** The overall distance travelled divided by overall time for a journey.

**Relative motion:** Different observers judge speeds differently if they are in motion too, so an object's speed is relative to the observer's speed.

**Acceleration:** How quickly speed increases or decreases.

### Distance Time Graphs

A distance time graph is a useful way to represent the motion of an object. It shows how the distance moved from a starting point changes over time.



If the line is horizontal, the object is stationary (because the distance stays the same).  
If the line is a straight diagonal, the object is moving at a constant speed.

The steeper the line, the greater the gradient and the greater the speed.

*E.g. Calculate the speed of the green line for the first 3s.*

**Speed = Distance ÷ Time**

**Speed = 6m ÷ 3s**

**Speed = 2m/s**

### Speed

The speed of an object tells you how fast or slow it is moving. You can find the average speed of an object if you know the distance it has travelled and the time taken to travel that distance.

*The equation is:*

**Speed(m/s) = Distance(m) ÷ Time(s)**

$$V = \frac{S}{t}$$

*E.g. A car travels 100m in 20s. Calculate the speed of the car.*

**Speed = Distance ÷ Time**

**Speed = 100m ÷ 20s**

**Speed = 5m/s**

### Unbalanced Forces

If more than one force act along a straight line, the resultant force can be found by adding (acting in the same direction) or subtracting (acting in opposite direction) them.

$100 - 60 = 40 \text{ N (to the right)}$



### Contact & Non-Contact Forces

All forces between objects are either:

**Contact Forces** – The objects are physically touching

**Non-Contact Forces** – The objects are physically separated.

**Contact:** Friction, Air Resistance, Tension, Normal Contact

**Non-Contact:** Gravitational, Electrostatic, Magnetic

### Keywords

**Solvent:** A substance, normally a liquid, that dissolves another substance.

**Solute:** A substance that can dissolve in a liquid.

**Dissolve:** When a solute mixes completely with a solvent.

**Solution:** Mixture formed when a solvent dissolves a solute.

**Soluble (insoluble):** Property of a substance that will (will not) dissolve in a liquid.

**Solubility:** Maximum mass of solute that dissolves in a certain volume of solvent.

**Pure substance:** Single type of material with nothing mixed in.

**Mixture:** Two or more pure substances mixed together, whose properties are different to the individual substances.

**Filtration:** Separating substances using a filter to produce a filtrate (solution) and residue.

**Distillation:** Separating substances by boiling and condensing liquids.

**Evaporation:** A way to separate a solid dissolved in a liquid by the liquid turning into a gas.

**Chromatography:** Used to separate different coloured substances.

## Science KS3 Separating Mixtures

### Mixtures

Mixtures are made up from more than one type of atom or compound and are not chemically bonded

It is hard to separate the different substances of a mixture - they do not need a chemical reaction.



The substances which make up a mixture are not in a fixed ratio.

The substances which make up a compound keep the same properties even when they are in a mixture.

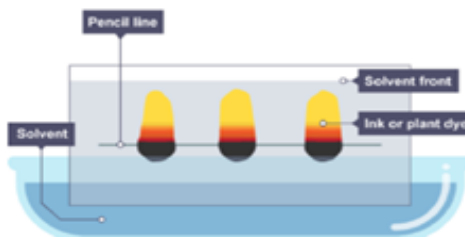
### Evaporation:

- A method used to separate a soluble solid from a liquid.
- A solution is placed in an evaporating basin and heated with a Bunsen Burner.
- The water will begin to evaporate and solid particles will begin to form in the basin.
- Once the water has evaporated, it will leave solid crystals behind.



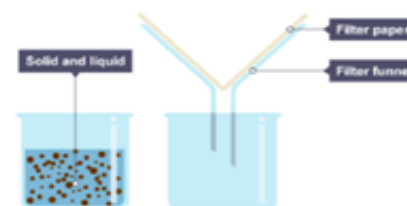
### Chromatography:

- Paper chromatography is a method for separating dissolved substance from one another. Often used when the dissolved substance are coloured such as inks, food colouring or plant dyes.
- A pencil line is drawn on the paper, and spots of ink are placed on the line.
- There is a solvent usually water or ethanol in a container/beaker.
- The paper is lowered into the solvent. The solvent travels up the paper, taking some of the substances with it.
- As the solvent travels up the paper, the different coloured substances are spread apart.

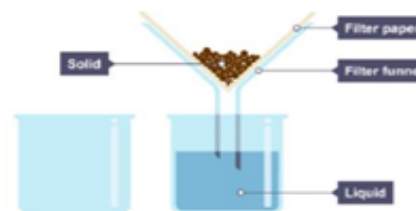


### Filtration:

- A method for separating an insoluble solid from a liquid. A beaker containing a mixture of insoluble solid and liquid. There is filter paper in a filter funnel above another beaker.



- The mixture of insoluble solid and liquid is poured into the filter funnel.
- The liquid particles are small enough to pass through the paper as a filtrate. The solid particles are too large to pass through the filter paper and stay behind as the residue.





## Science KS3 Breathing and Circulation

### Keywords

**Breathing:** The movement of air in and out of the lungs.

**Trachea (windpipe):** Carries air from the mouth and nose to the lungs.

**Bronchi:** Two tubes which carry air to the lungs.

**Bronchioles:** Small tubes in the lung.

**Alveoli:** Small air sacs found at the end of each bronchiole.

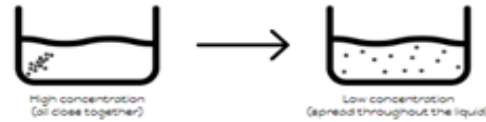
**Ribs:** Bones which surround the lungs to form the ribcage.

**Diaphragm:** A sheet of muscle found underneath the lungs.

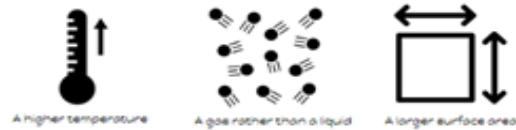
**Lung volume:** Measure of the amount of air breathed in or out.

### Diffusion

Diffusion is the random spreading of particles, from an area of high concentration to an area of low concentration.



### Factors which will speed up diffusion



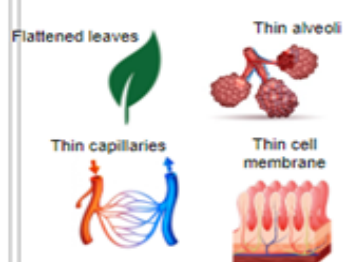
### Large surface area

Provides more surface area to diffuse across. This speeds up the rate of diffusion



### A short diffusion path

A thin cell membrane means substances can pass through faster, increasing diffusion rate



### Efficient blood supply

Lots of capillaries (blood vessels) to transport molecules increases exchange.

e.g. 1. capillaries around alveoli for  $O_2$  and  $CO_2$  exchange

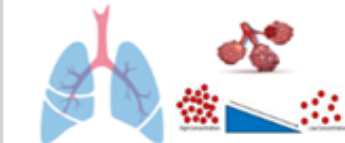


e.g. 2. capillaries around villi in intestines for food absorption

### Good ventilation

A good air supply provided can increase the rate of diffusion of gases. E.g. the lungs

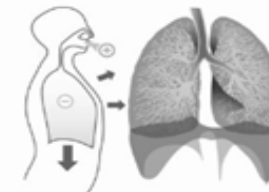
Breathing brings in a removes air from exchange surface (the alveoli)



Steep concentration gradient is maintained. Increases exchange.

### Inhalation

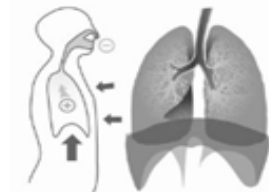
Inhalation is the process of breathing in



- Ribcage is pulled upwards and outwards
- Diaphragm contracts and moves downwards
- Volume in the lungs increases
- Air moves into the lungs

### Exhalation

Exhalation is the process of breathing out



- Ribcage is pulled downwards and inwards
- Diaphragm relaxes and moves upwards into a dome
- Volume in the lungs decreases
- Air moves out of the lungs

### Adaptations of the lungs



Lots of blood vessels to take away oxygenated blood



Thin walls in the alveoli to reduce distance of diffusion



Alveoli create a large surface area



Moist

## 16. SPANISH

### Knowledge Organiser - Español - Year 7- Learning Circle 1.1 - Vocabulario

<b>Saludos</b>	<b>Greetings</b>	uno	1
¿Cómo te llamas?	What's your name?	dos	2
Me llamo ...	My name's ...	tres	3
¿Y tú?	And you?	cuatro	4
¡Hola!	Hello!	cinco	5
¡Adiós!	Goodbye!	seis	6
¡Hasta luego!	Bye!	siete	7
Buenos días.	Good morning.	ocho	8
Buenas tardes.	Good afternoon.	nueve	9
Buenas noches.	Goodnight.	diez	10
¿Qué tal?	How are things?	once	11
¿Cómo estás?	How are you? (tú, informal)	doce	12
¿Cómo está usted?	How are you? (formal)	trece	13
Fenomenal.	Great.	catorce	14
Bien.	Fine.	quince	15
Regular.	So-so.	dieciséis	16
Mal.	Bad.	diecisiete	17
¡Fata!	Terrible!	dieciocho	18
		diecinueve	19
		veinte	20
<b>En mi mochila</b>	<b>In my school bag</b>	veintiuno	21
¿Tienes un/una/	Have you got a/	veintidós	22
unos/unas ...?	any ...?	veintitrés	23
Tengo un/una/	I've got a/ some ...	veinticuatro	24
unos/unas ...		veinticinco	25
No tengo (un/una/I haven't got		veintiséis	26
unos/unas) ...	(a/any) ...	veintisiete	27
una agenda	a diary	veintiocho	28
un bolígrafo	a biro	veintinueve	29
una carpeta	a file	treinta	30
un cuaderno	an exercise book	treinta y uno	31
un diccionario	a dictionary		
un estuche	a pencil case		
una goma	a rubber		
un lápiz	a pencil		
los lápices	pencils		
un libro	a textbook		
una pluma	a fountain pen		
una regla	a ruler		
un sacapuntas	a pencil sharpener		
<b>Los números</b>	<b>Numbers</b>		

<b>¿Cuántos años tienes? How old are you?</b>	
Tengo ... años.	I'm ... (years old).
Tiene ... años.	He/She is ... (years old).
¿Cuándo es tu cumpleaños?	When is your birthday?
¿Cuándo es su cumpleaños?	When is his/her/its/your (formal) birthday?
Mi cumpleaños es	My birthday is
el ... de ...	the ... of ...
Su cumpleaños es	His/Her/Its/Your



el ... de ...	birthday is the ...	Abrid los libros.	Open your books.
	of ...	Escribid en los	Write in your exercise
el primero (uno) de ...	the first of ...	cuadernos.	books.
¡Feliz cumpleaños!	Happy birthday!	Escuchad la cinta.	Listen to the tape.
mi	my	Levantaos.	Stand up.
tu	your	Mirad la página ...	Look at page ...
su	his/her/its/your(formal)	Mirad la pizarra.	Look at the board.
<b>Los meses</b>	<b>The months</b>	Sentaos.	Sit down.
enero	January	¡Silencio, por favor!	Silence, please!
febrero	February	Tira el chicle en	Put your
marzo	March	la papelera	chewing gum
abril	April		in the bin.
mayo	May	Trabajad en el	Work on the
junio	June	ordenador	computer.
julio	July	Voy a pasar lista.	I'm going to take
agosto	August		the register.
septiembre	September	Déjame ..., por favor.	Please could I have ...
octubre	October	Me hace falta ...	I need ...
noviembre	November	Necesito ...	I need ...
diciembre	December	Toma/Tome (Ud/Uv).	Here you are.
		¿Cómo se escribe?	How do you spell it?
		¿Cómo se escribe tu	How do you spell
		nombre?	Your name?
		Se escribe ...	It's spelt ...
		¿Cómo se dice ... en	How do you say
		español?	... in Spanish?
		No comprendo.	I don't understand.
		¿Puedes repetir?	Can you repeat that?
<b>Los días de la semana</b>	<b>The days of the week</b>		
lunes	Monday		
martes	Tuesday		
miércoles	Wednesday		
jueves	Thursday		
viernes	Friday		
sábado	Saturday		
domingo	Sunday		
<b>En clase</b>	<b>In the classroom</b>		
la alumna	pupil (female)		
el alumno	pupil (male)		
los deberes	homework		
el ejercicio	exercise		
la mesa del profesor/	teacher's desk		
de la profesora			
la pizarra	the board		
la puerta	the door		
la silla	the chair		
la ventana	the window		

## Español – Year 7 – Learning Circle 1.1 – Gramática



### HOW TO SAY "A", "AN"

Masculine	Feminine
Un cuaderno (a book)	Una regla (a ruler)

### HOW TO SAY "SOME"

	Singular	Plural
Masculine	Un	Unos
	cuaderno	cuadernos
Feminine	Una goma	Unas gomas

### HOW TO SAY "THE"

	Singular	Plural
Masculine	El libro	Los libros
Feminine	La mesa	Las mesas

### HOW TO SAY "MY", "YOUR", "HIS", "HER"

mi	my
tu	your (informal)
su	his, her, its, your (formal)

### HOW TO SAY "TO HAVE"

Tener	To have
Tengo	I have
Tienes	You (tú, informal) have
Tiene	He/she/it has You (usted, formal) have
Tenemos	We have
Tenéis	You (pl) have
Tienen	They have

### HOW TO SAY "TO BE"

Ser	To be
Soy	I am
Eres	You (tú, informal) are
Es	He/she/it is You (usted, formal) are
Somos	We are
Sois	You (pl) are
Son	They are

### TU AND USTED

There are two ways of saying you in Spanish: tú for friends, people your own age and children; usted (Ud/Vd) for adults and people you don't know.

tú	usted (Ud, Vd)
¿Cómo te llamas?	¿Cómo se llama?
¿Cómo estás?	¿Cómo está?
¿Y tú?	¿Y usted?



# Knowledge Organiser – Español – Year 7 – Learning Cycle 1.2 – Vocabulario



<u>Los países</u>	<u>Countries</u>		
Australia	Australia	cubano/a	Cuban
Escocia	Scotland	español/a	Scottish
España	Spain	estadounidense	Spanish
Estados Unidos	United States	galés/galesa	American
Gales	England	inglés/inglesa	Welsh
Irlanda	Ireland	irlandés/irlandesa	English
Jamaica	Jamaica	jamaicano/a	Irish
México	Mexico	mexicano/a	Jamaican
Nigeria	Nigeria	nigeriano/a	Mexican
Pakistán	Pakistan	paquistaní	Nigerian
¿De dónde eres?	Where are you from?	puertorriqueño/a	Pakistani
Soy (de) ...	I'm (from) ...		Puerto Rican
¿Dónde vives?	Where do you live?	<u>Los idiomas Languages</u>	
Vivo en ...	I live in ...	¿Qué idiomas hablas?	What languages do you speak?
¿Dónde vive (Mateo)?	Where does (Mateo) live?	Hablo ...	I speak ...
(Mateo) vive en ...	(Mateo) lives in ...	alemán	German
¿Dónde viven (Arturo y Susana)?	Where do (Arturo and Susana) live?	catán	Catalan
(Arturo y Susana) viven en ...	(Arturo and Susana) live in ...	español	Spanish
		francés	French
		galés	Welsh
		inglés	English
<u>La nacionalidad</u>	<u>Nationality</u>	italiano	Italian
¿Cuál es tu nacionalidad?	What nationality are you?	¿Tienes hermanos?	Have you got any brothers / brothers and sisters?
Soy ...	I am ...	Tengo un hermano.	I've got a brother.
¿Eres ...?	Are you ...?	Tengo una hermana.	I've got a sister.
argentino/a	Argentinian	Tengo (tres) hermanas.	I've got (three) sisters.
australiano/a	Australian	No tengo hermanos.	I don't have any brothers or sisters.
chileno/a	Chilean		

un perro	a dog	un pez	a fish	un ratón	a mouse
una tortuga	a tortoise	gris	grey	¿De qué color son tus ojos?	What colour are your eyes?
dos caballos	two horses	rojo/a	red	Tengo ...	I've got ...
dos cobayos	two guinea pigs	verde	green	Tiene ...	He's/She's got
dos conejos	two rabbits	Mis gatos son ...	My cats are ...	los ojos azules	blue eyes
dos gatos	two cats	amarillos/as	yellow	los ojos marrones	brown eyes
dos pájaros	two birds	atigrados/as	tabby	los ojos negros	black eyes
dos peces	two fishes	azules	blue	los ojos verdes	green eyes
dos perros	two dogs	blancos/as	white	Tengo pecas.	I've got freckles.
dos ratones	two mice	dorados/as	gold	Llevo barba.	I've got a beard.
dos tortugas	two tortoises	marrones	brown	Llevo bigote.	I've got a moustache.
Es grande.	It's big.	negros/as	black	Llevo gafas.	I wear glasses.
Es pequeño/a.	It's small.			Llevo ...	He/She wears ...
Son grandes.	They're big.	<u>Los ojos y el pelo Eyes and hair</u>		¿Cómo eres?	What are you like?
Son pequeños/as.	They're small.	¿De qué color es tu pelo?	What colour is your hair?	Soy ...	I'm ...
¿Cuántos años tiene? How old is it?	It is ... (years old).	Tengo ...	I've got ...	Es ...	He/She/It is
Tiene ... años.	It has ... (years old).	Tiene ...	He's/She's got	alto/a	tall
No tienen un animal.	I haven't got a pet.			bajo/a	short
Es genial.	It's great.			de talla mediana	medium height/size
<u>Los colores</u>	<u>Colours</u>			blanco/a	white
¿De qué color es tu animal?	What colour is your pet?			moreno/a	dark
Mi animal es ...	My pet is ...			negro/a	black
amarillo/a	yellow			pelirrojo/a	red-headed
atigrado/a	tabby			rubio/a	fair
azul	blue			Mi hermano vive ...	my brother lives ...
blanco/a	white			Mi perro es ...	my dog is ...
dorado/a	gold				

# Year 7 - Learning Cycle 1.2 Gramática



## ADJECTIVES

Adjectives agree with the noun they describe, so they have masculine, feminine and plural forms.

El gat <u>o</u> blanc <u>o</u>	Los gat <u>os</u> blanc <u>os</u>
La gat <u>a</u> blanc <u>a</u>	Las gat <u>as</u> blanc <u>as</u>

For some exceptions, the masculine and the feminine endings are the same.

El perr <u>o</u> grand <u>e</u>	Los perr <u>os</u> grand <u>es</u>
La perr <u>a</u> grand <u>e</u>	Las perr <u>as</u> grand <u>es</u>

## Plurals

To form of the plural of a noun, you usually add s. However, if the noun ends in a consonant, add **es**.

El ratón pequ <u>e</u> ñ <u>o</u>	Los rat <u>o</u> nes pequ <u>e</u> ñ <u>os</u>
-----------------------------------	--

Note also:

El pez dorad <u>o</u>	Los pec <u>e</u> s dorad <u>os</u>
-----------------------	------------------------------------

## HOW TO SAY "MY", "YOUR", "HIS", "HER"

Singular	Plural
mi	mis
tu	tus
su	sus

my  
your (informal)

his, her, its, your (formal)

## VERBS

SER	TO BE	HABLAR	TO SPEAK	VIVIR	TO LIVE	LLAMAR	TO BE CALLED
Soy	I am	Hablo	I speak	Vivo	I live	Me llamo	I am called
Eres	You are	Hablas	You speak	Vives	You live	Te llamas	You are called
Es	He/she/it is	Habla	He/she/it speaks	Vive	He/she/it lives	Se llama	He/she/it is called
Somos	We are	Hablamos	We speak	Vivimos	We live	Nos llamamos	We are called
Sois	You (pl) are	Hablaís	You (pl) speak	Vivís	You (pl) live	Os llamáis	You (pl) are called
Son	They are	Hablan	They speak	Viven	They live	Se llaman	They are called



# 17. TEXTILES

## Year 7 Textiles -Knowledge Organiser

Key Words and Definitions:					
Pins	a piece of metal with a point at one end for holding fabric together	Stitch	A thread that passes through fabric	Tie dye	Resist method of dying- created by tying string/ elastic bands around areas of the fabric.
Scissors/shears	Used for cutting fabric	Sew/Sewing	Done by machine or hand to join fabric or add decoration	Applique	Applying 1 fabric to another to create a design
Sewing Machine	A machine used to produce stitches in fabric	Tacking	Temporary stitching to hold fabric in place	Reverse Applique	cutting away a layer of fabric to reveal a shape appliquéd underneath
Needle	a piece of metal with a point at one end and a hole or eye for thread at the other, used in sewing	Hem	The finishing off at the edge of fabric	Embroidery	Decorative stitching by hand or machine
Thread	a strand of cotton, used in sewing or weaving	Seam	Joining two fabrics together	Design	A drawing to show the look of your idea
Tailors chalk	Chalk used to mark fabric	Seam Allowance	Distance between the edge of fabric and the stitching line (1.5 cm)	Annotation	Labelling to explain your design
Fabric	Cloth produced by weaving or knitting textile fibres.	Pattern	A template used to cut out the fabric	Evaluation	Making a judgement about your product
Unpicker	A small piece of equipment with a sharp pointy end used to unpick stitches	Components	Buttons, zips, sequins	Specification	A list of requirements that a product must meet

Health and safety	
<b>Iron:</b> NO talking whilst using iron No distracting others when using iron No touching base of iron either when on or off Do not use iron around water Unplug iron when not in use Stand iron on platform when not in use Do not walk around with the iron	<b>Sewing Machine:</b> No talking whilst using sewing machine No distracting others when using sewing machine Sew at a safe speed Turn off machine if a problem occurs Never try to mend machine Never use sewing machine unless supervised by a teacher
<b>Equipment:</b> Do not stick pins or needles in skin Do not point or wave around scissors Do not point or wave around unpicker Do not use dyes or chemicals without permission	<b>General:</b> Do not run in classroom Do not act dangerously Follow instructions given by teacher No shouting

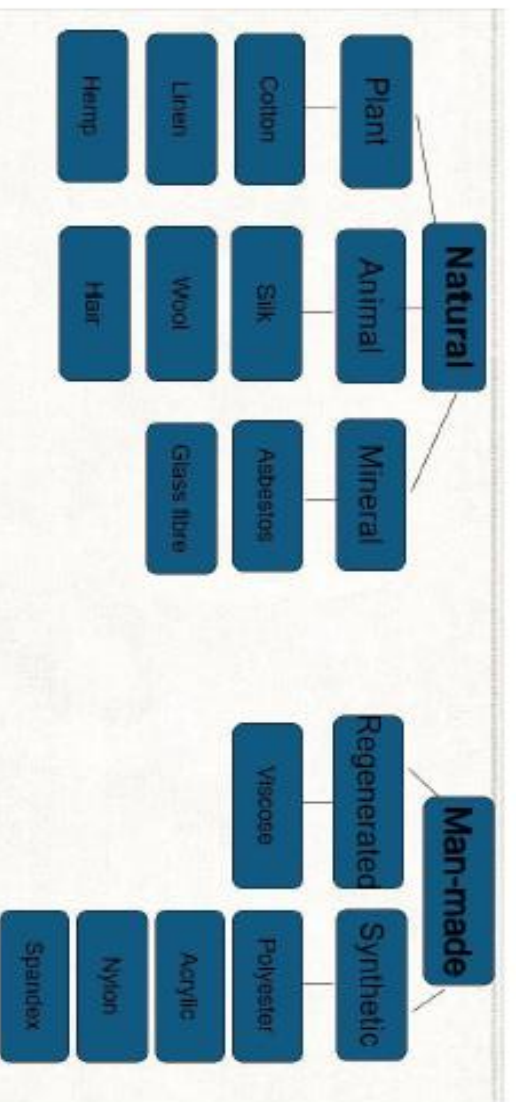


Research – Mood board and consumer research, culture

Block printing, masking tape printing and masking tape printing



## Classification of Fibres



### Properties and characteristics of fibres and fabrics.

Fabrics and fibres behave in different ways this can be good or bad thing, the way they behave is known as properties and characteristics.

**Good properties-** strong, absorbent, comfortable, hard wearing, drapes well, does not crease, cheap, environmentally friendly.

**Bad properties-** expensive, creases easily, shrinks, burns easily, bobbles, itchy, weak when wet, takes a long time to dry.

## Properties of Natural Fibres

Natural Fibre	Properties	Uses
Cotton	Strong, absorbent, cool to wear, hard wearing, creases easily, easy to care for	Clothing, soft furnishings
Wool	Warm, absorbent	Warm outer wear e.g. jumpers, carpets, blankets, soft furnishings
Silk	Comfortable to wear, soft, absorbent, expensive, natural sheen	Luxury clothing and furnishing

Synthetic fibres and regenerated fibres are manufactured. All manufactured fibres start as filament fibres. Regenerated fibres are made from natural materials, such as cellulose from wood, that are chemically processed. Viscose and rayon are regenerated fibres. Synthetic fibres are all man-made from organic polymers, made by refining crude oil or coal. Polyester, nylon and acrylic are synthetic fibres. Nylon was the first synthetic fibre to be created from chemicals obtained from crude oil.