

A large, light blue watermark of the Wellington School crest is centered in the background of the page. It features the same lion and 'W' design as the official crest, but in a much lighter, semi-transparent color.

# Knowledge Organisers

## Year 7

### Spring 2022

# **Knowledge Organisers**

Some subjects like Design Technology organise the curriculum on a carousel, as such all the organisers for that subject are in the Spring Term booklet.

## **Contents**

An introduction to Knowledge Organisers

Art

Computing

Drama

Design Technology (DT)

English

Geography

History

Mathematics

MFL

Music

PSHE

Religion, Ethics and Philosophy (REP)

Science

\*Some subjects have Knowledge Organisers which last two terms or a year, therefore it will be the same as the Autumn Term.

## An Introduction to Knowledge Organisers

### What is a Knowledge Organiser?

A knowledge organiser is a document, usually one side of A4, occasionally two, that contains key facts and information that children need to have a basic knowledge and understanding of a topic, or in some cases a series of topics.

Students are expected to bring their Knowledge Organiser Booklet to school every day. Students will be issued with a new booklet to bring each term. However, it is important they keep the old booklets to help with revision for end of year exams.

### What are the benefits of knowledge organisers?

The main benefit of knowledge organisers is that they give students and parents the 'bigger picture' of a topic or subject area. Some topics can be complicated, so having the essential knowledge, clear diagrams, explanations and key terms on one document can be really helpful.

Research shows that our brains remember things more efficiently when we know the 'bigger picture' and can see the way that nuggets of knowledge within that subject area link together. Making links, essentially, helps information move into our long-term memory.

### How can the students use them?

As mentioned earlier, students are expected to bring their Knowledge Organiser Booklet to school everyday. In lessons they can be used in a number of ways, for example, to look up the meaning of key words, spell words correctly and do some additional work if they have finished classwork.

At home knowledge organisers can be used to support homework, independent work and revise for tests and exams. Two quick and easy ways to do this are:

1. Look, cover write, check – look at part of the knowledge organiser, cover it, write as much as you can remember and then check it
2. Word up – Pick out any words you don't understand. Use a dictionary or thesaurus to find the meaning. If they don't help ask your teacher.

The more often you do this the better. YouTube has some clips on them; search 'Mr Garner look, cover, write, and check' and 'Mr Garner word up'

### How can parents use them?

- Read through the organiser with your son/daughter – if you don't understand the content then ask them to explain it to you – 'teaching' you helps them to reinforce their learning.
- Test them regularly on the spellings of key words until they are perfect. Get them to make a glossary (list) of key words with definitions or a list of formulae.
- Read sections out to them, missing out key words or phrases that they have to fill in. Miss out more and more until they are word perfect.

### How the booklet is organised

The knowledge organisers are in alphabetical order by subject.

# YEAR 7 ART PORTRAITS

# Knowledge Organiser - Term 2 & 3

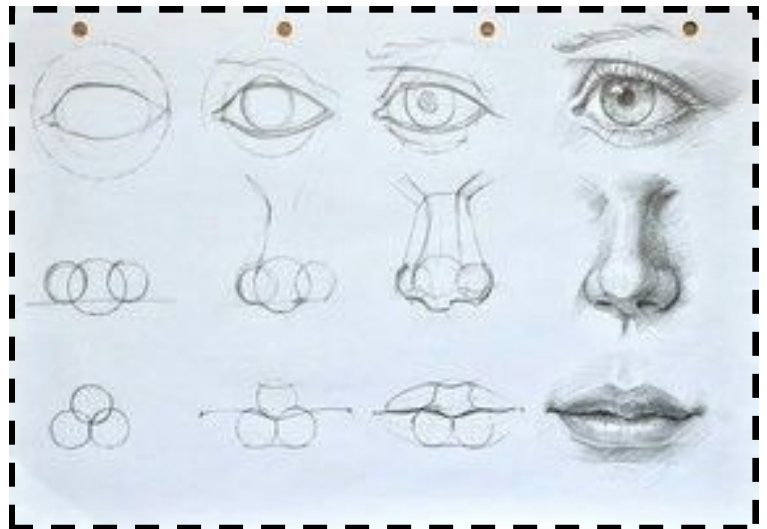
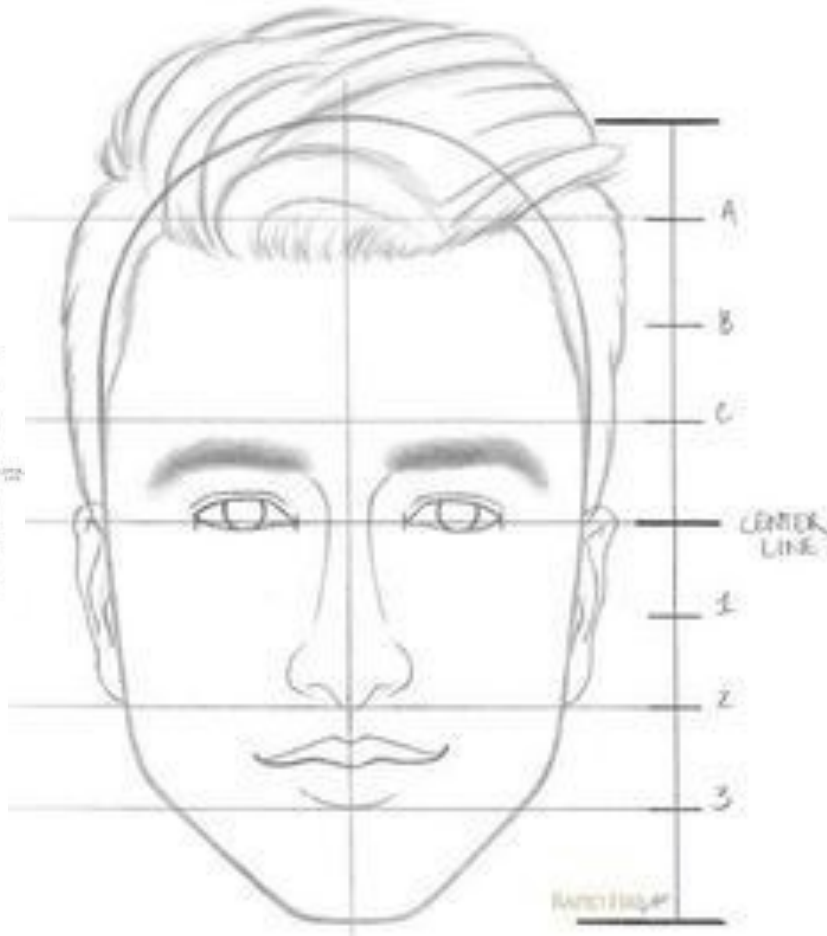
## KEY WORDS

- Proportion
- Guide lines
- Tone
- Shape
- Portrait
- Texture
- Composition
- Symmetry
- Mark Making
- Highlight
- Technique
- Style
- Expression
- Skin tone



### WHERE TO PLACE THE FEATURES PROPORTION RULES

- The eye line – typically half way between the top of the head and the chin
- The width of the distance between the eyes – the width of one eye
- Eye level to the end of the nose – most variable measurement and must be taken from the model. I assume that means that this measurement is important in getting a good likeness.
- The centre line of the mouth – typically about a third between the nose (end or base?) of the chin
- The inside corner of the eyes line up vertically with the edge of the nostrils
- The centre of the pupils line up vertically with the corners of the mouth



## Well Known Portrait Artists

- Pablo Picasso
- Van Gogh
- Andy Warhol
- David Hockney
- Lucian Freud
- Frida Kahlo

TONAL	CROSSHATCH	LINEAR
<p>Gradually add more pressure for each darker value.</p>	<p>4 directions very close together.</p> <p>Lines cross in 4 directions.</p> <p>Lines cross in 3 directions.</p> <p>2 directions close together.</p> <p>Lines cross in 2 directions.</p> <p>Begin with short lines in 1 direction.</p>	<p>Saturate with fine lines as dark as possible.</p> <p>Increase pressure.</p> <p>More lines closer together.</p> <p>Small, short lines in 1 direction.</p>
Controlling blends in Values	"Crossover" lines from 1 to 4 directions	Lines only in ONE direction
Increase pressure		
Use very light pressure for 1st values		

- ### Skills
- Planning/proportion
  - Tone for 3D & surface qualities
  - Artist understanding/ application
  - Painting techniques
  - Measurements/Grid planning
  - Developing intentions and ideas
  - Colour mixing/ Presentation skills



## KS3 Computing: Data Representation

All data in a computer, such as text, numbers, images and sound can be represented by just using zeroes and ones..

Converting **binary to denary** numbers. Example: Convert 01110101 to denary.

Place value	128	64	32	16	8	4	2	1
	0	1	1	1	0	1	0	1

2. Add up the place values where there is a 1 below it.

$$64 + 32 + 16 + 4 + 1 = \underline{117}$$

Converting **denary to binary** numbers. Example: Convert 79 to binary

1. Write out the place values:

Place value	128	64	32	16	8	4	2	1

2. Imagine you had 1 coin worth each of the numbers above. You have to pay for a product costing your target number using the exact change.

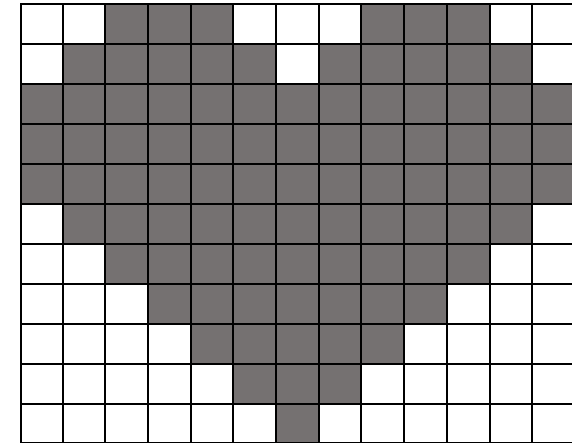
You would pay for a product costing 79 using coins 64, 8, 4, 2 and 1. These numbers add up to 79.

3. Write a 1 under those place values and a 0 under the others.

Place value	128	64	32	16	8	4	2	1
	0	1	0	0	1	1	1	1

**Bitmap images** are broken up into pixels. Each pixel is given a binary code which represents a colour.

If 1 represents white and 0 is black, the first line of this image could be stored as 1100011100011.



**Run-length encoding (RLE)** can shorten the bit pattern.

The number of the same colour is stored. The first five rows of this image could be:

2 1, 3 0, 3 1, 3 0, 3 1, 5 0, 1 1, 5 0, 1 1, 3 3 1.

This takes up less memory and means images can be downloaded more quickly.

**Text** is also stored in binary. Each character has its own bit pattern. The letters are stored in sequence.

'a' is 1100001; 'A' is 1000001. The binary numbers can be converted to 97 and 65.

'b' is 1100010; 'B' is 1000010. These numbers could be converted to 98 and 66.

This program draws a square. The **sequence** of instructions is important. If they are in a different order, the outcome of the program will be different.

This program does exactly the same thing. However, it uses a loop to repeat instructions, making it shorter and therefore easier to edit if necessary. This is known as **iteration**.

The program has been improved further here. It uses two **variables**, *sides* and *n*.

This makes the program more flexible, by being able to draw shapes of different number of sides.

The number of degrees to rotate has been calculated by an **arithmetic operation**:  $360 \div \text{sides}$ . We use '/' as the division operator (instead of ÷) in computing.

## Computing: Programming with Scratch

This time the program asks the user how many sides the shape should be. This is known as **user input** and the answer is stored in the variable *sides*.

Once the shape has been drawn, the program **outputs** text to the screen. It joins some text with the value of the variable *sides*. This is known as **concatenation**.

Finally, the user is given a choice of colours. This part of the program uses a **Boolean expression** to compare the user input with 'r'.

If this is *true* (the users types 'r'), the pen colour is red.

If this is *false* (the user doesn't type 'r'), the pen will be blue.

*If... else* statements are known as **selection**.

Charlie and the Chocolate Factory	Roald Dahl	Harry Potter
<ul style="list-style-type: none"> <li>• Students to perform in 'stereotype' linking to the main characters in the book - Charlie Bucket, Mike TV, Augustus Gloop, Violet Beauregarde and Veruca Salt.</li> <li>• Using strong physicalisation to represent characters.</li> <li>• Using and understanding scripts to perform in an effective way to fully embody the characters.</li> <li>• Using role on the wall to fully create and develop a character.</li> <li>• Developing the skill of Tableaux.</li> </ul>	<ul style="list-style-type: none"> <li>• Students will different Roald Dahl stories, <i>The BFG</i>, <i>The Twits</i>, <i>Georges Marvellous Medicines</i>, <i>Matilda</i> and <i>James and the Giant Peach</i>.</li> <li>• Using the skills of Physical Theatre, <i>Hot Seating</i>, <i>Conscience Alley</i>, <i>Choral Speaking</i>, <i>Tableaux</i> and <i>Script</i>.</li> <li>• Understanding the themes and messages within the different stories.</li> </ul>	<ul style="list-style-type: none"> <li>• Students to use physical theatre (performing using your body with gesture and movement).</li> <li>• Looking at key characters from the book - Harry Potter, Ron Weasley, Hermione Granger, The Dursleys, Snape.</li> <li>• Understanding different types of genre within theatre.</li> <li>• Looking at stereotypical characters.</li> <li>• Marking the moment - showing a significant moment within performance.</li> <li>• Using exaggerated movement and gestures to show characters personalities and feelings.</li> </ul>
Pantomime	Spy School	Key words
<ul style="list-style-type: none"> <li>• Inspired by <i>Commedia Del Arte</i> and clowning.</li> <li>• Originated in Italy.</li> <li>• <i>Commedia</i> means "the comedy"</li> <li>• Very popular in Shakespearian time.</li> <li>• Actors using no script - Improvisation - making up performance on the spot.</li> <li>• Started by being performed on the street.</li> <li>• Comedic in style - characters are very physical and over the top.</li> <li>• Main Characters - Prince, Princess, Dame, Evil</li> <li>• Choral elements are vital to this performance style - talking in unison.</li> <li>• Singing, dancing and acting are involved.</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to practitioner Konstantin Stanislavski and his 'System.'</li> <li>• Stanislavski - Father of Modern Theatre born in 1863 from Russia - created Method Acting.</li> <li>• Teacher in Role - teacher performing in character to create sense of realism.</li> <li>• Naturalism - performance that is like real life.</li> <li>• Physical Apparatus - actors voice and body.</li> <li>• Hot Seating - questioning actors in role.</li> <li>• Magic If - how the actor would feel IF they were in the characters situation.</li> <li>• Emotion Memory - Using a past memory to influence your acting.</li> </ul>	<ul style="list-style-type: none"> <li>• Tableaux</li> <li>• Characterisation</li> <li>• Body Language</li> <li>• Slap stick</li> <li>• Marking the moment</li> <li>• Stereotypes</li> <li>• Physical Theatre</li> <li>• Comedy</li> <li>• Chorus/Ensemble</li> <li>• Naturalism</li> <li>• Magic If</li> <li>• Emotion Memory</li> <li>• Teacher in role</li> <li>• Cross-cutting</li> <li>• Over exaggeration</li> <li>• Setting</li> <li>• Script/Plot</li> </ul> <p><u>Important practitioners:</u></p> <ul style="list-style-type: none"> <li>➤ Stanislavski</li> <li>➤ <i>Commedia Del Arte</i></li> </ul>

Employability:

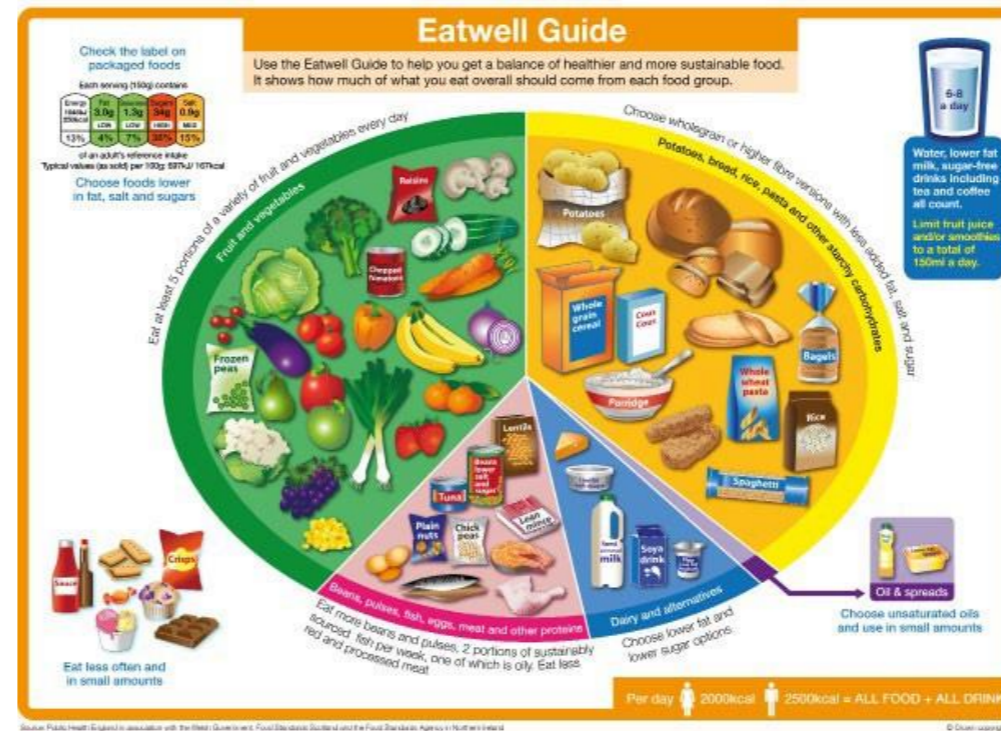
Team work, Collaboration, Listening skills, Creative thinking, Leadership, Focus, Concentration, Positivity, Confidence, Self-belief, Self-discipline

# Year 7 Cooking & Nutrition Knowledge Organiser – Developing Preparation Skills

## Practical Skills

Skill Group	Techniques
Knife skills	Fruit and Vegetables—bridge hold, claw grip, peel, slice, dice and cut into even pieces.
Weigh and measure	Be able to demonstrate accurate measurement of liquids and solids.
Use of equipment	Use a blender, grater, vegetable peeler and potato masher.
Using the hob	<ul style="list-style-type: none"> <li>boiling and simmering</li> <li>stir frying</li> </ul>
Using the oven	<ul style="list-style-type: none"> <li>baking</li> </ul>
Make sauces	Make a reduction sauce (pasta sauce)
Test for readiness	Use a knife/skewer, finger or poke test, bite or visual colour check to establish whether a recipe or ingredient is ready.
Judge and manipulate sensory properties	Demonstrate: <ul style="list-style-type: none"> <li>how to taste and season during cooking</li> <li>presentation and food styling—use garnishes &amp; decorative techniques.</li> </ul>

## Nutrition – The Eatwell Guide



## Key Messages:

- Eat at least 5 portions of fruit and vegetables per day.
- Base meals on potatoes, bread, rice, pasta or other starchy carbohydrates.
- Have some dairy or dairy alternatives.
- Eat some beans, eggs, fish, meat and other proteins.
- Choose unsaturated oils and spreads and eat in small amounts.
- Drink 6-8 cups/glasses of fluid per day.

## Equipment



Masher



Kitchen Scales



Measuring Jug



Fish Slice



Vegetable knife

## Hygiene & Safety Rules

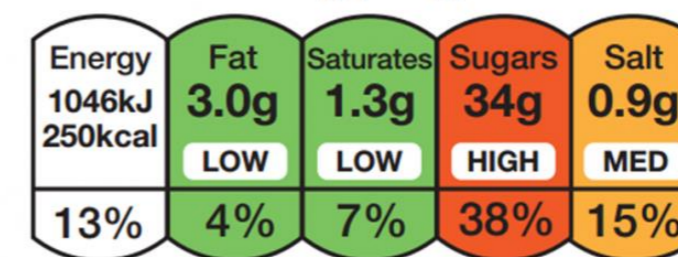
Tie up long hair
Wear an apron
Tuck tie in
Wash hands
No running
Use oven gloves when necessary
Clean practical equipment thoroughly

## Key abbreviations: Weights and Measurements

L	Litres	
g	Grams	
ml	millilitres	1000ml = 1 litre
Kg	kilograms	1000g
Tbsp	tablespoons	15ml
Tsp	teaspoon	5ml
1pt	1 pint	568ml

## Food Labelling

Each serving (150g) contains



of an adult's reference intake

Typical values (as sold) per 100g: 697kJ/ 167kcal



# Year 7 Textiles Knowledge Organiser

## Mobile Phone Stand

### Key Skills

- Responding to a Design Brief
- Analysing existing products
- Identifying a target audience
- Designing & annotating to include a range of decorative and construction techniques
- Demonstrating ability to complete a range of decorative by techniques by hand:
  - Embroidery stitches (running & blanket)
  - Appliqué
  - Adding components e.g. sequins & buttons
- Using a sewing machine to complete a range of construction techniques:
  - Seams
  - Hems

Product features	
Creative design that is personalised	A theme that is identifiable and original
Hand embroidery	Consideration of a specified target market
Hand appliqué	A variety of textured fabrics
Components used as decoration	Machine sewing

Health & safety
Follow teacher instructions
Move slowly around the room do not run
Tie long hair back
Hold scissors or shears correctly when walking around the room.
Only one person operating a sewing machine or overlocker at one time
Never use a sewing machine or overlocker unless supervised by a teacher/ technician
Turn off all machines when not in use.
Report any injuries or breakages to the teacher immediately.

**HAND SEWING**

Used as a decorative stitch or for seams. Stitch is easy but also not very strong. Stitches should be small & even.

**RUNNING STITCH**

**BACK STITCH**  
Strong hand stitch for holding seams together and inserting zippers by hand. Stitches overlap on the back.

**BLANKET STITCH**  
Good stitch for finishing edges. Stab from bottom up, and wrap thread around half exposed needle in the direction you are sewing.

Key vocabulary	
Decorative	Being aesthetically pleasing to the eye.
Materials	What something is made from?
Components	The parts/materials/threads needed to make a product.
Function	What a product does, how it works and what it will be used for?
Aesthetics	How a product or design looks .
Target Audience	The person or people most likely to be interested in your design or product.
Embroidery	Even stitch widths and lengths completed by hand sewn stitches.
Overlocking	A machine that prevents the raw edges of fabric fraying.
Appliqué	A decorative technique whereby one material is sewn on top of another by hand.
Design Brief	An written outline which explains the aims and objectives and milestones of a design project.





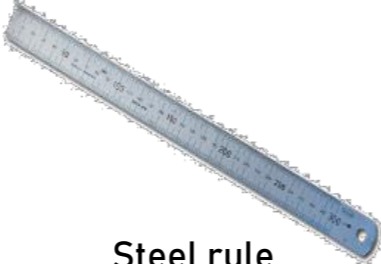







# Year 7 Product Design Knowledge Organiser



## Catamaran Boat Design

### Key Skills

- Responding to a Design Brief
- Identifying a target audience and product function
- Applying Health & Safety procedures and PPE in the workshop environment
- Developing practical skills to create housing & dowel joints to join materials
- Identifying specific workshop tools and equipment
- Manufacturing a prototype model
- Finishing materials
- Presentation skills
- Evaluating the manufacturing process

Tools for working with Timber	
 Try square	 Bench vice
 Steel rule	 Marking gauge
 Tenon saw	 File
 Belt & Disc Sander	 Coping Saw
 Bench hook	 Pillar drill

Health & safety in the workshop
Tie long hair back
Wear an apron
Wear safety goggles must be worn when using machinery
Move slowly around the workshop
Be aware of where the emergency stop buttons
Ensure the ventilation is switch on prior to using a machine
Only one person operating a machine at one time
Report any injuries or breakages to the teacher immediately

Key vocabulary	
Design Brief	An written outline which explains the aims and objectives and milestones of a design project.
Function	What a product does, how it works and what it will be used for?
Target Audience	The person or people most likely to be interested in your design or product.
Materials	What something is made from.
Finishing	The process of applying a finish to preserve or protect a material & improve aesthetics.
Wood grain	Wood grain is the pattern made by the wood fibres in trees when it grows.
Modelling	To present ideas in 2D & 3D to the user (target audience) or client.
Prototype	A prototype is a model that is built to test to see if it is successful or whether it needs further modification or improvements.
PPE	Personal protective equipment are items such as goggles and aprons.

Timber is a natural material with imperfections, knots and grain. Remember always sand with the grain

### Softwood



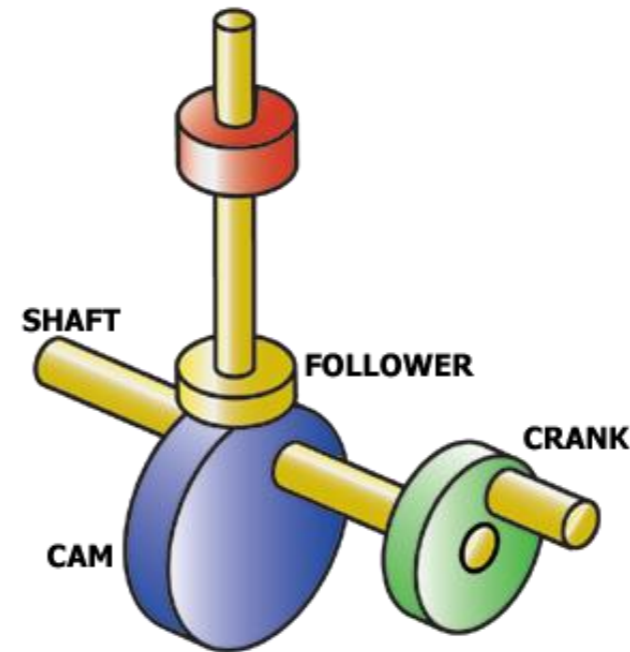
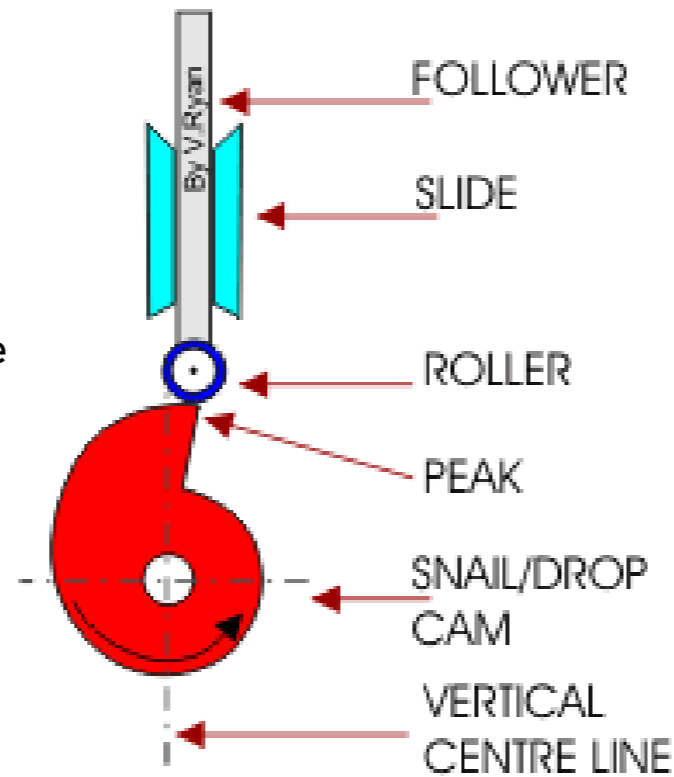
From coniferous trees that are evergreen, which are faster to grow and are less expensive than hardwoods. Softwoods are a sustainable material as the resource can be regrown and not depleted. Softwoods are strong and easy to work with.


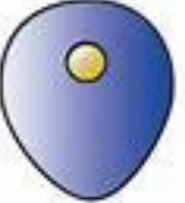






## Automata Project

### Key Skills

- Responding to a Design Brief
- Analysing & researching information
- Creating a suitable idea for a target audience
- Isometric drawing techniques
- Developing CAD drawing skills using:  
Serif Draw / Techsoft Design
- Rendering techniques
- Presentation skills
- Developing & testing
- Manufacturing with modelling materials (card & paper)
- Evaluating the design & making process



Cams	
 ROUND	 EGG-SHAPED
 ELLIPSE	 ECCENTRIC
 HEXAGON	 SNAIL

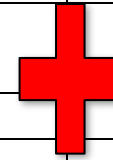


### Key vocabulary

Design Brief	An written outline which explains the aims and objectives and milestones of a design project.
Target Audience	The person or people most likely to be interested in your design or product.
Function	What a product does, how it works and what it will be used for?
Mechanism	A system of parts working together in a machine.
Motion	Something moving or being moved.
Cam	A rotating or sliding piece used to transfer rotary motion into linear motion or vice versa.
Modelling	To present ideas to the user (target audience) or client.
Evaluating	To judge or calculate the quality, importance, amount, or value of something
Linear Motion	Motion moving along a straight line.
Rotary Motion	Motion moving clockwise or anti-clockwise.

KEY TERMINOLOGY FOR ANALYSING PROSE		ADVERBS AND VERBS FOR ANALYSING EFFECTS	
prose	Continuous writing with no metre	deliberately	implies
mood	The feelings/emotions of a novel	intentionally	infers
tone	The attitudes of writing	purposefully	suggests
context	The influence of the time a novel is read or written	arguably	creates
dialogue	Conversation between at least two characters	possibly	chooses/uses
characterisation	How a character is constructed	cleverly	highlights
setting	Where the action takes place	effectively	emphasises
first person narration	Perspective using 'I'; allows for emotional insight	powerfully	evokes
third person narration	Perspective using 'He'/'She'/'They	*emphatically	conveys
*omniscient narration	Ability of a narrator to understand the emotions of all characters	*dramatically	develops
*withholding	What the writer isn't allowing us to know	*vividly	describes
*foreshadowing	Events that suggest future ones	*passionately	intensifies
<b>LANGUAGE TECHNIQUES YOU WILL ENCOUNTER</b>		*emotively	establishes
lexis	Impressive word for 'word'!	*subtly	builds-up
simile	Phrase with 'as' or 'like' to suggest similarity	*skilfully	illustrates
metaphor	Suggesting something is something else	*sensitively	explores
figurative language	Any non-literal language that is used for effect	<b>CONNECTIVES TO ADD AND DEVELOP SPEEDY PARAGRAPHS</b>	
alliteration	Repetition of consonant sounds	Furthermore,...	However,...
onomatopoeia	Words that are spoken as they sound	Moreover,...	Yet,...
pathetic fallacy	Where the weather or setting reflects a mood	Meanwhile,...	Conversely,...
personification	Given an inanimate object human qualities like movement or emotion	In addition,...	On the other hand,...
<b>COMMON THEMES IN CHILDREN'S FICTION</b>			
maturity	discrimination	parent-child relationships	romance
			personal challenges

**ADVERB**



**VERB**



**SHAKESPEAREAN COMEDY**

- In this unit, you will study a play by William Shakespeare and focus on the genre of the Shakespearean Comedy.
- You will learn about the different features of a Shakespearean comedy and understand why audiences enjoyed the genre when they were first written and performed - and also why they're still enjoyed in the 21<sup>st</sup> century.
- You will focus your analysis on key characters from the play you study and understand how comedy is created by Shakespeare, exploring the impact of language, characterisation and other dramatic devices.
- We hope you will enjoy and be amused by the play that you study!

**'A MIDSUMMER NIGHT'S DREAM'**

- First performed in 1595
- One of Shakespeare's comedies
- It is typical of Shakespeare's comedies because it involves romance, a happy denouement, confusion, a mix-up and some slapstick/farcical elements such as Bottom gaining an ass' head!
- The play was often performed at courtly marriages because of its light-hearted nature and three marriages.

**'THE TEMPEST' BY WILLIAM SHAKESPEARE**

- First performed in 1595 - his final play
- One of Shakespeare's comedies
- It is typical of Shakespeare's comedies because it involves romance, a happy denouement, confusion, a mix-up and some slapstick/farcical elements such as Stephano and Trinculo's scenes
- The exploration of power and legacy perhaps reflects Shakespeare's own reflections as he approached the end of his life - Prospero states. 'We are such stuff as dreams are made on'

**KEY SPELLINGS FOR THIS SCHEME OF WORK**

protagonist	Elizabethan	context	dialogue	climax
antagonist	comedy/comedic	archaic	soliloquy	medieval
dramatic	romance	myth	exposition	vernacular
Shakespeare(an)	humour	dramatic irony	denouement	farce



# Year 7 Geography

## Unit 2: Settlement



**LOOK**

**SAY**

**COVER**

**WRITE**

**CHECK**

### KEYWORDS



Early settlers often looked for certain features in an area to make life easier:

**Protection.** Good views from a hilltop give you warning if you are about to be attacked.

**Building materials.** Needed wood or stone. Useful to be near a wood or a rocky hillside.

**Supply of wood.** Needed for warmth and to cook on.

**Plenty of water.** Needed for drinking, cooking and washing. Water might come from a river, spring or well.

**Not too much water.** Sites must not flood or be marshy.

**Rivers.** Easy to cross either on foot at a ford or by a bridge.

**Shelter.** A south facing slope will have more sun and will be protected from the cold north wind.

**Flat land.** Easier to build on, for growing crops and travelling to other towns.

**UP THE BRITS**

**ROMA RULES**

'Is this a good place to build a village?'

'Is this a good place to build a town?'

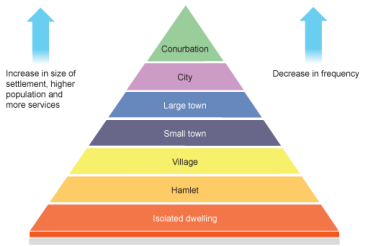
### Settlement size:

**Hamlet** - a small group of homes

**Village** - larger than a hamlet. It contains more services, e.g. post office

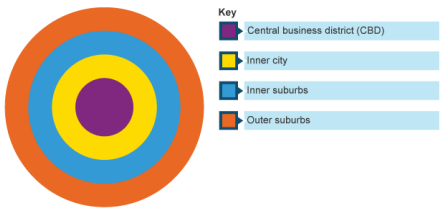
**Town** - this may contain tens of thousands of people. Usually has a range of functions, such as shopping centres and secondary schools

**Cities** - these have the widest variety of functions. In the past, cities were identified as having cathedrals.



### Land use zones

Towns and cities are often complex but it may be possible to see how some land uses group together in **zones**. The **Burgess model** shows a simple land use pattern that can be identified in some towns and cities, particularly in countries like the UK.



### Urban change and regeneration

As towns and cities have grown, some areas have become run down. This is particularly true of some old inner-city areas. Governments have tried to improve conditions in these areas.

### Problems of old inner-city areas and the city centre include:

- overcrowding
- poor-quality housing
- traffic congestion

### CBD - site of shops, entertainment and offices

**Inner city (old industry)** - this is where old factories built during the industrial revolution are being developed into new offices or apartment blocks

**Suburbs** - Over time cities spread out and this is where the suburbs were created. Here houses are often semi-detached.

**Outer suburbs/rural-urban fringe** - this zone is on the edge of the city and contains large, detached homes.



### Redesigning urban areas

Urban areas need to be:

- Clean
- Well lit
- Open with some greenery
- Close to shops and services
- Safe

It is also important for urban areas to have furniture and other features which make it attractive, e.g. fountains.



	Definition
<b>Site</b>	This is the place where the settlement is located, eg on a hill or in a sheltered valley.
<b>Situation</b>	this describes where the settlement is in relation to other settlements and the features of the surrounding area, eg is the settlement surrounded by forest or is it next to a large city?
<b>Urban sprawl</b>	The unplanned growth of urban areas into the surrounding countryside.
<b>Urban greening</b>	The process of increasing and preserving open space such as public parks and gardens in urban areas.
<b>Regeneration</b>	The revival of old parts of the built-up area.



# Year 7 Geography

## Unit 3: Ecosystems

Plants get their energy from the Sun. They are called **producers** because they make their own food.  
 Animals are called **consumers** because they eat plants and other animals. They do not make their own food.  
 Animals that eat other animals are called **predators**. The animals they eat are called **prey**.



KEYWORDS



### Tropical Rainforests

This biome is located on three continents:

- South America
- Africa
- South east Asia



The temperature ranges from 21 to 30 degrees Celsius. Rainfall remains high all year round.

The tropical rainforests are being cut down for the following reasons:

1. To sell the wood
2. To build on the land
3. To find minerals in the ground
4. To use the land for agriculture (cattle farming)

This means that:

1. Indigenous people lose their homes
2. Animals lose their habitat
3. Unique plants are lost forever
4. Less carbon dioxide is removed from the atmosphere. This will make the world a warmer place to live.



### Deserts

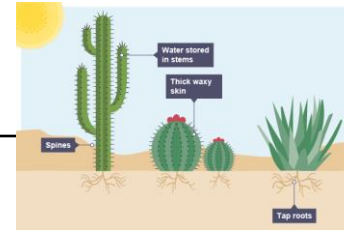
Deserts are found along the Tropic of Capricorn and the Tropic of Cancer. The **largest** desert is the **Sahara**.  
 There is very little biodiversity in hot deserts because of the harsh climate.

In the day, temperatures can **exceed 40 degrees Celsius** but **drop below 0 degrees Celsius at night**.

**Plant adaptations** - Plants have developed special adaptations to survive the harsh climate.

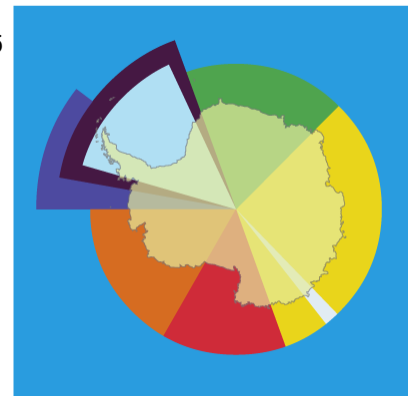
**Spines** -lose less water than leaves so are very efficient in a hot climate. They also stop animals from eating the plant.

**Waxy skin** - some leaves have a thick, waxy skin on their surface. This reduces water loss by transpiration.



### Polar

Polar biomes, such as Antarctica, are cold and dry all year round. **99 per cent** of it is covered by ice.  
 Antarctica is the **5th largest continent**, **25 per cent** larger than Europe.  
 During the winter, much of the water surrounding Antarctica freezes.  
 Countries have claimed ownership of parts of Antarctica.  
 The **Antarctic Treaty** was agreed in 1961 to help control human activity in the location and also to resolve disagreements over territory.  
 The biodiversity is low. **Emperor penguins** live in Antarctica. **Polar bears do not!**



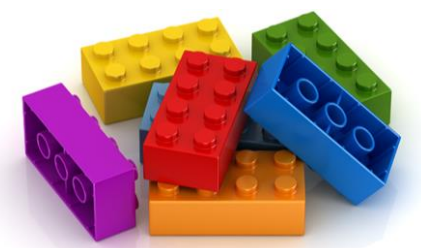
	Definition
Food Chain	A series of organisms each dependent on the next as a source of food.
Biome	A large naturally occurring ecosystem such as tropical rainforest.
Deforestation	The removal of trees.
Adaptation	The process of change by which an organism becomes better suited to its environment.
Sustainable	The process of maintaining a balanced environment. It is where we act in a way to provide for the needs of today without compromising the needs of the future generations.





Did Medieval kings have the power to do whatever they liked in the Middle Ages?

How significant was the Black Death?



- ✓ **What and why?** You will learn about how the powers of Medieval Monarchs changed over time and about the impact of a terrible Medieval pandemic.
- **Stop, think and link:** What was William I like as a King?
- ❖ **Cause and consequence assessment – Why did the barons rebel against King John in 1216?**
- ❖ **Want to explore further?**  
 Book: Good Masters! Sweet Ladies! Voices from a Medieval Village by Laura Amy Schlitz  
 Book: The Door in the Wall by Marguerite De Angeli  
 Book: Horrible Histories – The Measly Middle Ages by Terry Deary  
 Website: <https://www.bbc.co.uk/bitesize/topics/zfphvcw>

### Key Questions

- What made a good Medieval King?
- Why was Thomas Becket killed and how was Henry II punished?
- Why did the Barons rebel against King John?
- Which other Medieval Monarchs faced rebellions and how did they fair?
- Why did the peasants revolt in 1381?
- Who was the best English King of the Middle Ages?
- Why were Medieval people so powerless against the Black Death?
- Why was the Black Death so significant?

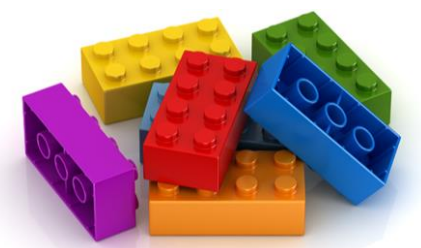
### Keywords

- Monarch**  
A King or Queen.
- Pope**  
Head of the Catholic Church.
- Archbishop of Canterbury**  
The head of the Church in England. He was appointed by the Pope.
- King's Courts**  
Law courts which were controlled by the King and his justice.
- Church Courts**  
These were controlled by the church for religious offences and for any crimes committed by the clergy.
- Magna Carta**  
The document that King John was forced to sign by the barons in 1215 that limited some of his power.
- Baron**  
A title of honour given to any nobleman who pledged his loyalty and service to a Monarch in return for land.
- Black Death**  
A pandemic (global) disease that killed 1/3 of England's population in the 14<sup>th</sup> Century.
- Freemen**  
Peasants that paid rent to the lord to farm their land, but they weren't 'owned' by the Lord, and could come and go as they pleased.
- Villein**  
Medieval peasants who were 'tied' to the Lord's land. They had to farm their own land and the land of the Lord.
- Poll Tax**  
Introduced by King Richard II to pay for the Hundred Years War. Everyone had to pay 4p every year – later increased.
- Rebel**  
To rise in opposition against a leader
- Peasants' Revolt**  
A popular revolt in 1381 against the rule of Richard II, his advisors and taxation led by Wat Tyler.



### Key events and Key People

- 1170AD – Thomas Becket murdered in Canterbury Cathedral
- 1215AD – The barons rebel against King John and force him to sign the Magna Carta
- 1327AD – The murder of Edward II
- 1337-1453AD - Hundred Years War between England and France.
- 1348AD - The Black Death comes to Britain.
- 1381AD – The Peasants' Revolt.
- 1455-85AD - The Wars of the Roses (the Cousins' War) between the Houses of Lancaster and York.



- ✓ **What and why?** You will learn about the invasions of the Middle East in the Medieval Era.
- **Stop, think and link:** What motivated other invasions that we've studied?

#### ❖ **Want to explore further?**

Book: The Silk Roads Illustrated by Peter Frankopan

Book: The Boy Knight: A Tale of the Crusades by G A Henty

Book: Daily Life in the Islamic Golden Age by Don Nardo

Website:

<https://www.bbc.co.uk/bitesize/guides/zjbj6sg/revision/1>

#### Key Questions

- What were the Crusades?
- Who fought each other in the Crusades?
- Why was Jerusalem so important?
- Why did people join in fighting in the Crusades?
- What were relationships like between Christians and Muslims?
- What impact did the Crusades have on the world?
- Was Richard the Lionheart a Medieval hero?
- What were the Silk Roads?
- What travelled along the Silk Roads?
- What was Medieval Baghdad like?

#### Keywords

##### **Atrocity**

A terrible crime

##### **Byzantine Empire**

Empire in South-East Europe and Asia Minor (Turkey) which was formed from the Eastern Roman Empire. Its capital was Constantinople (Byzantium).

##### **Chivalry**

The spirit of medieval knighthood, and the qualities expected of a medieval knight.

##### **Holy Land**

The land sacred to Jews, Christians and Muslims in what was ancient Palestine (now Israel, Palestine and Jordan).

##### **Knight**

A soldier on horseback who serves a baron.

##### **Massacre**

Killing a large number of people in a violent manner.

##### **Pilgrimage**

A journey which has religious or spiritual significance, usually to an important religious place.

##### **Pope**

The Bishop of Rome and head of the Roman Catholic Church.

##### **Sin**

Act of rebellion or disobedience against the known will of God in Judaism, Christianity or Islam.

##### **Tax**

Money paid by individuals or businesses to the government.

##### **Crusade**

An expedition to reclaim the Holy Land.



#### Key events and Key People

1096-1099 First Crusade

1147-1149 Second Crusade

1189-1192 Third Crusade

1202-1204 Fourth Crusade

Pope Urban II (1042-1099) - Sent out a call to all Christians to fight in the name of God to win back the Holy Land from Muslim rule, which they did in 1099.

Peter the Hermit (1050-1115)- A French preacher who inspired 1000s of people to go on the First Crusade.

Saladin (1137-1193) - Muslim General. He recaptured Jerusalem in 1187.

King Richard I "the Lionheart" (1157-1199) - English King won many battles against the Muslim armies but did not recapture Jerusalem.

Key Stage 3 Topic 4: Multiplying

Topic/Skill	Definition/Tips	Example	Non-example
1. Integers	Multiplication can be thought of as repeated addition or scaling the size of something.	$7 \times 4 = 7 + 7 + 7 + 7$  7 made 4 times greater	
	Multiplier x multiplicand = product	$56 = 8 \times 7$  56 is the product 8 is the multiplicand 7 is the multiplier	
	Multiplication is commutative and associative.	$8 \times 6 = 6 \times 8$  $2 \times 3 \times 4 = 6 \times 4$ $2 \times 3 \times 4 = 2 \times 12$	
	We can <u>disassociate</u> numbers into separate components to simplify calculations.	$49 \times 6 = (50 - 1) \times 6$	
	The <u>Distributive law</u> allows us to perform an operation over another.  The distributive law works commonly with addition/subtraction and multiplication.	$(10 + 3) \times 6 = 10 \times 6 + 3 \times 6$  $8 \times (20 - 1) = 8 \times 20 - 8 \times 1$	
	The Chinese grid method can be used for multiplication.		
	The grid method can be used for multiplication.		

2. Equivalent calculations	To find an equivalent calculation, multiply/divide the multiplicand and then do the <u>inverse</u> to the multiplier.	$8 \times 15 = 4 \times 30$	$7 \times 6 \neq 5 \times 8$ $8 \times 6 \neq 4 \times 3$
	To find an adjusted calculation, multiply/divide the multiplicand/multiplier and then do the <u>same</u> to the product.	If $40 \times 6 = 240$ , then $20 \times 6 = 120$ $40 \times 60 = 2400$	If $40 \times 6 = 240$ , then $40 \times 3 \neq 480$
3. Negatives	A negative multiplied by a positive produces a negative product.	$8 \times -3 = -24$ $-6 \times 7 = -42$	$5 \times -2 \neq 3$
	A negative multiplied by a negative produces a positive product.	$-7 \times -2 = 14$ $-6 \times -7 = 42$	$-6 \times -3 \neq -9$
4. Algebra	We can simplify terms by writing as single powers using index laws.	$a \times a \times a = a^3$ $b^4 \times b^6 = b^{10}$	$a \times a \neq 2a$ $b^2 \times b^5 \neq b^{10}$
	When multiplying, we multiply the numbers and then use index laws.	$4x \times 8y = 32xy$ $6x^2y \times 8x^3y^2 = 48x^5y^3$	$7x^3y \times 6x^4y^5 \neq 13x^{12}y^5$
	We can expand brackets using the grid method.	$  \begin{array}{ c c }  \hline  & 2x & -3 \\  \hline  4 & 8x & -12 \\  \hline  \end{array}  $ $4(2x - 3) = 8x - 12$ $  \begin{array}{ c c }  \hline  & 7x & -2y \\  \hline  2x & 14x^2 & -4xy \\  \hline  \end{array}  $ $2x(7x - 2y) = 14x^2 - 4xy$	

5. Decimals	To multiply decimals, we do the integer division and then adjust the calculation.	$7 \times 6 = 42$ $70 \times 6 = 420$ $70 \times 0.6 = 42$ $70 \times 0.06 = 4.2$ $70 \times 0.006 = 0.42$	
6. Fractions	Multiplying an integer and a fraction can be thought of as repeated addition.	$4 \times \frac{2}{3} = \frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} = \frac{8}{3}$	$5 \times \frac{3}{4} \neq \frac{15}{20}$
	To multiply two fractions, multiply the numerators and multiply the denominators.	$\frac{3}{4} \times \frac{8}{9} = \frac{24}{36} = \frac{2}{3}$	
	Difficult calculations can be simplified by cross-cancelling before multiplying.	$\frac{\overset{3}{\cancel{15}}}{\underset{4}{\cancel{44}}} \times \frac{\overset{3}{\cancel{33}}}{\underset{1}{\cancel{5}}}$ $\frac{15}{44} \times \frac{33}{5} = \frac{3}{4} \times \frac{3}{1} = \frac{9}{4}$	
	To multiply mixed numbers, convert to improper fractions.	$3\frac{1}{2} \times 1\frac{2}{3} = \frac{7}{2} \times \frac{5}{3} = \frac{35}{6}$	



Key Stage 3 Topic 5: Dividing

Topic/Skill	Definition/Tips	Example	Non-example
1. Integers	Division can be thought of as a) sharing b) grouping c) the inverse of multiplication.	$24 \div 6$  a) 24 sweets shared with 6 people b) 24 people put into groups of 6 c) What do we multiply by 6 to get 24?	
	Dividend $\div$ divisor = quotient	$8 = 56 \div 7$  56 is the dividend 7 is the divisor 8 is the quotient	
	Division is not commutative or associative.		$8 \div 2 \neq 2 \div 8$  $(36 \div 3) \div 4 \neq 36 \div (3 \div 4)$
	The distributive law can be used with division and addition/subtraction.	$(16 + 8) \div 4 = 16 \div 4 + 8 \div 4$	$12 \div (4 + 2) \neq 12 \div 4 + 12 \div 2$
2. Equivalent calculations	To find an equivalent calculation, multiply/divide the dividend and then do the <u>same</u> to the divisor.	$24 \div 6 = 4$ $48 \div 12 = 4$	$36 \div 3 = 12$ $18 \div 6 \neq 12$
	To find an adjusted calculation, multiply/divide the dividend and then do the <u>same</u> to the quotient.	$56 \div 7 = 8$ $28 \div 7 = 4$	$48 \div 6 = 8$ $24 \div 6 \neq 16$
	To find an adjusted calculation, multiply/divide the divisor and then do the <u>inverse</u> to the quotient.	$56 \div 7 = 8$ $56 \div 14 = 4$	$45 \div 15 = 3$ $45 \div 5 \neq 1$

3. Negatives	A positive divided by a negative produces a negative quotient.	$27 \div -3 = -9$	$27 \div -3 \neq 24$
	A negative divided by a positive produces a negative quotient.	$-10 \div 2 = -5$	$-10 \div 2 \neq -8$
	A negative divided by a negative produces a positive quotient.	$-48 \div -16 = 3$	$-9 \div -3 \neq -12$
4. Algebra	We can simplify terms by writing as single powers using index laws.	$a^3 \div a = a^2$ $b^7 \div b^4 = b^3$	$a^{10} \div a^2 \neq a^5$
	When dividing, we divide the numbers and then use index laws.	$36x^5y^4 \div 9x^2y = 4x^3y^3$	$28x^6y^8 \div 7x^2y \neq 21x^3y^8$
	We can factorise an expression by taking a common factor from each term.	$16x - 8 = 2(8x - 4)$ $16x - 8 = 4(4x - 2)$ $16x - 8 = 8(2x - 1)$  The final answer is factorised fully.  $15x^3 - 27x^2y = 3x^2(5x - 9y)$	
5. Decimals	To divide decimals, we do the integer division and then adjust the calculation.	$63 \div 9 = 7$ $6.3 \div 9 = 0.7$ $0.63 \div 9 = 0.07$ $0.63 \div 0.9 = 0.7$	

6. Fractions	Two numbers are reciprocals if they multiply to make 1.	$2$ and $\frac{1}{2}$ $\frac{1}{7}$ and $7$ $\frac{4}{7}$ and $\frac{7}{4}$ $0.3$ and $\frac{10}{3}$	3 and $-2$
	To divide fractions, we can find a common denominator and then divide numerators.	$\frac{24}{25} \div \frac{8}{25} = 24 \div 8 = 3$ $\frac{7}{4} \div \frac{9}{2} = \frac{7}{4} \div \frac{18}{4} = 7 \div 18 = \frac{7}{18}$	$\frac{3}{7} \div \frac{6}{7} \neq 2$
	To divide fractions, we can also multiply by the reciprocal of the divisor.	$\frac{5}{12} \div \frac{3}{4} = \frac{5}{12} \times \frac{4}{3} = \frac{5}{9}$ $2\frac{3}{5} \div \frac{1}{2} = \frac{13}{5} \div \frac{1}{2} = \frac{13}{5} \times \frac{2}{1} = \frac{26}{5}$	$\frac{7}{12} \div \frac{2}{5} \neq \frac{12}{7} \times \frac{2}{5}$

### School subjects

le français	French
le théâtre	drama
la géographie/la géo	geography
la musique	music
la technologie	technology
l'anglais (m)	English
l'EPS (f)	PE
l'histoire (f)	history
l'informatique (f)	ICT
les arts plastiques (m)	art
le dessin	art
les mathématiques/maths (f)	maths
les sciences (f)	science
éducation religieuse/la religion	RE

### High Frequency words

à	at
et	and
aussi	also
mais	but
très	very
trop	too
assez	quite
un peu	a (little) bit
pourquoi ?	why ?
parce que	because
car	because
tous les jours	everyday
toujours	always
aujourd'hui	today
pardon	excuse me
merci	thank you
avec	with
Est-ce que (tu)... ?	Do (you)... ?

### The timetable

le lundi	on Mondays
le mardi	on Tuesdays
le mercredi	on Wednesdays
le jeudi	on Thursdays
le vendredi	on Fridays
le samedi	on Saturdays
le dimanche	on Sundays
À(neuf heures)	A (nine o'clock)
J'ai (sciences)	I've got (science)
le matin	(in) the morning
l'après-midi	(in) the afternoon
le mercredi après-midi on	Wednesday afternoon
la récréation/la récré	breaktime
le déjeuner	lunch

### The school day

On a cours (le lundi)	We have lessons (on Mondays)
On n'a pas cours...	We don't have lessons...
On commence les cours à ...	We start lessons at...
On a quatre cours le matin	We have four lessons in the morning

### Opinions

Tu aimes/Est-ce que tu aimes...?	Do you like... ?
Je préfère...	I prefer...
J'adore...	I love...
J'aime beaucoup...	I like...a lot.
J'aime...	I like...
J'aime assez...	I quite like...
Je n'aime pas...	I don't like...
Je déteste...	I hate...
C'est ma matière préférée.	It's my favourite subject.
Ma matière préférée c'est...	My favourite subject is...
Il aime	He likes
Elle aime	She likes
Oui, j'aime ça	Yes, I like that
Non, je n'aime pas ça	No, I don't like that
Je suis d'accord	I agree
Je ne suis pas d'accord	I don't agree
Moi aussi.	Me too
T'es fou/folle.	You're crazy.

### Reasons

- Le/La prof est sympa.
- The teacher is nice.
- Le/La prof est (trop) sévère.
- The teacher is (too) strict.
- On a beaucoup de devoirs.
- We have a lot of homework.

### Reasons

C'est ...	it is
intéressant	interesting
ennuyeux	boring
barbant	boring
facile	easy
difficile	difficult
génial	great
nul	rubbish
marrant	funny
amusant	fun/funny
assez bien	quite good
passionnant	exciting
chouette	great
pratique	practical
stupide	stupid

### What time is it?

Il est...	It's...
huit heures	eight o'clock
huit heures cinq	five past eight
huit heures dix	ten past eight
huit heures et quart	quarter past eight
huit heures vingt	twenty past eight
huit heures vingt cinq	twenty five past eight
huit heures et demie	half past eight
neuf heures moins vingt-cinq	twenty five to nine
neuf heures et vingt	twenty to nine
neuf heures moins le quart	quarter to nine
neuf heures moins dix	ten to nine
neuf heures moins cinq	five to nine
midi	midday
minuit	midnight

### Computers and mobile phones

Qu'est-ce que tu fais... ?	What do you do/are you doing?
...avec ton ordinateur ?	...on your computer ?
...avec ton portable ?	...on your mobile phone ?
Je joue....	I play.../ I am playing...
Je surfe sur internet.	I surf/I'm surfing the net.
Je tchatte sur MSN.	I chat/I'm chatting on MSN.
Je regarde des clips vidéo.	I watch/I am watching video clips.
Je télécharge de la musique.	I download/I'm downloading music.
J'envoie des SMS.	I text/I'm texting.
Je parle avec mes ami(e)s.	I talk/I'm talking to my friends.
J'envoie des emails.	I send/I'm sending emails.

### What do you play ?

Je joue...	I play...
au basket	basketball
au billard	billiards/snooker
au foot(ball)	football
au hockey	hockey
au rugby	rugby
au tennis	tennis
au tennis de table	table tennis
au ping-pong	ping pong
au volleyball	volleyball
à la pétanque/aux boules	boules
sur la Wii	on the Wii

### Examples of

#### Opinions + infinitives

**Je préfère** jouer  
**J'adore** aller  
**J'aime** faire  
**Je n'aime pas** regarder  
**Je déteste** parler

### Connectives

et	and
mais	but
aussi	also
cependant	however

Tu es sportif/sportive ?	Are you sporty?
Je suis (assez) sportif/sportive	I am quite sporty
Je ne suis pas (très) sportif/sportive	I am not (very) sporty)
Mon sportif/Ma sportive préféré(e) est...	My favourite sports Person is...

### Conjugation of regular -er verbs

-e  
-es  
-e  
-ons  
-ez  
-ent

→

### The verb jouer=

#### To play

Je joue  
Tu joues  
Il/Elle/On joue  
Nous jouons  
Vous jouez  
Ils/Elles jouent

### Frequency words (How often)

quelquefois	sometimes
souvent	often
tous les jours	every day
tous les soirs	every evening
tout le temps	all the time
de temps en temps	from time to time
une fois par semaine	once a week
deux fois par semaine	twice a week

### Quand? When?

en été	in summer
en hiver	in winter
quand il y a du soleil	when it's sunny
quand il fait beau	when it's good weather
quand il fait chaud	when it's hot
quand il pleut	when it rains/is raining
quand il fait froid	when it's cold
le soir	in the evening
le weekend	on the weekend(s)
le samedi matin	on Saturday morning(s)

### Qu'est-ce que tu aimes ?

What do you like ?

### Qu'est-ce que tu aimes faire/jouer... ?

What do you like to do/play... ?

### Qu'est-ce que tu fais ? What do you do ?

Je fais du judo	I do judo
Je fais du parkour	I do parkour
Je fais du patin à glace	I do/go ice skating
Je fais du roller	I do/go roller-skating
Je fais du skate	I do/go skateboarding
Je fais du vélo	I do/go cycling
Je fais de la danse	I do dance
Je fais de la gymnastique	I do gymnastics
Je fais de la natation	I do/go swimming
Je fais de l'équitation	I do/go horseriding
Je fais des promenades	I go for walks

### High frequency words

sur	on
en (été)	in summer
quand	when
tout/toute/tous/toutes	all
par (deux fois par semaine)	per (twice a week)
d'habitude	usually
d'abord	first of all/firstly
ensuite	then/next
puis	then/next

### What do you like doing?

J'aime...	I like...
...retrouver mes amis	...meeting my friends
...regarder la télé	...watching TV
...jouer sur ma PlayStation	...playing on my Playstation
...écouter de la musique	...listening to music
...faire les magasins	...going shopping
...faire du sport	...doing sport
...jouer au football	...playing football
...traîner avec mes copains	...hanging out with my mates
...téléphoner à mes copines...	...phoning my mates.

## Year 7 German Knowledge Organiser: HT3 Me and Others

### Body Parts

der Arm	arm
der Bauch	stomach
das Bein	leg
der Ellenbogen	elbow
der Fuß	foot
das Gesicht	face
die Hand	hand
das Knie	knee
der Kopf	head
die Nase	nose
Ohren (pl)	ears
der Rücken	back
die Schulter	shoulder
groß	big, tall
gut aussehend	good-looking
klein	small
muskulös	muscular
pummelig	chubby
schlank	thin

### Was sind deine Lieblingstiere?

Hast du ein Haustier? *Do you have a pet?*

Ich habe kein Haustier. *I don't have a pet.*

der Fisch	fish
der Hund	dog
der Kanarienvogel	canary
das Kaninchen	rabbit
die Katze	cat
das Meerschweinchen	guinea pig
das Pferd	horse
die Schlange	snake
das Tier	animal
der Vogel	bird

### Opinions

Ich mag/Ich mag (gar) nicht	<i>I like/I don't like (at all)</i>
Ich liebe	<i>I love</i>
Ich hasse	<i>I hate</i>
aber	<i>but</i>
und	<i>and</i>
oder	<i>or</i>

### Wie siehst du aus?

Wie sieht er/sie aus?

Wie sind deine Augen?

Wie sind deine Haare?

blond	blond
glatt	straight
kurz	short
lang	long
lockig	curly
mittellang	medium-length
der Bart	beard
der Schnurrbart	moustache
Sommersprossen (pl)	freckles
blau	blue
braun	brown
gelb	yellow
grau	grey
grün	green
orange	orange
rot	red
schwarz	black
violett	purple
weiß	white

### What do you look like?

What does he/she look like?

What are your eyes like?

What is your hair like?

### Pronunciation Tips

<u>Letters</u>	<u>Sound</u>
ei	eye
ie	ee
v	f
w	v

### Connectives and qualifiers

oder	or
und	and
aber	but
ein bisschen	a bit
nicht so	not very, not so
vielleicht	perhaps
sehr	very
ziemlich	quite

### Key verb

**HABEN** = to have

Ich habe	I have
Du hast	you have
Er hat	he has
Sie hat	she has

### Key verb

**SEIN** = to be

Ich bin	I am
Du bist	you are
Er ist	he is
Sie ist	she is

**Sport macht Spaß!**

**Welche Sportarten machst du? Which sports do you do?**

der Sport	sport
die Sportart	type of sport
Ich gehe/mache/spiele/tanze...	I go/do/play/dance...
angeln gehen	to go fishing
Ballett tanzen	to dance ballet
Basketball spielen	to play basketball
Federball spielen	to play badminton
ins Fitnesscenter gehen	to go to the gym
Fußball spielen	to play football
Gymnastik machen	to do gymnastics
joggen	to jog
Judo/Karate machen	to do judo/karate
Rugby spielen	to play rugby
schwimmen gehen	to go swimming
Tennis spielen	to play tennis
Yoga machen	to do yoga
Wie findest du...?	How do you find...?
Es ist...	It is...
anstrengend	tiring
entspannend	relaxing
schwierig	difficult
Es macht Spaß.	It is fun.
Es gefällt mir nicht.	I don't like it.
anstrengend	tiring
entspannend	relaxing
schwierig	difficult
Es macht Spaß.	It is fun.
Es gefällt mir nicht.	I don't like it.

Was machst du oft/nie?	What do you often/never do?
ausruhen/chillen	to relax
die Familienzeit	family time
die Schularbeit	school work
zocken	to game/play video games
zuhause bleiben	to stay at home

**Das mache ich gern!**

**Was machst du in deiner Freizeit?**

*What do you do in your free time?*

basteln	to do crafts
einkaufen gehen	to go shopping
faulenzten	to lounge/laze about
fernsehen	to watch television
ins Kino gehen	to go to the cinema
lesen	to read
malen	to paint
mit Freunden chatten	to chat/text with friends
Musik hören	to listen to music
Musik machen	to play/make music
Rad fahren	to ride a bike, to cycle
Skateboard fahren	to go skateboarding
Ski fahren	to ski
Snowboard fahren	to snowboard
tanzen	to dance
Videospiele spielen	to play video games

**Was für Musik hörst du gern?**

die Musikart	type of music
die elektronische Musik	electronic dance music, electronica
die klassische Musik	classical music
der Schlager	German pop
der/die Komponist/Komponistin	composer
das Lieblingsstück	favourite piece (of music)
das Lied	song
Liedtexte (pl)	song lyrics
die Melodie	melody
der/die Sänger/Sängerin	singer
singen	to sing
die Stimme	voice
aggressiv	aggressive
hart	harsh
inspirierend	inspiring
schön	beautiful
Spielst du ein Instrument?	Do you play an instrument?
Ich bin nicht musikalisch.	I am not musical.

**Adverbs**

ab und zu	now and then
am Wochenende	at the weekend
einmal/zweimal pro Woche	once/twice a week
jeden Abend	every evening
jeden Tag	every day
manchmal	sometimes
nie	never
nur	only
oft	often
selten	rarely
denn	because

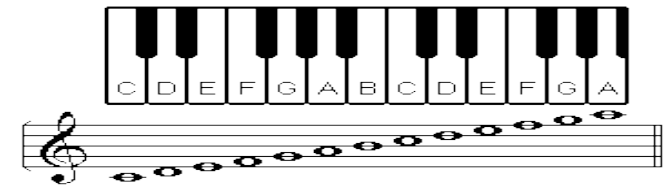
**Ich spiele**

**I play...**

die Geige	violin
die Gitarre	guitar
das Klavier	piano
das Musikinstrument	musical instrument
das Schlagzeug	drums
die Trompete	trumpet



# Music Year 7 Knowledge Organiser: I Got Rhythm (Spring Term)



<b>PULSE</b>	Regular beat
<b>NOTATION</b>	Written music
<b>RHYTHM</b>	Pattern of sounds i.e. short or long notes
<b>OSTINATO</b>	Repeated pattern (classical)
<b>RIFF</b>	Repeated pattern (popular)
<b>PITCH</b>	High or low sounds
<b>DURATION</b>	Length of sounds
<b>TEMPO</b>	Speed
<b>DYNAMICS</b>	Volume
<b>TIMBRE</b>	Different instrumental sounds
<b>TEXTURE</b>	Layers of sound
<b>STRUCTURE</b>	How sounds / ideas are organised
<b>SILENCE</b>	No sound

Note Name	Note Symbol	Note Value
Semibreve		4 beats
Minim	<i>too</i>	2 beats
Crotchet	<i>ta</i>	1 beat
Quaver	<i>ti</i>	½ of a beat
Pair of Quavers	<i>ti-ti</i>	2 x ½ beats = 1

## Time signatures

Type Of Beat	Duple Time	Triple Time	Quadruple Time
Crotchet Beat	$\frac{2}{4}$	$\frac{3}{4}$	$\frac{4}{4}$

<b>CYCLIC RHYTHM</b>	A rhythm that's repeated over and over again
<b>POLYRHYTHM</b>	Different rhythms performed at the same time



# Unit 2: Smoking

## Year 7

### Skills

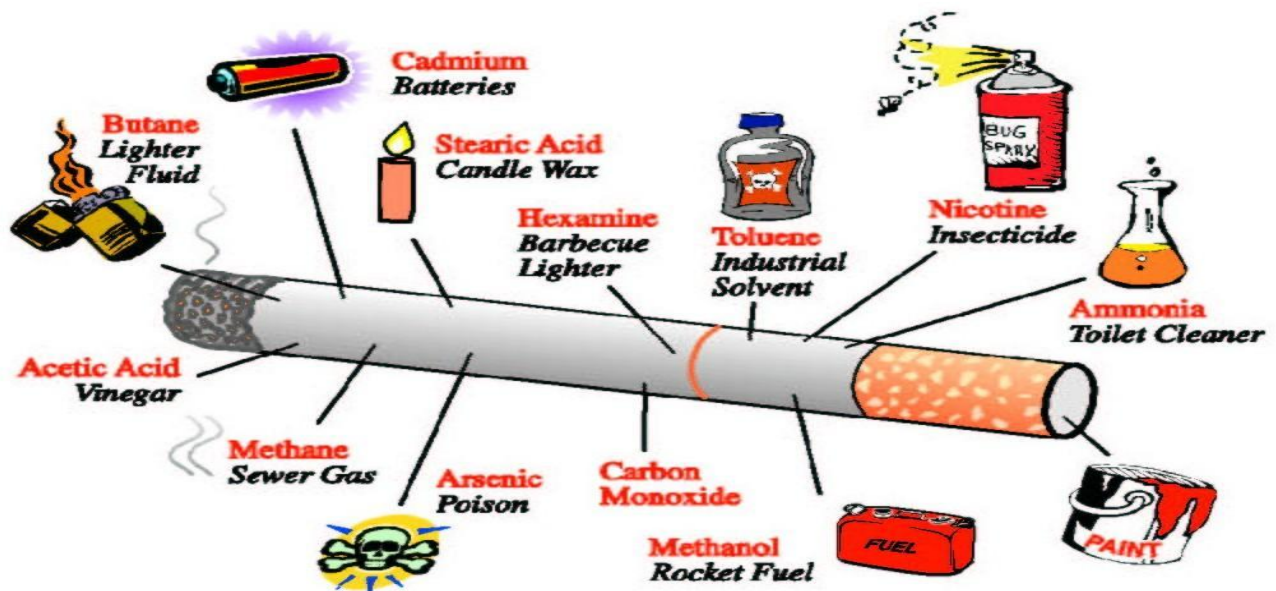
- Engage with and reflect on different ideas, opinions and beliefs to help develop personal opinion.
- Express and explain opinions through discussion and written assessments.
- Reflect on the knowledge and skills needed for setting realistic targets and personal goals.
- Work individually and with others to negotiate, plan and take action.
- Analyse and reflect upon action taken and progress made.

### Knowledge

Develop our awareness of the prevalence of smoking and to be aware of how many people smoke in the UK and in families.

Understand the dangers of smoking/passive smoking and the reasons why people smoke.

Understand the UK smoking law.



# Unit 3: First Aid

## Year 7

### Skills

- Has a basic knowledge of First aid and can recognise and reduce risk, minimising harm and getting help in emergency and risky situations
- Work individually and with others to negotiate, plan and take action.
- Analyse and reflect upon action taken and progress made.

### Knowledge

Develop an understanding of emergency procedures: DRABC, emergency phone calls

Develop an understanding of emergency procedures: the recovery position

Develop knowledge and understanding of emergency procedures to aid choking and asthma attacks

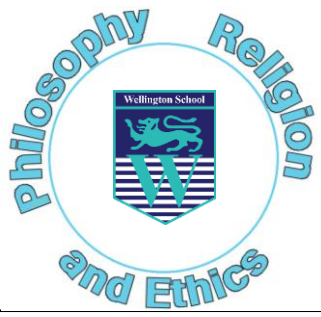
Know how to treat a casualty with severe bleeding; Recognise the signs/symptoms of shock

Recognise and be able to treat a burn/scald/fracture

Develop our knowledge and understanding about heart attacks; the signs and symptoms and how to prevent them

Develop knowledge and understanding of how to perform mouth to mouth breathing and CPR





# Y7: REP

68% of the worlds population have stated that they have some belief in God or would claim to have some element of religious faith. Religion remains an important feature of our world and has been part of our lives for thousands of years. However, are we now at a crossroads where religions are often misunderstood, are misused and some would argue in decline. You are going to consider a variety of different religious, ethical and philosophical ideas to consider why religion is still important and the role it continues to play in the world today in shaping our views.

## Knowledge Organiser

### Religion

#### Lesson 1

##### **What has religion ever done for us?**

*Can you give 2 examples why religion might be seen to be a positive thing & explain why?*

*Can you give 2 examples why religion might be seen to be a negative thing & explain why?*

#### Lesson 4

##### **The six main world religions: how much do you know?**

*What are the 6 main world religions and can you give facts and beliefs about each of them?*

#### Lesson 7

##### **Project: which religion will you study?**

*Can you give me facts & information about your religions beliefs about life after death, God(s), rules & laws?*

#### Lesson 10

##### **What makes you, you?**

*Can you explain and discuss different beliefs about what makes us, who we are? This Include religious views on the soul and self.*

### Ethics

#### Lesson 2

##### **The Ten Commandments: Do we need laws and rules?**

*Can you explain why these rules may be seen to be important or unimportant in society today?*

#### Lesson 5

##### **Stereotyping and Prejudice: Are there enough good Samaritans?**

*Can you define the terms prejudice & discrimination and identify examples of this and what we can do to prevent them from happening? Can you link this to and describe the story of the Good Samaritan?*

#### Lesson 8

##### **Should we care about the world?**

*Can you give examples of how we are harming our planet and what religious groups believe we should do about this?*

#### Lesson 11

##### **The Trolley Problem: Can we make correct moral decisions?**

*What does it mean to be moral and make ethical decision? Can you make good ethical decisions?*

### Philosophy

#### Lesson 3

##### **Does God exist?**

*Can you define the terms atheist, agnostic & theist?*

*Can you give arguments to suggest God does exist and arguments to suggest that God does not exist? Evidence is key here.*

#### Lesson 6

##### **How was the world made?**

*Can you give arguments to suggest that God is responsible for creating the world?*

*Can you give arguments to suggest that creation has nothing to do with God or a divine being?*

#### Lesson 9

##### **Life after Death – unrealistic?**

*Can you give the views of different religions on what might happen when we die?*

*Do you think there is any real proof of life after death?*

#### Lesson 12

##### **Do Atheists have a point?**

*Can you understand why some may choose to be a theist and an atheist?*

*Are atheists views too strong?*

*\*Pupils will be assessed in lessons and complete an extended project on a religion of their choice. They will complete a formal examination at the end of the year.*

# Elements and compounds

## Atoms, Molecules, Elements, compounds and mixtures

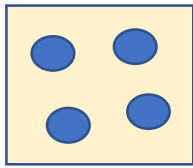
An **atom** is the smallest particle of a chemical element that can exist.

**Molecules** form when two or more atoms form chemical bonds with each other.

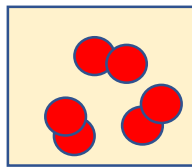
An **element** is a substance that contains only one type of atom.

A **compound** is a substance containing two or more elements chemically bonded together.

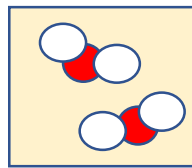
A **mixture** is a substance containing two or more elements/compounds, not chemically bonded.



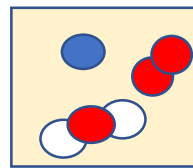
Atoms of one type of element.



Molecules of one type of element.



Molecules of one type of compound.



A mixture of elements and compounds.

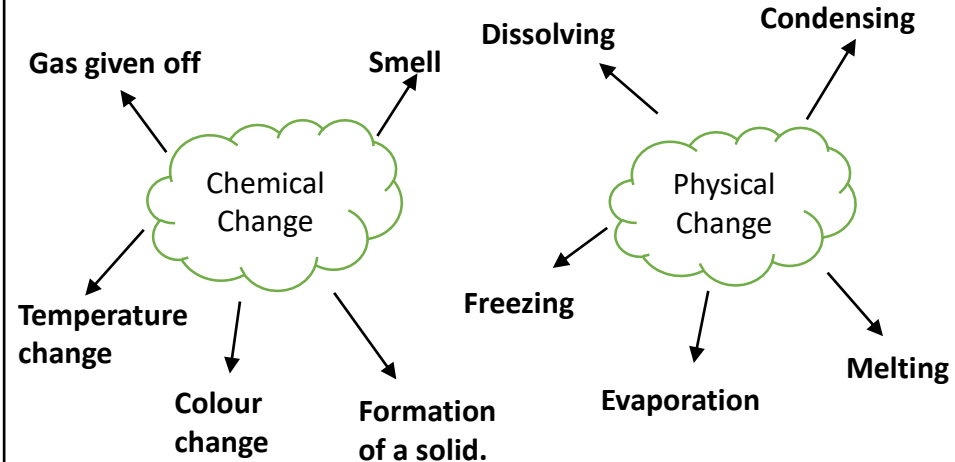
## Properties of metals

Metals are good conductors of heat and electricity, have a high density, melting and boiling points. They are sonorous, malleable and ductile.

## Chemical and physical changes

Chemical changes occur when elements and compounds combine to form a new substance. The change is permanent.

Physical changes occur without forming new substances. These are not permanent and are reversible.



## Elements and the periodic table

Dmitri Mendeleev created first version of the modern periodic table.

Elements are arranged into periods (horizontal) and groups (vertical) on the periodic table. Each element has a unique chemical symbol.

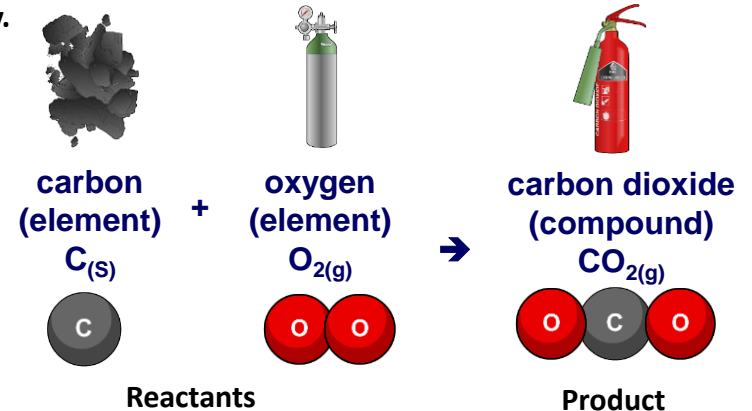
Elements are either metals or non-metals.

TRENDS can be found in properties along periods and down groups.

																		Non-Metals						
																		Metals						
H hydrogen																		He helium						
Li lithium	Be beryllium																B boron	C carbon	N nitrogen	O oxygen	F fluorine	Ne neon		
Na sodium	Mg magnesium																Al aluminum	Si silicon	P phosphorus	S sulfur	Cl chlorine	Ar argon		
K potassium	Ca calcium	Sc scandium	Ti titanium	V vanadium	Cr chromium	Mn manganese	Fe iron	Co cobalt	Ni nickel	Cu copper	Zn zinc	Ga gallium	Ge germanium	As arsenic	Se selenium	Br bromine	Kr krypton							
Rb rubidium	Sr strontium	Y yttrium	Zr zirconium	Nb niobium	Mo molybdenum	Tc technetium	Ru ruthenium	Rh rhodium	Pd palladium	Ag silver	Cd cadmium	In indium	Sn tin	Sb antimony	Te tellurium	I iodine	Xe xenon							

## Properties of compounds

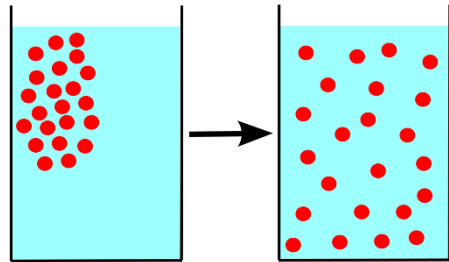
Compounds have very different properties to the elements from which they are made. This is because the atoms are joined together differently.



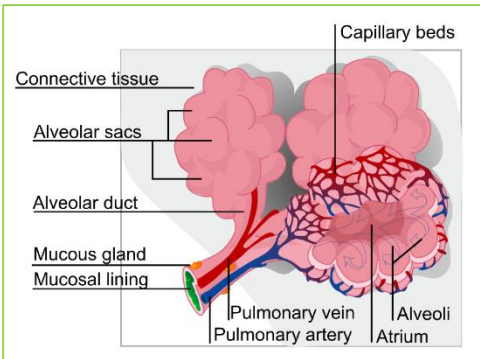
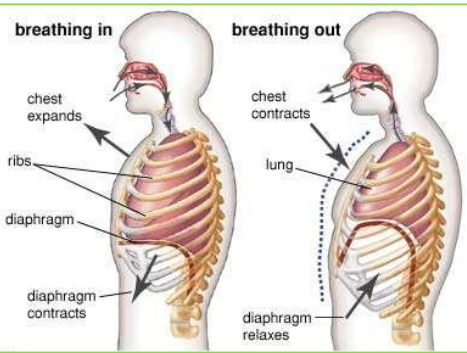
Rusting is a type of chemical reaction when oxygen reacts with iron



# Year 7 Knowledge Organiser : Exchange and Transport in Animals



**Diffusion** is the movement of particles **from a high concentration to a low concentration**.

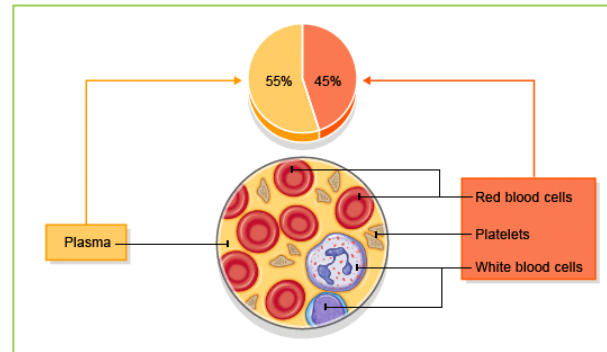
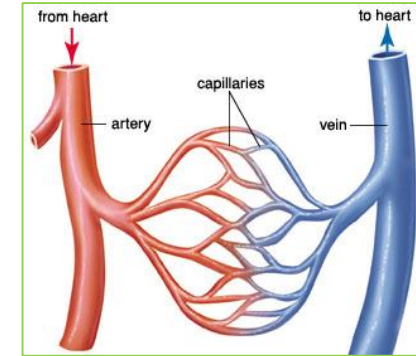


**Respiration** is a reaction that happens in our cells that **releases energy** so that normal activities can happen.

There are **two** types of respiration that occur in humans:

- Aerobic** respiration happens when there's lots of oxygen.  
**GLUCOSE + OXYGEN → CARBON DIOXIDE + WATER**
- Anaerobic** respiration happens when our muscles don't get enough oxygen during exercise.  
**GLUCOSE → LACTIC ACID**

Name of blood vessel	Job	How is it specialised?
Artery	Transport blood away from the heart at high pressure	Thick walls to prevent it from bursting
Vein	Transport blood back to the heart at low pressure	They have valves to stop the blood flowing backwards
Capillary	Exchange of materials between the blood and body cells	Walls are thin and one cell thick so diffusion is easier



**Red blood cells** carry **oxygen** around the body

**White blood cells** destroy disease-causing microbes, like bacteria.

**Plasma** carries **dissolved substance**, such as **glucose**, around the body.

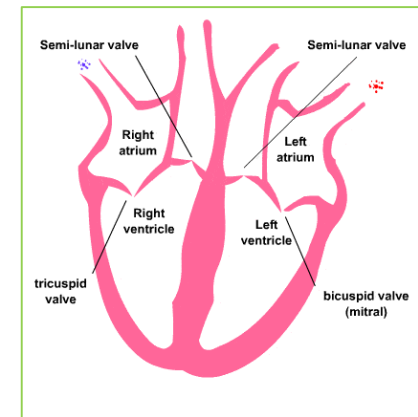
**Platelets** help to **clot the blood** and stop us from **bleeding** when our skin is cut.

The **heart** pumps blood around the body.

The muscles in the wall of the heart **contract** to put **pressure** on the blood, which forces it out of the different **chambers** – the **atria** and the **ventricles**.

The right side of the heart **pumps deoxygenated blood** to the **lungs**.

The left side of the heart **pumps oxygenated blood** to **all parts of the body**.



**Alveoli** are specialised for gas exchange in the following ways:

- they have a **large surface area**
- their walls are **very thin**
- they have **many capillaries carrying blood** covering them

Waves transfer energy from one place to another.  
 Waves are made by forcing something to vibrate or oscillate.  
 There are two types of waves; transverse and longitudinal.  
 Sound waves are longitudinal waves.  
 Light and waves on water are transverse waves.

## Knowledge organiser-P2- Waves

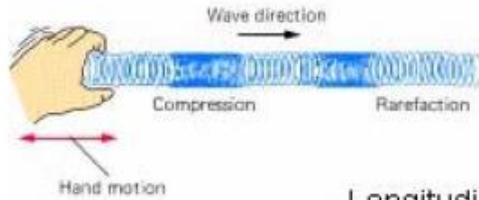
### Comparing Light and Sound waves

Similarities	Differences
<ul style="list-style-type: none"> <li>Both transfer energy</li> <li>Both have a range of frequencies and wavelengths</li> </ul>	<ul style="list-style-type: none"> <li>Travel as different type of wave</li> <li>Sound waves need particles to carry energy but light waves do not</li> <li>Different speeds – light travels up to a million times faster than sound</li> </ul>

The law of reflection states that for a plane (flat) mirror the angle of reflection will be the same as the angle of incidence. You need to make sure your diagrams show this.

When an object or substance vibrates, it produces sound. These sound waves can only travel through a solid, liquid or gas. They cannot travel through empty space. Sound waves are longitudinal waves - the vibrations are in the same direction as the direction of travel. The diagram below shows this.

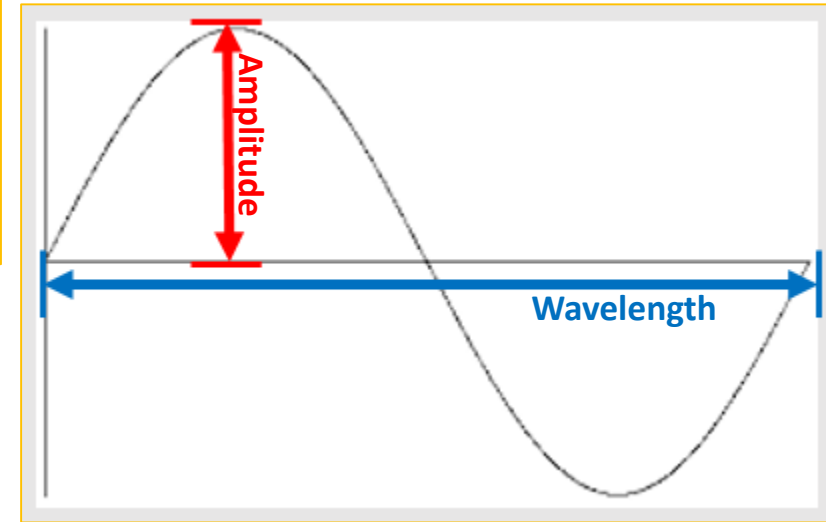
$$v = \frac{x}{t}$$



Longitudinal Waves

Time period - time needed for one complete cycle of vibration to pass a point.

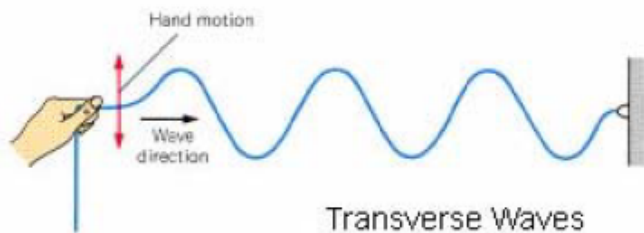
Frequency - number of waves produced by a source each second



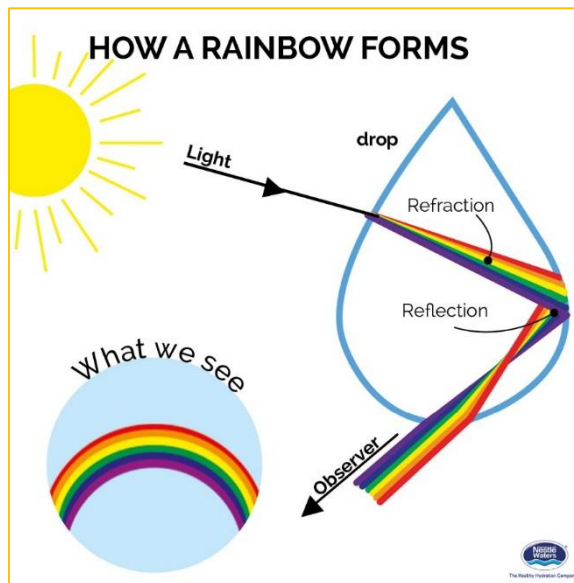
$$v = f \times \lambda$$

If you throw a pebble into a pond, ripples spread out from where it went in. These ripples are waves travelling through the water. The waves move with a transverse motion. The undulations (up and down movement) are at 90° to the direction of travel.

For example, if you stand still in the sea, the water rises and falls as the waves move past you. The diagram below shows a transverse wave.



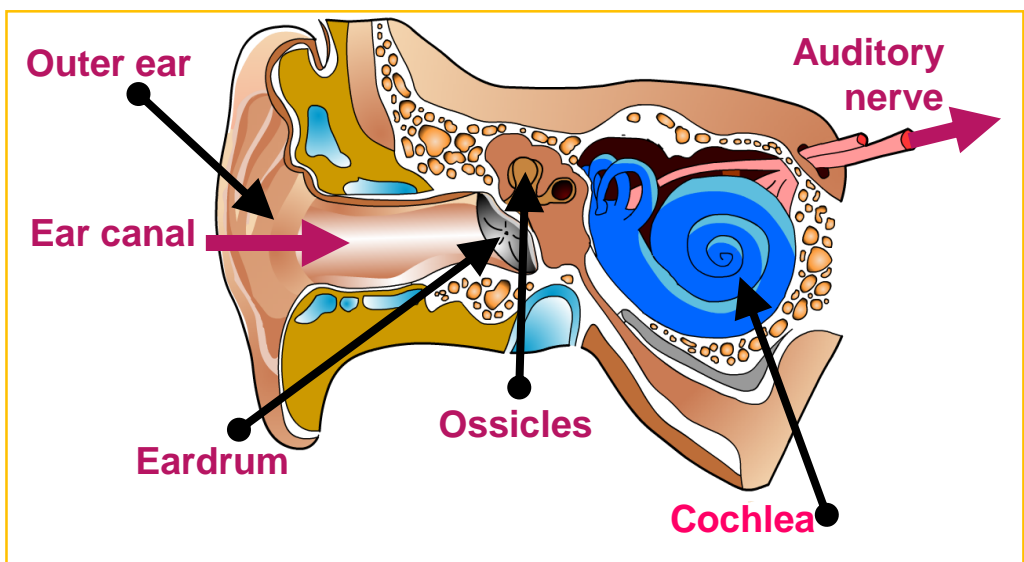
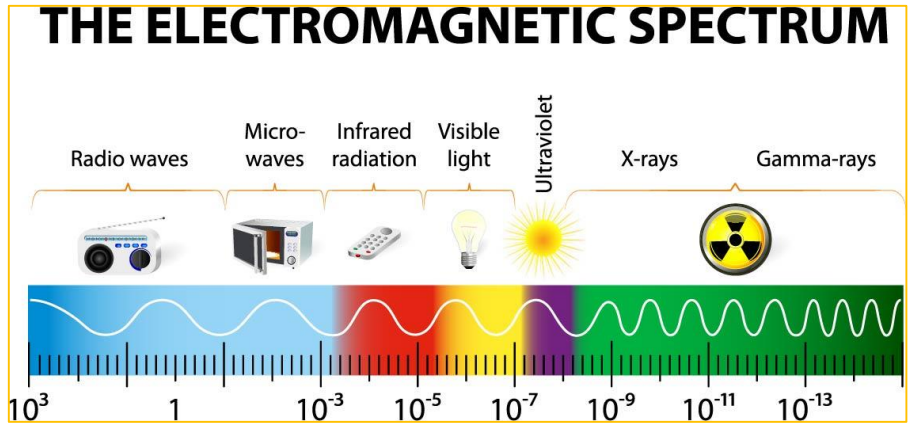
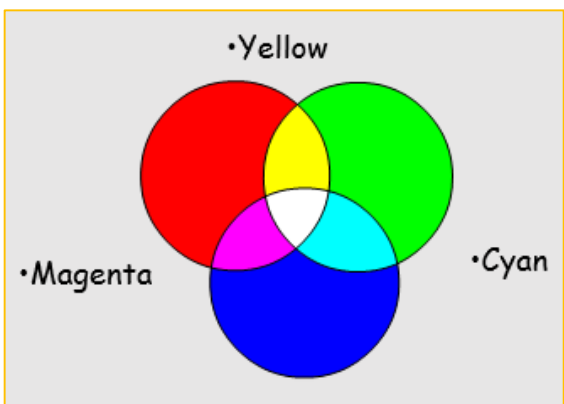
Transverse Waves



Red  
 Orange  
 Yellow  
 Green  
 Blue  
 Indigo  
 Violet

Mechanical waves- needs a substance for the wave to transfer energy e.g. Sound waves

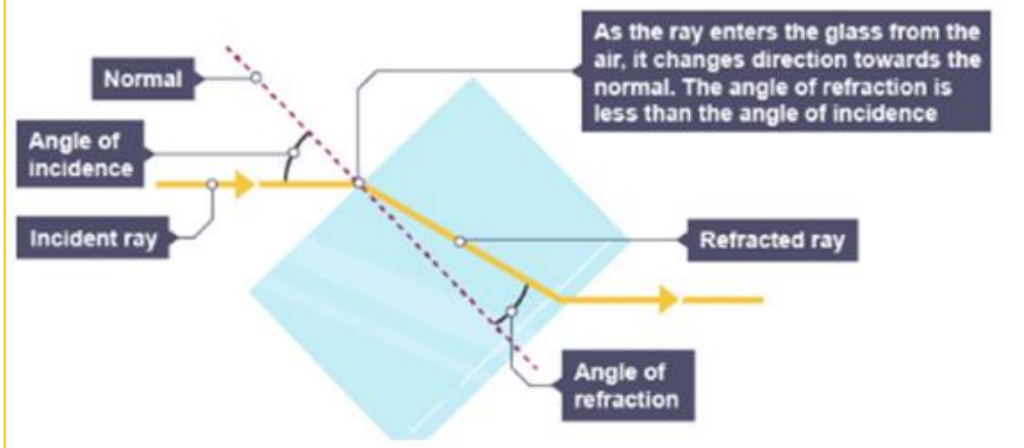
Non-mechanical waves- does not need a substance for the wave to transfer energy e.g. Light waves



### Refraction

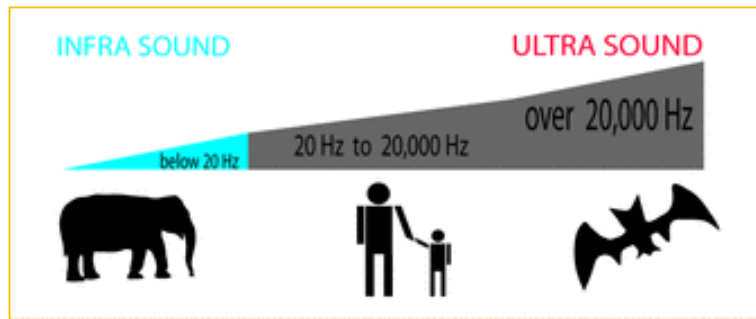
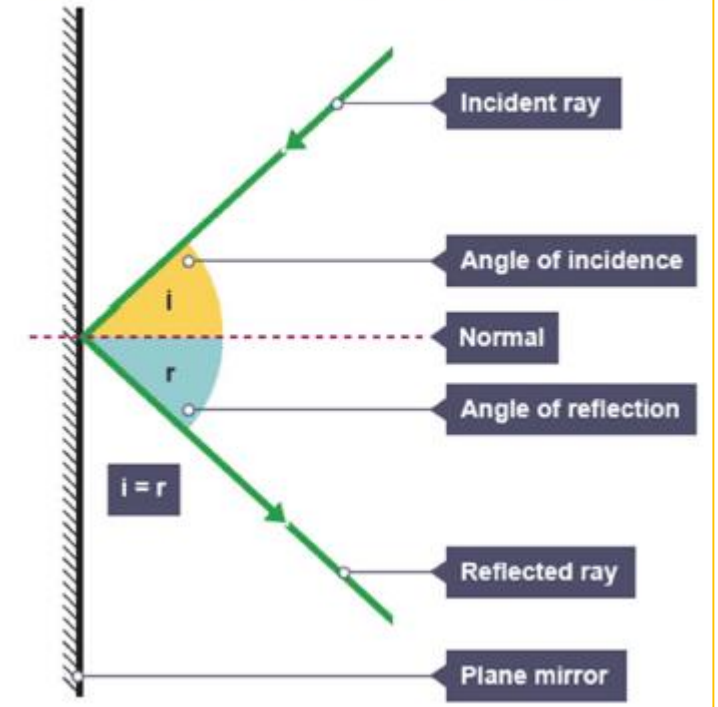
Light waves change speed when they pass across the boundary between two substances with a different density, such as air and glass. This causes them to change direction, an effect called **refraction**.

- At the boundary between two transparent substances:
- the light slows down going into a denser substance, and the ray bends towards the normal
  - the light speeds up going into a less dense substance, and the ray bends away from the normal
- The diagram shows how this works for light passing into, and then out of, a glass block. The same would happen for a Perspex block:



Frequency = Pitch  
Amplitude = Loudness

- the incident ray is the light going towards the mirror
- the reflected ray is the light coming away from the mirror



**TIP**  
When drawing light ray diagrams make sure you always:

- Use a pencil and a ruler
- Draw the initial lines faintly so you can erase them
- Always add an arrow to show the direction of the light ray
- Real light rays are a solid line and virtual light rays are dashed lines