



# Knowledge Organisers

## Year 7

### Spring 2024

# **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 Knowledge organiser term 2&3

## Portraits

### Skills

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

### Keywords

Proportion Highlight Expression  
Guide lines skin tone  
Tone Mark making Technique  
Shape Style  
Portrait Composition  
Texture Symmetry

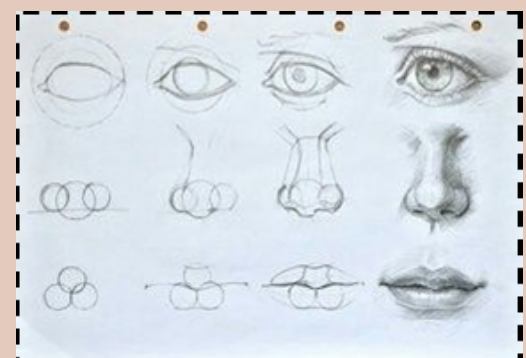
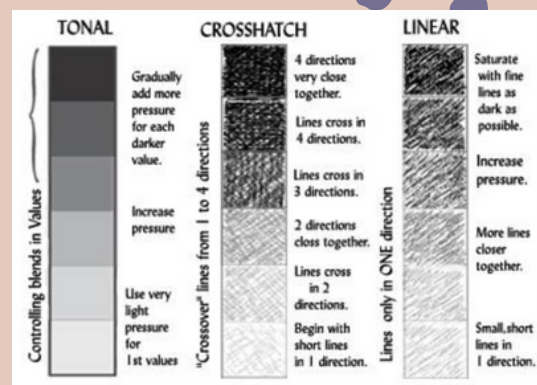
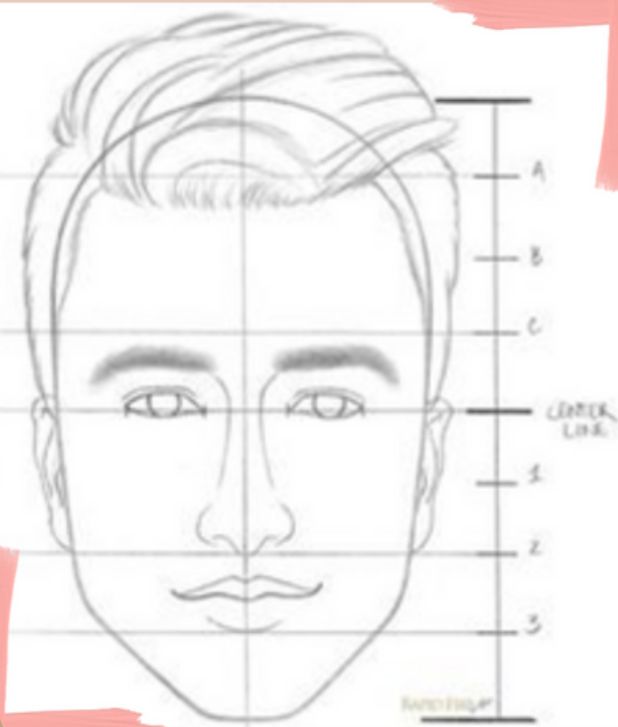
### Lina Viktor



Lina Viktor is an Liberian- British artist  
Her works across paper and canvas draw on a variety of artistic traditions and visual influences, from European portraiture, classical mythology and astronomy, to ancient Egyptian and African symbolism.  
The lustrous blacks are punctuated with luminous gold and opulent ultramarine blue – the limited colour palette making the work high contrast.  
Viktor's shows cultural narratives and potent mediations on blackness and being. It is layered with reflections on history and culture. Her portraits present the viewer with a proud and powerful black woman, patterns cross the line between graphic, geometric and symbolic of her heritage

### Other well known Portrait Artists:

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





# Spreadsheet Reference



## Formula view

	A	B	C	D	E
1	Product	Price	Tax rate	Tax amount	Selling price
2	Sprocket	£10.00	20%	=B2*C2	=B2+D2

A spreadsheet is a document that has a tabular layout.

It is split into boxes **cells**.

Cells have an address or **cell reference**. A1 and E2 are cell references.

## Normal view

	A	B	C	D	E
1	Product	Price	Tax rate	Tax amount	Selling price
2	Sprocket	£10.00	20%	£2.00	£12.00

Spreadsheets are used for performing calculations.

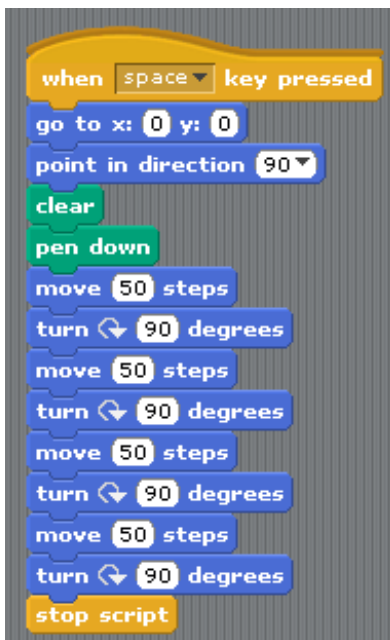
A computer user has created a spreadsheet to calculate the price of products after tax has been added.

- Cell A2 is a **text label** as it contains data that will not be used in any calculation.
- B2 is a **numeric variable** as the user could change the price. It has **currency formatting**. This means the user doesn't need to type the £ symbol and pence — they will be displayed automatically.
- C2 is another numeric variable, but this time it uses **percentage formatting**.
- Cells D2 and E2 contain **formulas**. These are calculations that always begin with the = symbol. They use cell references in their calculations, so if the data in the cells changes, the answer automatically updates too.

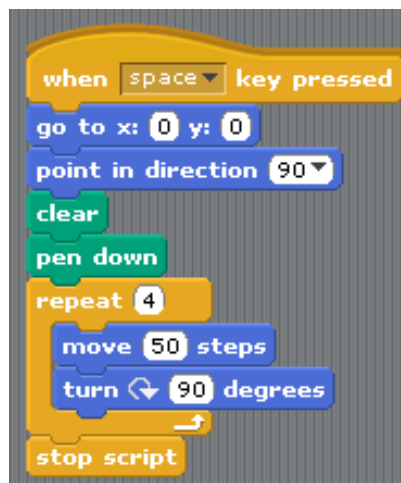
Formula operator	Description
+	Addition
-	Subtraction
*	Multiplication
/	Division

## Spreadsheet information

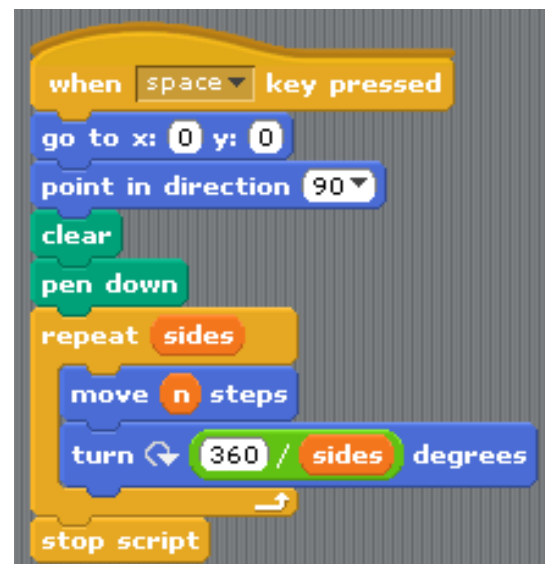
1. Use a formula for every calculation. Never do them in your head or use a calculator!
2. Spreadsheets are the most useful tool on a computer. Almost everyone can benefit from using them. Learn how to use one!
3. There are 17,179,869,184 cells on Excel. That's over 17 billion!



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**.

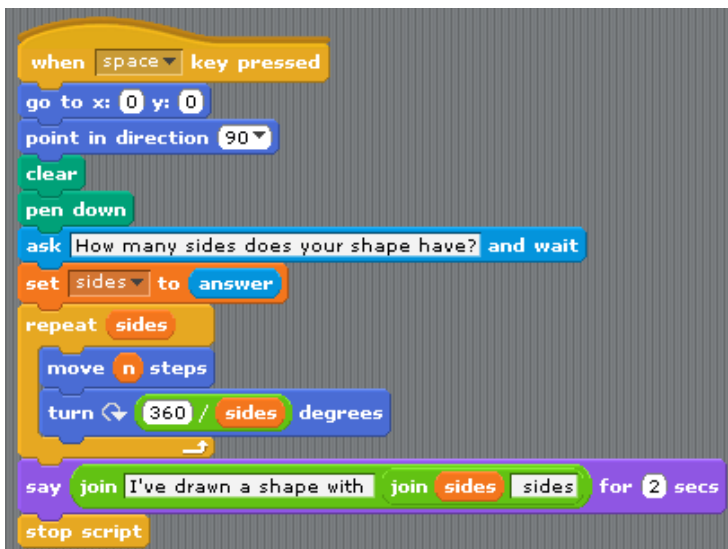


The program has been improved further here. It uses two **variables**, *sides* and *n*.

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

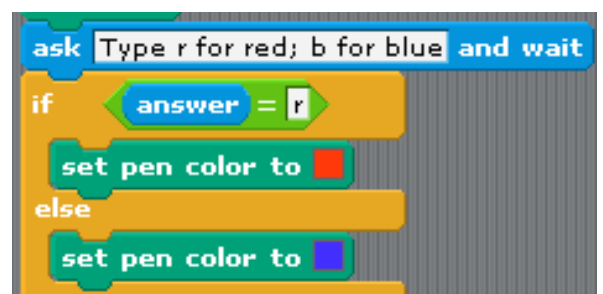
The number of degrees to rotate has been calculated by an **arithmetic operation**:  $360 \div \text{sides}$ . We use '/' as the division operator (instead of  $\div$ ) in computing.

## 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**.

## DRAMA KNOWLEDGE ORGANISER: YEAR 7

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, The BFG, The Twits, Georges Marvellous Medicines, Matilda and James and the Giant Peach.</li> <li>Using the skills of Physical Theatre, Hot Seating, Conscience Alley, Choral Speaking, Tableaux and Script.</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 Commedia Del Arte and clowning.</li> <li>Originated in Italy.</li> <li>Commedia 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>	<div> <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> <div> <b>IMPORTANT PRACTITIONERS:</b> <ul style="list-style-type: none"> <li>➤ Stanislavski</li> <li>➤ Commedia Del Arte</li> </ul> </div> </div>

### EMPLOYABILITY:

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

# Year 7 Cooking & Nutrition Knowledge Organiser

## 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 grater, vegetable peeler, paring knife, saucepans and wok.
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



Wok



Kitchen Scales



Measuring Jug



Fish Slice



Vegetable knife

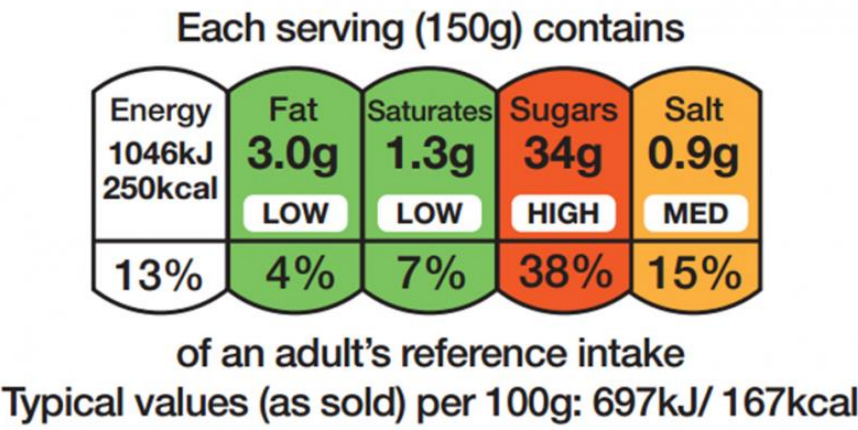
## Hygiene & Safety Rules

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

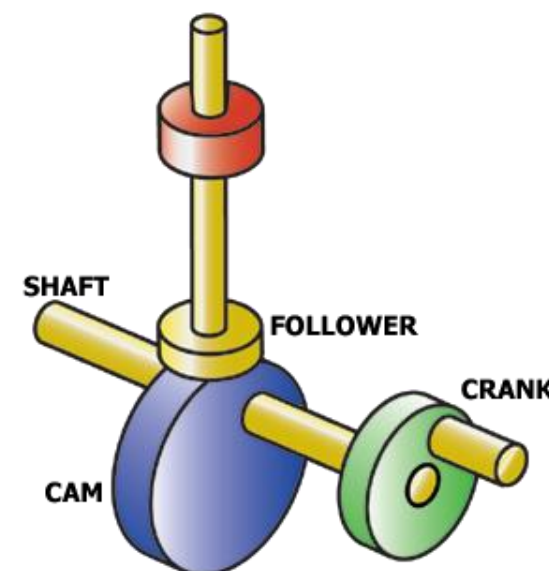
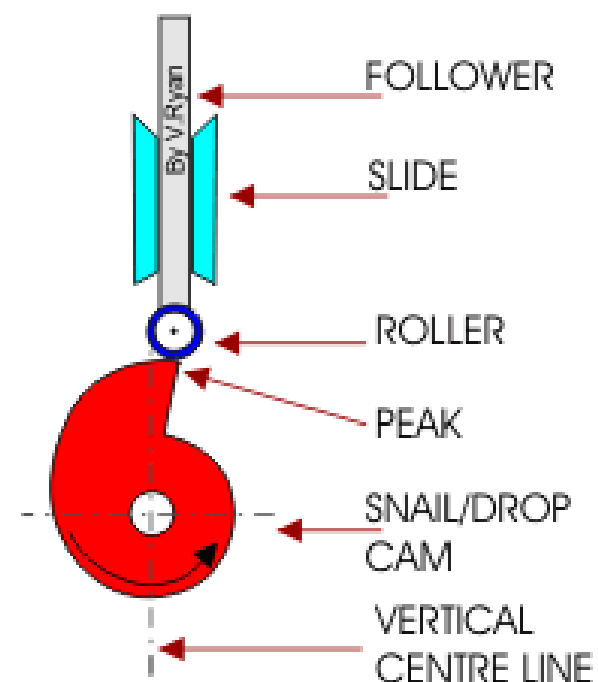










## Automata Project

### 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
Linea Motion	Motion moving along a straight line.
Rotary Motion	Motion moving clockwise or anti-clockwise.

# 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



Belt & Disc Sander



Coping Saw



Bench hook



Pillar drill

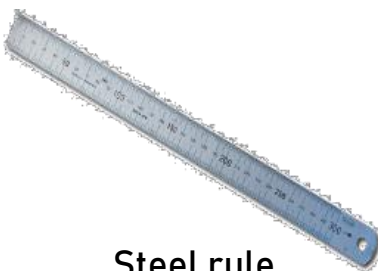
### Tools for working with Timber



Try square



Bench vice



Steel rule



Marking gauge



Tenon saw



File

### 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.



# Year 7 Textiles Knowledge Organiser

## Animal Cushion Design

### 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 stitch, back stitch & blanket stitch)
  - Appliqué
  - Adding components e.g. buttons or googly eyes
- Using a sewing machine to complete construction techniques to make seams



Product features	
Creative design that is personalised	A theme that is identifiable and original
Hand embroidery	Consideration of a specified target market
Hand appliqué	Components used as decoration
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.
Report any injuries or breakages to the teacher immediately



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.
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.

Key Knowledge	Definition
<b>ANECDOTE</b>	A short amusing or interesting story about a real incident or person.
<b>OPINION</b>	A view or judgement formed about something, not necessarily based on fact or knowledge.
<b>STATISTIC</b>	A fact or piece of data obtained from a study.
<b>IMPERATIVE</b>	A command.
<b>RHETORICAL QUESTION</b>	A question which does not require an answer.
<b>TRICOLON</b>	A series of three parallel words, phrases, or clauses
<b>DIRECT ADDRESS</b>	Addressing a person or a group of people directly through use of name or personal pronouns.
<b>HYPERBOLE</b>	Exaggerated statements or claims that are not meant to be taken literally.
<b>PATHOS</b>	Language which makes the audience feel a particular emotion.
<b>METAPHOR</b>	A figure of speech that implicitly compares two unrelated things, typically by stating that one thing is another
<b>ANAPHORA</b>	The repetition of a word or phrase at the beginning of multiple sentences.
<b>ANALOGY</b>	A comparison between one thing and another, typically for the purpose of explanation.
<b>GALVANISE</b>	Shock or excite (someone) into taking action
<b>RHETORIC</b>	The art of effective persuasive speaking or writing

# Making My Mark



## TEXT FORMS

Speech: a formal address or discourse delivered to an audience.

Letter: a written, typed, or printed communication, sent in an envelope by post or messenger.

Article: a piece of writing - included with others - in a newspaper, magazine, or other print or online publication.





# Year 7 Geography

## Unit 2: Settlement



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



**Settlement size:**

**Hamlet** – a small group of homes

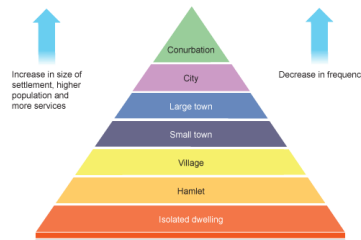
**Village** – larger than a hamlet. It contains more services, e.g. post office

**Town** – this may contain tens of thousands of people.

Usually has a range of functions, such as shopping centres and secondary schools

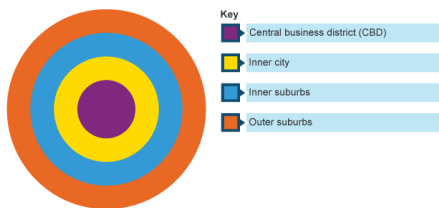
**Cities** – these have the widest variety of functions.

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:**

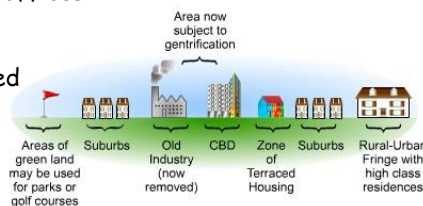
- overcrowding
- poor-quality housing
- traffic congestion

**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**.



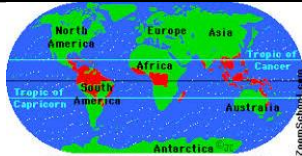
### KEYWORDS



### 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**.

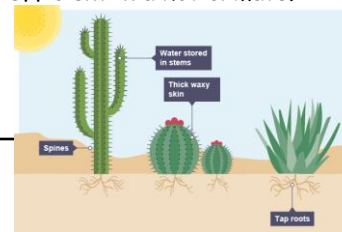
There is very little biodiversity in hot deserts because of the harsh climate.

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.



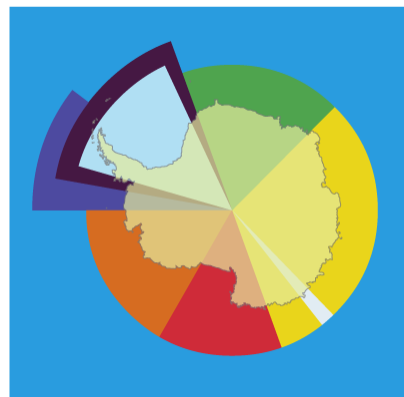
### Polar

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.





# Wellington History

## Year 7 HT 3 Knowledge Organiser

Why did Europeans go on Crusades to the Middle East?

How did the Mongols create a World Empire?



### What and why?

- ✓ You will learn about the invasions of the Middle East in the Medieval Era and about global trade.
- ✓ You will learn about who Genghis Khan was and how the Mongols created the largest land empire.

**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/zbj6sg/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?
- Who was Genghis Khan?
- Where did the Mongols conquer, and how?
- How did the Mongols control their empire?
- Were the Mongols brutal conquerors, or bringers of peace?
- What did Europeans think of the Mongols?

### 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).

#### **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.

#### **Crusade**

An expedition to reclaim the Holy Land.

#### **Mongol:**

Someone from the Mongolian steppes in Central Asia

#### **Tribe:**

A societal group linked by family ties.

#### **Khan:**

Ruler



### 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.

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.

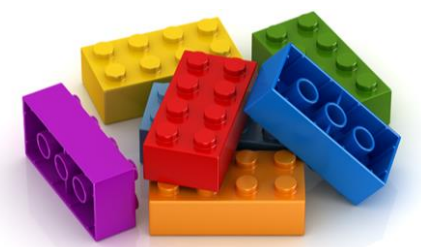
Genghis Khan (1162-1227): the founder of the Mongol Empire  
Kublai Khan (1215-1294): Grandson of Genghis Khan, Emperor of China 1260-1294.



# Wellington History

## Year 7 HT 4 Knowledge Organiser

### What caused Medieval Kings to lose power?



#### What and why?

- ✓ You will learn about how much power Medieval Monarchs had and the events that started to chip away at the power of the Monarch.
- ✓ You will see how both the barons and the peasants contributed to limit what a Monarch could do and how the Black Death also caused unhappiness.

#### ❖ 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?

#### 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.

#### 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**

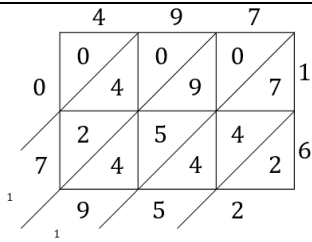
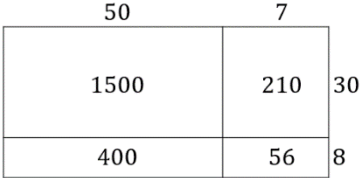
To rise in opposition against a leader

##### **Peasants' Revolt**

A popular revolt in 1381 against the rule of Richard II, his advisors and taxation led by Wat Tyler.



#### 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.	<div style="display: flex; align-items: center; justify-content: center;"><div style="margin-right: 10px;">4</div><table style="border-collapse: collapse; text-align: center;"><tr><td></td><td><math>2x</math></td><td><math>-3</math></td></tr><tr><td></td><td><math>8x</math></td><td><math>-12</math></td></tr></table></div> $4(2x - 3) = 8x - 12$ <div style="display: flex; align-items: center; justify-content: center; margin-top: 20px;"><div style="margin-right: 10px;">2x</div><table style="border-collapse: collapse; text-align: center;"><tr><td></td><td><math>7x</math></td><td><math>-2y</math></td></tr><tr><td></td><td><math>14x^2</math></td><td><math>-4xy</math></td></tr></table></div> $2x(7x - 2y) = 14x^2 - 4xy$		$2x$	$-3$		$8x$	$-12$		$7x$	$-2y$		$14x^2$	$-4xy$
	$2x$	$-3$												
	$8x$	$-12$												
	$7x$	$-2y$												
	$14x^2$	$-4xy$												

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.	$\begin{array}{c} 3 \quad 3 \\ \cancel{15} \quad \cancel{33} \\ \hline \cancel{44} \quad \cancel{5} \\ 4 \quad 1 \end{array} \times$ $\frac{15}{44} \times \frac{33}{5} = \frac{3}{4} \times \frac{3}{1} = \frac{9}{4}$	
	To multiply mixed numbers, convert to improper fractions.	$3\frac{1}{2} \times 1\frac{2}{3} = \frac{7}{2} \times \frac{5}{3} = \frac{35}{6}$	

### 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  
glatt  
kurz  
lang  
lockig  
mittellang  
der Bart  
der Schnurrbart  
Sommersprossen (pl)

blau  
braun  
gelb  
grau  
grün  
orange  
rot  
schwarz  
violett  
weiß

### What do you look like?

*What does he/she look like?*  
*What are your eyes like?*  
*What is your hair like?*  
*blond*  
*straight*  
*short*  
*long*  
*curly*  
*medium-length*  
*beard*  
*moustache*  
*freckles*

*blue*  
*brown*  
*yellow*  
*grey*  
*green*  
*orange*  
*red*  
*black*  
*purple*  
*white*

### Pronunciation Tips

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

### Connectives and qualifiers

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

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

Was machst du oft/nie?

ausruhen/chillen	<i>to relax</i>
die Familienzeit	<i>family time</i>
die Schularbeit	<i>school work</i>
zocken	<i>to game/play video games</i>
zu Hause bleiben	<i>to stay at home</i>

## Das mache ich gern!

Was machst du in deiner Freizeit?

*What do you do in your free time?*

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

## Was für Musik hörst du gern?

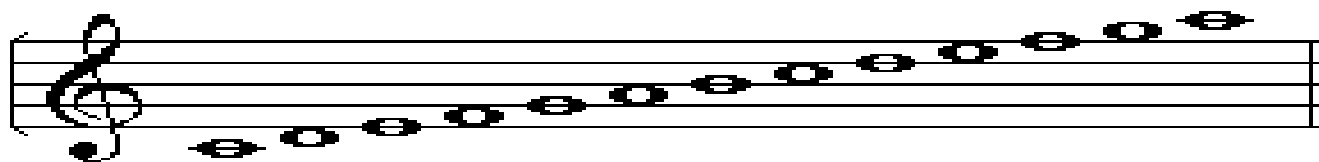
die Musikart	<i>type of music</i>
die elektronische Musik	<i>electronic dance music, electronica</i>
die klassische Musik	<i>classical music</i>
der Schlager	<i>German pop</i>
der/die Komponist/Komponistin	<i>composer</i>
das Lieblingsstück	<i>favourite piece (of music)</i>
das Lied	<i>song</i>
Liedtexte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

## Adverbs

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

## Ich spiele

die Geige	<i>violin</i>
die Gitarre	<i>guitar</i>
das Klavier	<i>piano</i>
das Musikinstrument	<i>musical instrument</i>
das Schlagzeug	<i>drums</i>
die Trompete	<i>trumpet</i>





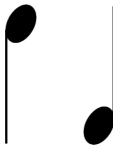





String	Wind	Brass	Percussion	Keyboard
Violin	Piccolo	Trumpet	Timpani	Keyboard
Viola	Flute	French Horn	Tambourine	Piano
Cello	Oboe	Trombone	Triangle	Harpsichord
Double Bass	Cor Anglais	Tuba	Castanets	Organ
Harp	Clarinet		Side Drum	Synthesiser
	Bassoon		Xylophone	

Bach    Handel	Mozart    Haydn    Beethoven	Tchaikovsky    Chopin    Liszt
<ul style="list-style-type: none"> <li>• Harpsichord</li> <li>• Small ensembles</li> <li>• Mainly string</li> <li>• Vocal Music</li> <li>• Continuo bass part (string &amp; keyboard)</li> <li>• Mainly polyphonic</li> <li>• Limited dynamics</li> </ul>	<ul style="list-style-type: none"> <li>• Piano</li> <li>• Mainly string orchestra with some wind and brass</li> <li>• More use of dynamics</li> <li>• 4 bar phrases</li> </ul>	<ul style="list-style-type: none"> <li>• Larger orchestra</li> <li>• Lots of wind and brass</li> <li>• More extreme dynamics</li> <li>• Chromatic chords</li> <li>• Use of Rubato (playing freely)</li> </ul>

Bach    Handel	Mozart    Haydn    Beethoven	Tchaikovsky    Chopin    Liszt
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LOOKS LIKE	SOUNDS LIKE	DURATION	NAME
	LI-I-I-ME 	4	SEMIBREVE
	GRA-PE 	2	MINIM
	PEAR 	1	CROTCHET
	APP-LE 	1/2 EACH	QUAVER (USUALLY GROUPED IN 2S)



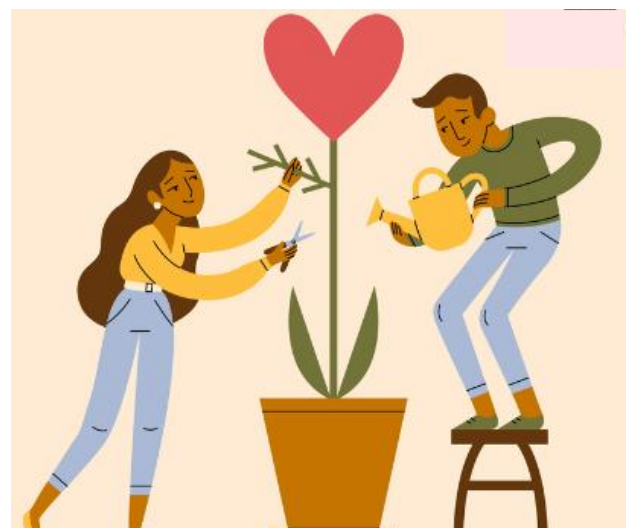
# Year 7 Unit 2: Relationships

## **KNOWLEDGE**

- R1.** about different types of relationships, including those within families, friendships, romantic or intimate relationships and the factors that can affect them
- R2.** indicators of positive, healthy relationships and unhealthy relationships, including online
- R3.** about the similarities, differences and diversity among people of different race, culture, ability, sex, gender identity, age and sexual orientation
- R4.** the difference between biological sex, gender identity and sexual orientation
- R5.** to recognise that sexual attraction and sexuality are diverse
- R6.** that marriage is a legal, social and emotional commitment that should be entered into freely, and never forced upon someone through threat or coercion
- R9.** to clarify and develop personal values in friendships & relationships
- R10.** the importance of trust in relationships and the behaviours that can undermine or build trust
- R13.** how to safely and responsibly form, maintain and manage positive relationships, including online
- R14.** the qualities and behaviours they should expect and exhibit in a wide variety of positive relationships (including in school and wider society, family and friendships, including online)
- R19.** to develop conflict management skills and strategies to reconcile after Disagreements
- R21.** how to manage the breakdown of a relationship (including its digital legacy), loss and change in relationships
- R22.** the effects of change, including loss, separation, divorce and bereavement; strategies for managing these and accessing support
- R35.** the roles and responsibilities of parents, carers and children in families
- R36.** the nature and importance of stable, long-term relationships (including marriage and civil partnerships) for family life and bringing up children
- R38.** to recognise bullying, and its impact, in all its forms; the skills and strategies to manage being targeted or witnessing others being bullied
- R39.** the impact of stereotyping, prejudice and discrimination on individuals and relationships
- R40.** about the unacceptability of prejudice-based language and behaviour, offline and online, including sexism, homophobia, biphobia, transphobia, racism, ableism and faith-based prejudice
- R41.** the need to promote inclusion and challenge discrimination, and how to do so safely, including online

## **SKILLS**

1. Engage with and reflect on different ideas, opinions and beliefs to help develop personal opinion.
2. Can express and explain opinions through discussion and written work.
3. Develop empathy with others and an understanding of how to safely and respectfully interact.
4. Is reflective about the knowledge and skills needed for setting realistic targets and personal goals.
5. Work individually and with others to negotiate, plan and take action.
6. Can recognise and reduce risk, minimising harm and getting help.
7. Develop skills of enquiry and advocacy via research and group work





# Y7: REP Term 2

68% of the world's 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

Basics of REP

The World

Big Questions

Morality

### Lesson 13-14

#### What does it mean to be an atheist or agnostic?

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

*What are the alternatives to having a faith?*

### Lesson 19-20

#### What makes you, you?

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

### Lesson 15-16

#### 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 21-22

#### 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 17-18

#### 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 23-24

#### 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?*

*\*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

## 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.

## Atoms, Molecules, Elements, compounds and mixtures

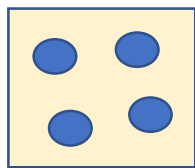
An **atom** is the smallest particle of a chemical element that can exist.

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

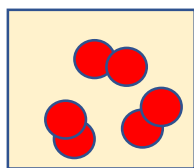
An **element** is a substance that contains only one type of atom.

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

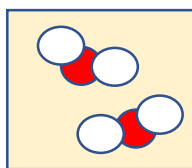
A **mixture** is a substance containing two or more elements/compounds, not chemically bonded.



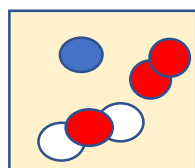
Atoms of one type of element.



Molecules of one type of element.



Molecules of one type of compound.

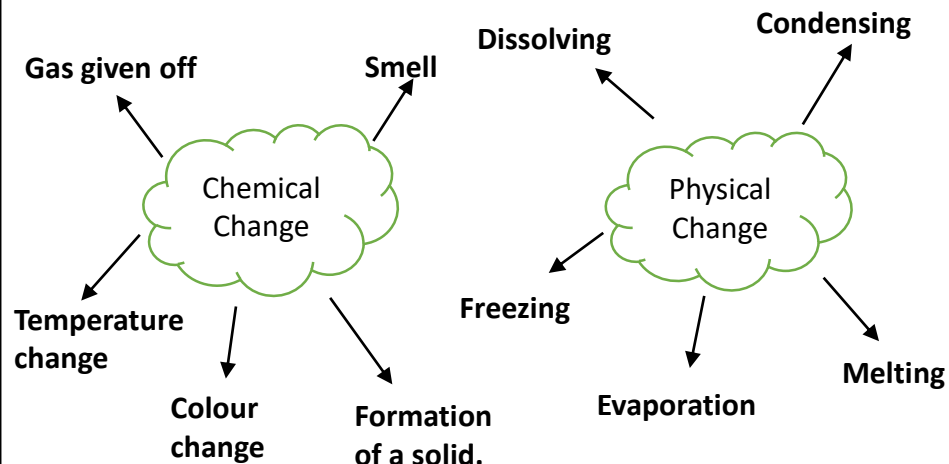


A mixture of elements and compounds.

## 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.

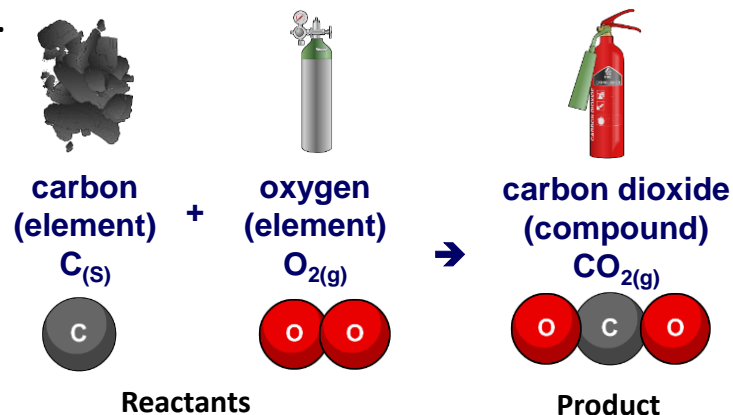
TRENDS can be found in properties along periods and down groups.

																Non-Metals						He helium																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

Metals

## 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



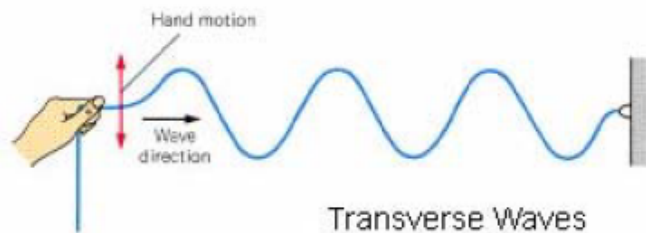
## Knowledge organiser-P2- Waves

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.

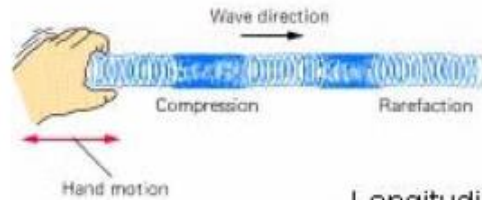
The law of reflection states that for a plane (flat) mirror the angle of reflection will be the same as the angle of incidence. You need to make sure your diagrams show this.

$$v = f \times \lambda$$

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.



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.



Longitudinal Waves

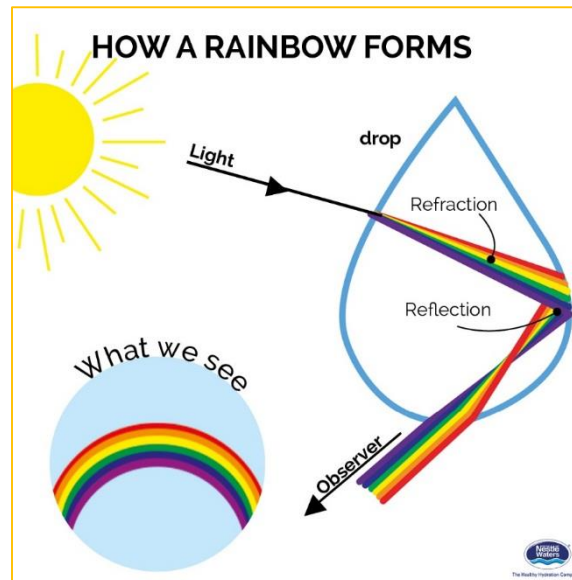
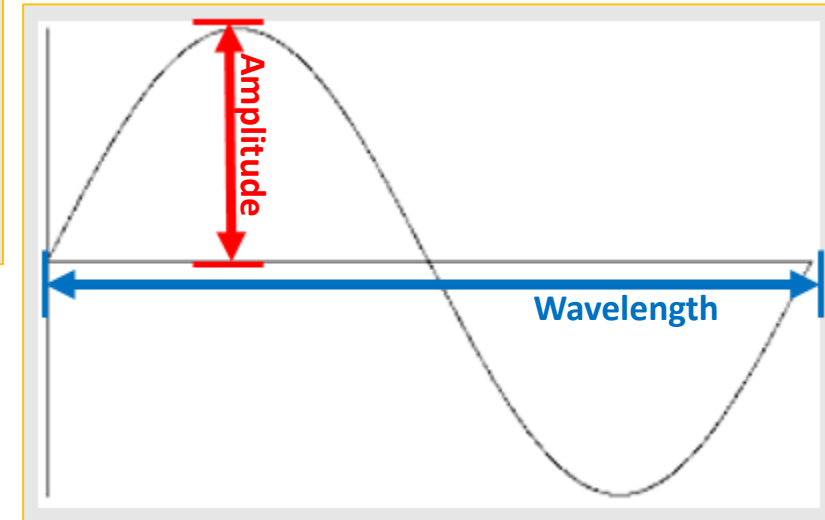
$$v = \frac{x}{t}$$

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

Frequency - number of waves produced by a source each second

## 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>

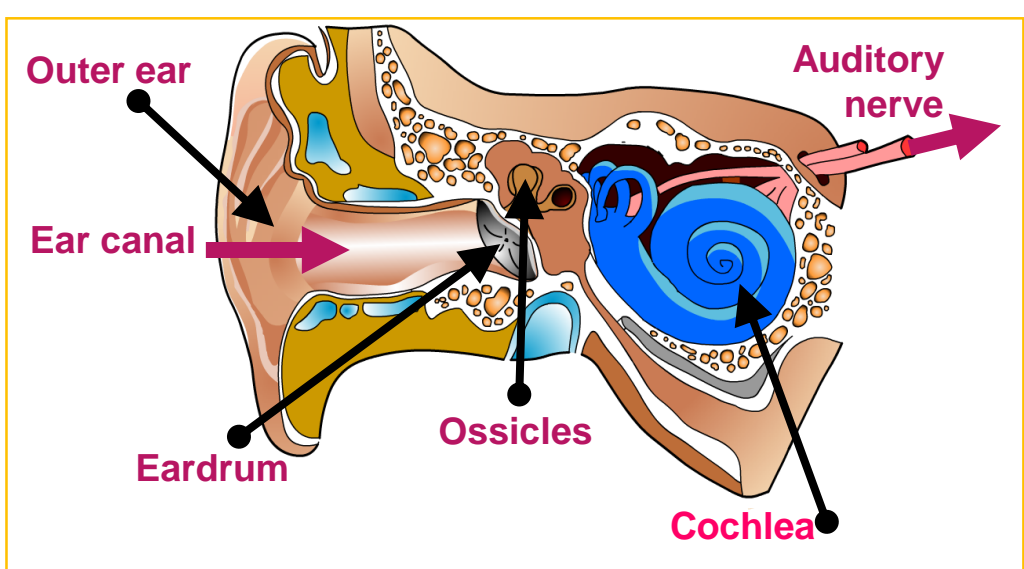
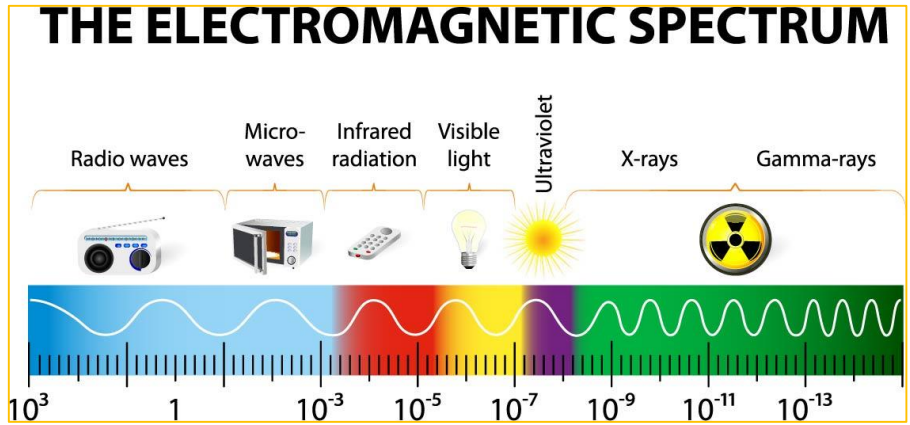
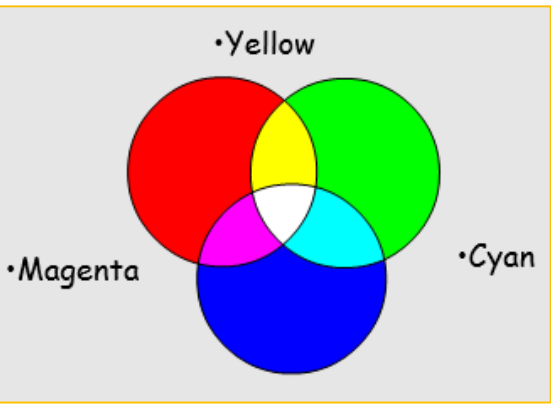


Red  
Orange  
Yellow  
Green  
Blue  
Indigo  
Violet

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





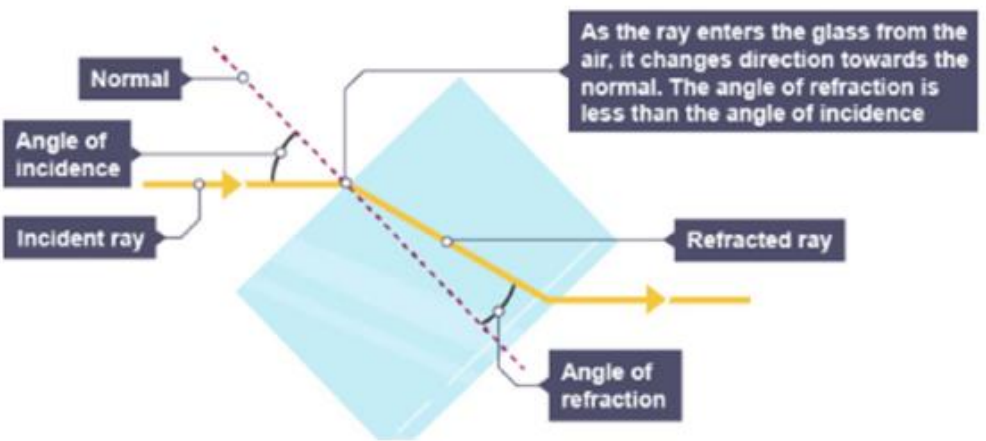
## Refraction

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**.

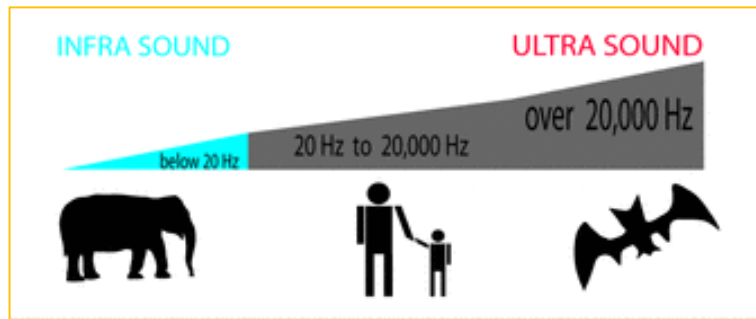
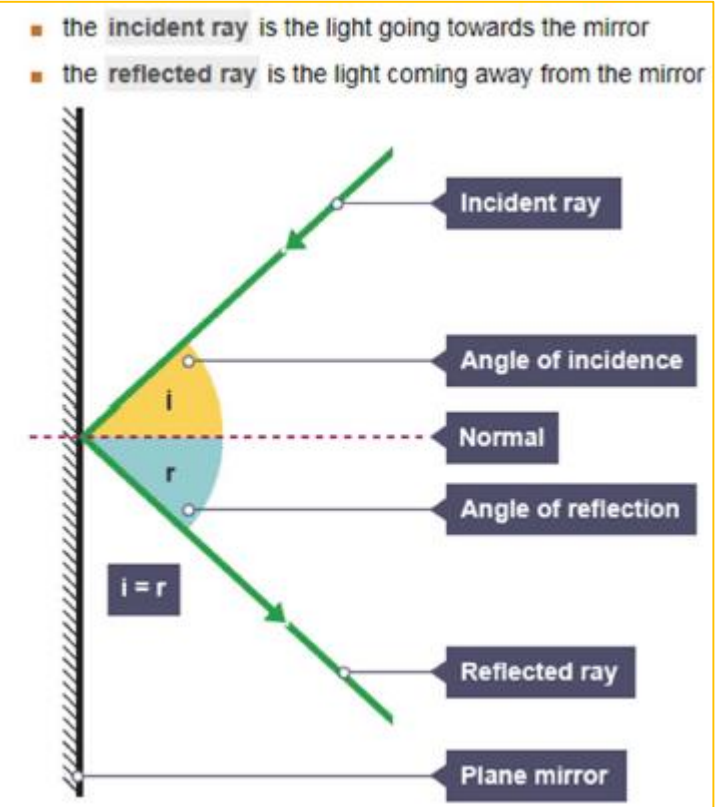
At the boundary between two transparent substances:

- 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:



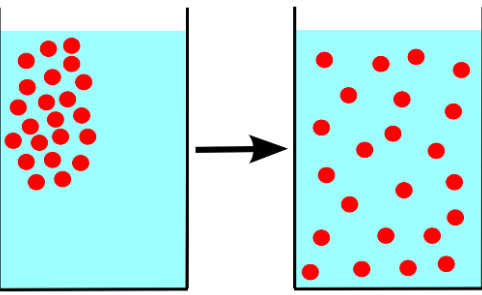
Frequency = Pitch  
Amplitude = Loudness



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

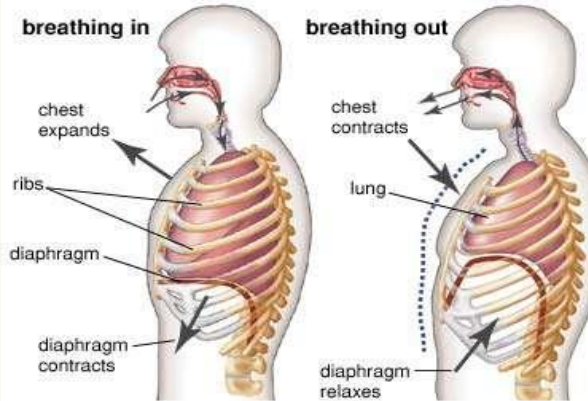
- Use a pencil and a ruler
- Draw the initial lines faintly so you can erase them
- Always add an arrow to show the direction of the light ray
- Real light rays are a solid line and virtual light rays are dashed lines

# Year 7 Knowledge Organiser : Exchange and Transport in Animals



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

During exercise there is an increase in physical activity and muscle cells respire more than they do when the body is at rest. **The heart rate increases during exercise.** The rate and depth of breathing increases - this makes sure that more oxygen is absorbed into the blood, and more carbon dioxide is removed from it.



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

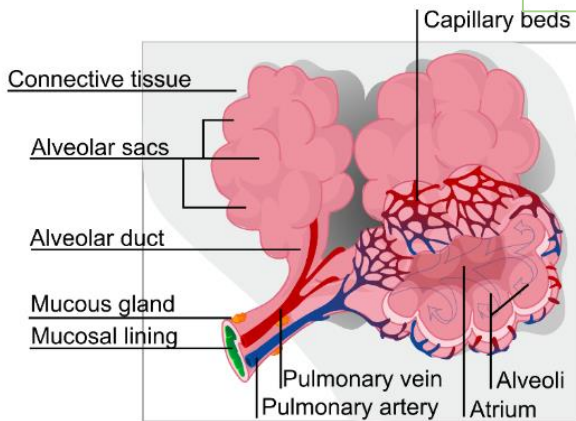
There are **two** types of respiration that occur in humans:

- Aerobic** respiration happens when there's lots of oxygen.

**GLUCOSE + OXYGEN → CARBON DIOXIDE + WATER**

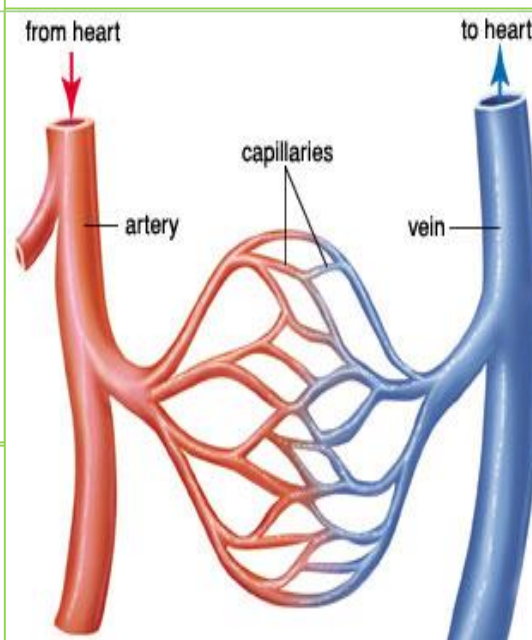
- Anaerobic** respiration happens when our muscles don't get enough oxygen during exercise.

**GLUCOSE → LACTIC ACID**



**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



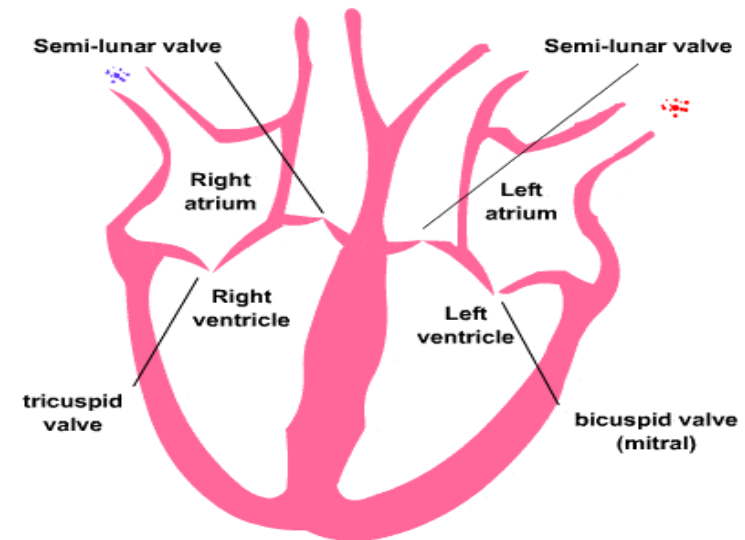
Name of blood vessel	Job	How is it specialised?
Artery	Transport blood away from the heart at high pressure	Thick walls to prevent it from bursting
Vein	Transport blood back to the heart at low pressure	They have valves to stop the blood flowing backwards
Capillary	Exchange of materials between the blood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

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**.



**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.

