

# YEAR 8 KNOWLEDGE ORGANISER

MICHAELMAS TERM



Name:

Family Group:



LEARNING - LOVING - LIVING

## HOW TO USE MY KNOWLEDGE ORGANISER

The timetable shows the **subjects** you should be studying and the days that you should be studying them. You should **complete your work in your exercise book**.

Each evening you should draw a straight line (using a ruler), under the previous day's work, and write the date, clearly at the top. You need to **bring your KO and exercise book with you to school EVERYDAY**.

The **KO** work that you have completed for the week will be checked in Family Group time **EVERY** Friday. If homework is not of an appropriate standard or amount will result in an after school detention. Knowledge tests will also be used frequently in lessons.

## SUBJECT HOMEWORK

Students will also be **given** additional subject homework to be completed throughout the week and/or can use FREE online revision tools such as [www.senecalearning.com](http://www.senecalearning.com)

It is also recommended that students regularly **READ** a variety of fiction and non fiction books that they choose for pleasure. This extra reading will help to develop and broaden their general knowledge.

In **ENGLISH** all students will be expected to complete 1-2 reading assignments each week by accessing [www.CommonLit.org](http://www.CommonLit.org) . Each assignment will take 20-30 minutes and students will be required to answer multiple choice questions to check their understanding of what they have read.

In **MATHS** students are expected to watch short explanation videos and complete activities on the online platform of <https://mathswatch.co.uk>. Students can log in using the details and password they use to log in to the school computers.

## HOMEWORK TIMETABLE

You should spend *at least* **1 hour** per night on homework = 3 subjects x 20 minutes per subject

Year 8	Subject 1	Subject 2	Subject 3
Monday	Maths	History	PE
Tuesday	English	Geography	ICT
Wednesday	Maths	Religious Education	English
Thursday	English	Science	Creative
Friday	Maths	Languages	Drama

# RETRIEVAL ACTIVITY IDEAS

Knowledge organisers are for **learning and mastering** the knowledge in each subject. There are many different ways you can do this, however some **PROVEN** methods to try in your work book are:

## 4 Methods of Retrieval Practice

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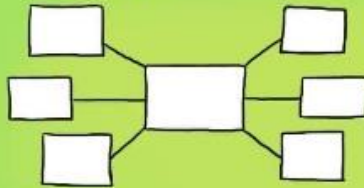
Before you start put away all your books & classroom materials.

### Retrieval Practice Examples

- \* Exit Tickets
- \* Starter quizzes
- \* Multiple choice quizzes
- \* Short answer tests
- \* Free write
- \* Think, pair, share
- \* Ranking & sorting
- \* Challenge grids

### BRAIN DUMP

Write, draw a picture, create a mind-map on everything you know about a topic.



Give yourself a time limit, say 3 minutes, then have a look at your books & add a few things you forgot.

### QUIZZING

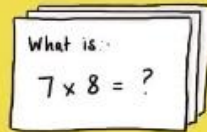
Create practice questions on a topic. Swap your questions with a partner & answer.

Question - What is a metaphor?

- A comparison using 'like, as, than'.
- A comparison where one thing is another.
- A comparison with a human attribute.

### FLASHCARDS

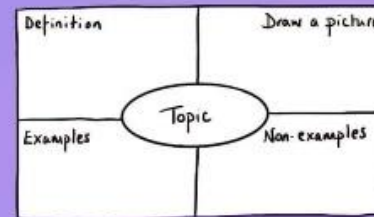
Create your own flashcards, question on one side answer on the other. Can you make links between the cards?



You need to repeat the Q&A process for flashcards you fail on more frequently & less frequently for those you answer correctly

### KNOWLEDGE ORGANISERS

Complete a knowledge organiser template for key information about a topic.



You can use knowledge organisers to learn new vocab & make links in between subjects or ideas.

After you have retrieved as much as you can go back to your books & check what you've missed. Next time focus on that missing information

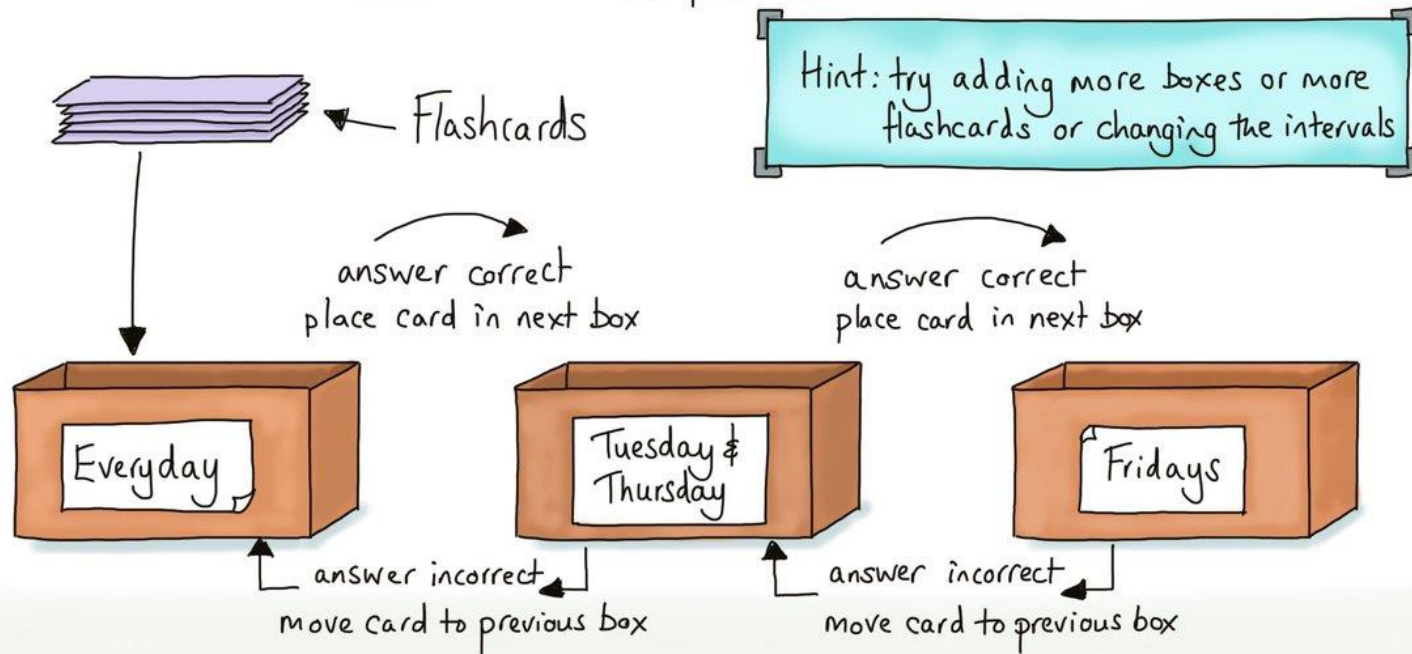
## USING FLASH CARDS SUCCESSFULLY

Once flash cards are created, you will need to use them correctly to have an impact. Follow the method below for the best knowledge retention

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### LEITNER Flash card method

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An effective use of flashcards to prompt & recall learning using spaced practice proposed by Leitner in the 1970s. It focuses on the proficiency of recall of the learner. Information which is easily recalled has a longer time lapse before the next recall opportunity.

**16<sup>th</sup> Century Elizabethan London**

1	1558	Elizabeth becomes monarch and Queen of England.
2	1564	William Shakespeare is born.
3	1593	Playwright Christopher Marlowe is killed in a pub brawl in London.
4	1599	Shakespeare's Julius Caesar is the first play performed at the Globe.
5	1603	Queen Elizabeth I dies aged 70.

**Characters in Shakespeare's Julius Caesar**

6	Caesar	Dictator who ignores the soothsayer's and his wife's warnings.
7	Cassius	Conspirator influencing others to plot Caesar's assassination.
8	Brutus	Conspirator influenced by honour and Roman republicanism.
9	Antony	Caesar's general who incites the mob against the plotters.
10	Decius	Conspirator who convinces Caesar to come to the Capitol.
11	Calpurnia	Caesar's loyal wife who dreams of his murder and warns him.
12	Portia	Brutus' wife. She wants her husband to confide in her.
13	Casca	Conspirator who strikes the first blow in Caesar's murder.
14	Cinna	Conspirator who announces Caesar's assassination.

**Vocabulary**

15	Conspirators	Plotters who conspire to assassinate Caesar.
16	Suicide	Considered a sin by Elizabethans, noble by Ancient Romans.
17	Regicide	Killing a monarch, usually a king
18	Tyrannicide	Killing a tyrant
19	Colossus	The Colossus at Rhodes, a statue of a god astride Rhodes harbor.

**Plot of Shakespeare's Julius Caesar**

20	Act 1.1	A soothsayer warns Caesar to beware the Ides of March
21	Act 1.2	Cassius persuades Brutus to plot against Caesar.
22	Act 1.3	The conspirators plot to assassinate Caesar
23	Act 2.1	Calpurnia dreams Caesar's murder and convinces him to stay home
24	Act 2.2	Decius persuades Caesar to come to the Capitol
25	Act 2.3	The conspirators assassinate Caesar and announce his death.
26	Act 3.1	Brutus persuades the crowd that Caesar had to die for his ambition.
27	Act 3.2	Antony incites the mob to violence with Caesar's cloak, body and will.
28	Act 3.3	Cinna, the poet is ripped apart by the mob because of his name.
29	Act 4.1	Brutus and Cassius argue about bribery and justice.
30	Act 4.2	Brutus sees Caesar's spirit the night before the battle of Phillipi
31	Act 5.1	Cassius and Brutus lose the battle to Antony and commit suicide.

**Theatrical Stagecraft: Dramatic Devices**

32	Tragedy	A play that ends with the death of the protagonist.
33	Dramatic Irony	The audience knows what the characters don't.
34	Stage directions	Instructions for the actors
35	Monologue	a long speech by an actor
36	Irony	A gap between appearance or expectation and reality.
37	Soliloquy	a device often used in drama when a character speaks to himself or herself
38	Pathetic Fallacy	The weather represents the characters' mind-sets.
39	Dramatic Monologue	A speech in which the speaker inadvertently reveals aspects of their character while describing a particular situation or event.

	Term	Definition		Term	Definition
1	<b>Plosive</b>	.'b', 'p', 't', and 'd' sounds - which can be harsh, aggressive or shocking	17	<b>Elegy</b>	A sad poem, usually written to praise and express sorrow for someone who is dead.
2	<b>Hyperbole Hyperbolic (adj)</b>	Exaggeration	18	<b>Epic</b>	A long, narrative poem that is usually about heroic deeds and events
3	<b>Blank verse</b>	Poetry written in non-rhyming ten syllable lines	19	<b>Lyric</b>	A poem which expresses personal emotions or feelings,
4	<b>Couplet</b>	A pair of rhyming lines which follow on from each other.	20	<b>Narrative Poem</b>	A poem which tells the story of an event
5	<b>Chiasmus</b>	Reversal of ideas in a sentence: "Fair is foul, foul is fair."	21	<b>Ode</b>	A formal poem written to celebrate a person, place, object or idea.
6	<b>Free verse</b>	Non-rhyming, non-rhythmical poetry which follow the rhythm of natural speech.	23	<b>Sonnet</b>	A fourteen line poem, with a regular rhythm and varied rhyme scheme, usually about love.
7	<b>iamb</b>	A pair of syllables in which the second is stressed and the first is unstressed.	24	<b>Romantics</b>	Thought that feelings or emotions should be prized over logic and reason
8	<b>Pentameter</b>	Five pairs of syllables per line.	25	<b>Romantics</b>	Thought society corrupted children who were born pure and innocent
9	<b>Tetrometer</b>	Four pairs of syllables per line of poetry	26	<b>Romantics</b>	Thought that the urban, industrialised world was corrupt
10	<b>Trimeter</b>	Three pairs of syllables per line.	27	<b>Romantic Literature</b>	challenged rigid social, religious and political traditions
11	<b>Trochee Trochaic</b>	A pair of syllables in which the first is stressed and the second unstressed (opposite of an iamb).	28	<b>Romantic Period</b>	End of 18 <sup>th</sup> Century until middle of 19 <sup>th</sup> Century.
12	<b>Volta</b>	A turning point in the line of thought or argument in the poem	30	<b>The Sublime</b>	Nature's duality: awe-inspiring yet terrifying
13	<b>Quatrain</b>	A four line stanza	31	<b>William Blake</b>	Wrote 'Songs of Innocence and Experience'.
14	<b>Apostrophe</b>	Speaking to an object or to someone who is not present or dead	32	<b>Samuel Taylor Coleridge</b>	poems include 'Kubla Khan' and 'The Rime of the Ancient Mariner'.
15	<b>metonymy</b>	Referring to something by using a word connected to it. E.g. A suit=businessman.	33	<b>Percy Bysshe Shelley</b>	His works include, 'Ozymandias' and 'Masque of Anarchy'. Married to Mary Shelley who wrote Frankenstein
16	<b>Dramatic monologue</b>	A poem in which an imagined speaker addresses the reader.	34	<b>William Wordsworth</b>	His most famous poems include, 'The Prelude', and 'Composed Upon Westminster Bridge'.

Julius Caesar			Romantic Poetry		
	Word	Definition		Word	Definition
1	<b>Dismiss (v)</b> <b>dismissive (adj)</b>	Showing that something is unworthy of consideration	16	<b>Sedition (n)</b>	Rebelling against the government
2	<b>Colonialism (n)</b> <b>Colonial (adj)</b>	Where one country takes, occupies and rules another	17	<b>Credible (adj)</b> <b>Credibility (n)</b>	How believable something is
3	<b>Vague (adj)</b>	Uncertain, not specific or precise	18	<b>Oratory (n)</b> <b>Orator (n)</b>	Public speaking
4	<b>The commonwealth</b>	A group of countries, Most used to be in the British Empire	19	<b>Rouse (v)</b> <b>Rousing (adj)</b>	Exciting and inspiring (of a speech)
5	<b>Indifferent (adj)</b> <b>Indifference (n)</b>	Unconcerned, not caring, having no opinion.	20	<b>Antithesis (n)</b> <b>Antithetical (adj)</b>	Opposites
6	<b>Plight (n)</b>	A difficult or horrible situation	21	<b>Domineer (v)</b> <b>Domineering (adj)</b>	Assert your will in an arrogant way. Bossy
7	<b>Authoritarian (adj)</b> <b>Authoritarianism (n)</b>	Strict, bossy, expecting obedience	22	<b>Patriotism (n)</b> <b>Patriotic (adj)</b>	A love for your country
8	<b>Mundane (adj)</b>	Boring, lacking interest, dull	23	<b>Implore (v)</b>	To beg desperately for something
9	<b>Denounce (v)</b> <b>Denunciation (n)</b>	A public statement that something is wrong	24	<b>Subtle (adj)</b> <b>Subtlety (n)</b>	Using soft or indirect methods to do something
10	<b>Berate (v)</b>	To scold or criticise angrily	25	<b>Defer (v)</b> <b>Deferential (adj)</b>	Showing polite respect to someone powerful
11	<b>Scathing (adj)</b>	Severely and strongly critical	26	<b>Undermine (v)</b>	To lessen the effectiveness or power of something, to go against someone's power
12	<b>Apartheid (n)</b>	Racial segregation in South Africa	27	<b>Futile (adj)</b> <b>Futility (n)</b>	Pointless or useless
13	<b>Oppress (v)</b> <b>Oppression (n)</b>	The exercise of power in a cruel or unfair manner	28	<b>Allude (v)</b> <b>Allusion (n)</b>	Suggest or hint at something
14	<b>Disparity (n)</b> <b>Disparate (adj)</b>	A great difference	30	<b>Resent (v)</b> <b>Resentment(n)</b>	Feeling bitter towards something
15	<b>Deprive (v)</b> <b>Deprivation (v)</b>	Lacking the basics in life	31	<b>Contempt (n)</b> <b>Contemptuous (adj)</b>	A feeling that something is worthless





**Vocabulary**

Variable	(or an <u>unknown</u> ) is a letter used to represent a number, these can take any values
Terms	the separate parts of expressions. For example, in $5x + 3y - 4$ , there are three terms $5x$ , $+3y$ and $-4$
Expressions	is made up numbers and/or letters representing unknown values where there is no equals symbol. For example, $4a + 6$ or $a + b$
Equations	contains an 'equals' sign and at least one variable. A value can be found for the variable and this is known as solving the equation
Formula	is a special type of equation which is a rule for working things out such as area
Probability	The likelihood/chance of something happening It is expressed as a number between 0 (impossible) and 1 (certain). It can be expressed as a fraction, decimal, percentage or in words (likely, unlikely, even chance etc.)
Plan	The view you see when looking at a 3D shape directly from above 'a bird's eye view'
Front elevation	The view you see when looking directly at the front of a 3d shape
Side elevation	The view you see when looking directly at the side of a 3d shape

**QUESTION ANSWER**

**Sample Space:** 12 There are 12 marbles total ( $4+5+1+2 = 12$ )

**P(black)**  $P(\text{black}) = \frac{2}{12} = \frac{1}{6}$  There are 2 black marbles in the bag 12 is your sample space

**P(blue)**  $P(\text{blue}) = \frac{4}{12} = \frac{1}{3}$  There are 4 blue marbles in the bag 12 is your sample space

**P(blue or black)**  $P(\text{blue or black}) = \frac{6}{12} = \frac{1}{2}$  4 blue + 2 black = 6 12 is your sample space

**P(not green)**  $P(\text{not green}) = \frac{11}{12}$  There's 1 green, so  $12-1 = 11$  that aren't 12 is your sample space

**P(not purple)**  $P(\text{not purple}) = 1$  I will definitely select a marble that is not purple because there are no purple marbles in the bag. Whenever the chance of something occurring is definite, the probability is 1.

**MathsWatch References**

14	Probability scale
58,59	Calculating probabilities and outcome
43,44	Solids, nets
51	Plans and elevations
33-35,93-95	Algebraic expressions

**KEY FACTS AND FORMULA**

**Simplifying**

Simplify the following

- $x + x + x + x + x = 5x$
- $5e - 2e + e = 4e$
- $4x + 2y - x + 5y + 6 = 3x + 7y + 6$
- $3x^2 + 5x + 2x^2 - 4x = 5x^2 + x$
- $5 \times 4g = 20g$
- $3b \times 4c = 12bc$

**Substitution**

Evaluate  $3a^2$  when  $a = 5$

$$3 \times 5^2 = 3 \times 25 = 75$$

(Don't forget BIDMAS!)

**Expanding Brackets single brackets**

- Expand  $2(3m + 5)$   
 $= 6m + 10$
- Expand  $4r(2r - 3)$   
 $= 8r^2 - 12r$

**Probability scale**

**Calculating probability**

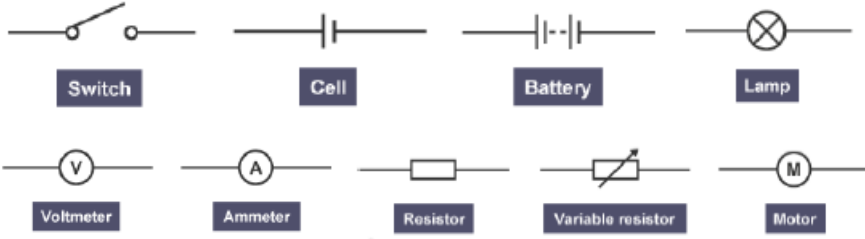
**Probability =**  $\frac{\text{\# of ways a certain outcome can occur}}{\text{Total Possible Outcomes (Sample Space)}}$

**Charge & static electricity**

Electric charges are positive or negative. For example, electrons have a negative charge. Opposite charges attract each other (+ and -), whereas charges that are alike repel each other (+ and +, OR - and -). This is because there is a force of attraction between opposite charges, but a force of repulsion between like charges.

- If a material has a charge, but the charge is not moving anywhere, we call this static electricity. This will only happen if the material is an insulator. To get a positive or negative charge on an insulator, all you have to do is rub it with a different material (use the force of friction).
- For example: rubbing a balloon on your hair will produce a charge on the balloon and the opposite charge on your hair. This causes them to attract each other.
- When a static charge is produced like this, it is because electrons from one material are transferred to the other material (see first diagram).
- The material that gains electrons becomes more negative.
- The material that loses electrons becomes more positive.
- Any time there is a difference in electric charge between two points, there is a difference in electrical potential energy. We call this a potential difference.

Key Terms	Definitions
Circuit	A complete loop of conductors
Current	The rate of flow of charge
Resistance	The property of materials that determines how much current they will carry and how much work they do
Work	Transfer of energy from one store to another
Component	Part of a circuit. See symbols below
Series	Linking components one after another, making one loop
Parallel	Linking components so they are in separate loops



In a circuit with only **one loop**, so all components are in **series**, the potential difference from the supply is **shared** by all the components.  
 If a circuit includes components on different loops (in **parallel**), each loop receives ALL the potential difference from the supply. The parallel components don't have to share.

**Key Terms**

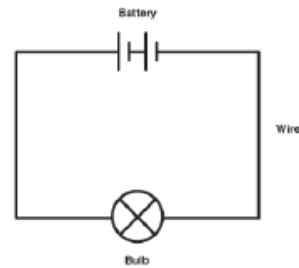
Key Terms	Definitions
Charge	A positive or negative property of substances, that causes the substance to feel a force when there are other charges nearby
Conductor	Material that can carry electric current e.g. metals
Insulator	Material that does NOT conduct electric current
Friction	The force caused when two materials move past each other
Potential difference	p.d. for short, and also known as voltage. This is the measure of the difference in electrical potential energy between two points
Static electricity	Electric charges that are <b>not</b> flowing
Electrons	Tiny, negatively charged, particles, found in all atoms
Resistance	The property of materials that determines how much current they will carry and how much work they do

If there is a charge on materials that are **conductors** (like metals), the charge is able to flow. The rate (speed) of flow of the charged particles is the **current**. Current is measured in amps (A). Usually the flowing charged particles are **electrons**.

Charges flowing around a loop is called a **circuit**.

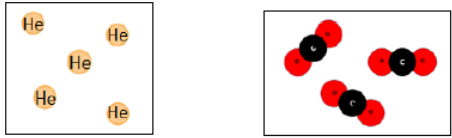
Three ingredients are needed in a circuit:

1. Conductors connected in a loop for the current to flow through
2. A source of potential difference, like a battery. This causes a difference in electric potential energy between each end of the circuit.
3. Components (like lamps) with resistance.

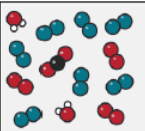


The greater the resistance in a circuit, the lower the current in the circuit.  
 The greater the resistance of a component, the more **work** it will do.

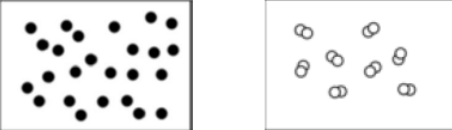
**Pure Substances**  
 A substance is pure if it only has **one type** of particle in it e.g. just helium atoms or just carbon dioxide molecules.



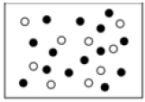
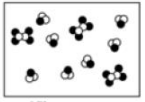
**Impure Substances**  
 Impure materials are mixtures of different types of particle (covered more in Topic 7).

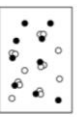


**Elements**  
 • Elements are substances made up of one type of atom.  
 • All 118 elements are found listed in the Periodic Table.  
 • The atoms in an element can either be single, or go around in pairs. It doesn't matter, as long as the atoms are **the same**.  
 • Elements that go around in pairs are called diatomic elements.



**Mixtures**  
 A mixture contains different elements or compounds that are not chemically joined to each other. There are three types of mixture:

- A mixture of elements:  

- A mixture of compounds:  


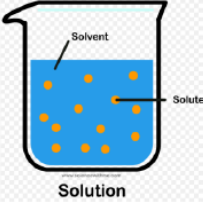
- A mixture of elements and compounds:  


• Mixtures contain more than one substance, so they are impure.  
 • Mixtures can be easily separated because the substances are not bonded together.

Key Terms	Definitions
Mixture	A substance made up of different elements or compounds that are not chemically bonded to each other
Solute	The substance that dissolves into the solvent
Solvent	The liquid that the solute dissolves into
Solution	The solute dissolved in the solvent
Solubility	How easily a substance dissolves
Soluble	The substance dissolves into a solvent
Insoluble	The substance does not dissolve into a solvent

**Solutions**

- A solution is made up of a liquid in which a substance is dissolved.
- The liquid part of the solution is called the **solvent** e.g. water
- The substance that has dissolved into the solvent is called the **solute** e.g. salt
- When the solute dissolves into the solvent, a **solution** is made e.g. salt water
- Salt is described as **soluble**, because it dissolves into the solvent
- A substance that will not dissolve into a solvent is described as **insoluble** e.g. sand



Key Terms	Definitions
Dissolving	When solvent particles surround solute particles so they are spread out
Saturated Solution	A solution in which no more solute can dissolve
Evaporation	A method for separating a dissolved substance from the liquid
Filtration	A method for separating an insoluble solid from a liquid

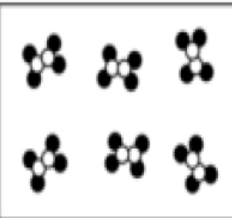
Key Terms	Definitions
Pure	A material that is made up of only one type of particle i.e. elements or compounds
Impure	A material that made up of more than one type of particle i.e. mixtures (covered in Topic 7)
Element	Substances made up of one type of atom
Compounds	Substances made up different elements which are chemically bonded

**Compounds**

- Compounds are substances made up of **different elements** which are chemically bonded.
- Compounds can be formed by chemically reacting elements together e.g.:

**Magnesium + oxygen → magnesium oxide**  
 (Element)    (Element)                    (Compound)

- Often, the compound formed has different properties to the elements that make it. E.g. magnesium is a shiny metal, oxygen is a colourless gas and magnesium oxide is a white powder
- In order to separate the elements in a compound you would need to carry out another chemical reaction.
- Compounds are still pure because, although they contain different atoms, those atoms are bonded to make **one particle**
- Examples of compounds are:
  - Carbon dioxide (CO<sub>2</sub>)
  - Water (H<sub>2</sub>O)
  - Anything else that has more than one element



**Respiration**


Respiration is a chemical reaction that occurs in plant and animal cells and releases energy from food molecules. The organism can then use this energy in several different ways including:

- To build large molecules from smaller ones
- To move
- To keep warm

There are two types of respiration: aerobic and anaerobic.

**Aerobic respiration**

Aerobic respiration occurs in the presence of oxygen and takes place in the mitochondria. Cells that require a lot of energy (e.g. muscle cells, sperm cells) will have higher numbers of mitochondria so they can release more energy.



Aerobic respiration is shown by the following equation:

$$\text{glucose} + \text{oxygen} \rightarrow \text{carbon dioxide} + \text{water}$$

$$\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O}$$

Respiration can use different food molecules as the reactant but it is generally shown as glucose. Oxygen and glucose travel to the cells through the circulatory system and the waste products are removed from cells in the same way.

**Photosynthesis**

- Plants use **photosynthesis** to make food (glucose) using **energy** from the sun

**Word equation**

Carbon dioxide + Water  $\xrightarrow[\text{Chlorophyll}]{\text{Light}}$  Glucose + Oxygen

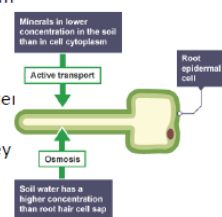
- The plant takes in **water** through the roots and **carbon dioxide** through the leaves via stomata
- Photosynthesis takes place in the **chloroplasts** which contain **chlorophyll** to absorb the light from the sun
- The glucose made in photosynthesis is stored as **starch**
- We can use **iodine** to test for starch; if starch is present the iodine will turn black
- Limiting factors for photosynthesis are light, temperature & CO<sub>2</sub> concentration

Key Terms	Definition
Respiration	A chemical reaction that releases energy from food molecules.
Aerobic	With oxygen.
Anaerobic	Without oxygen.
Fermentation	Anaerobic respiration that occurs in yeast.
Mitochondria	Cell organelle where aerobic respiration occurs.
Fatigue	When muscle cells become tired and no longer contract efficiently.

Key Terms	Definitions
Osmosis	Movement of water from a high concentration to a low concentration through a partially permeable membrane
Diffusion	Movement of particles from a high concentration to a low concentration until they are evenly spread out
Active transport	Movement of particles against a concentration gradient
Transpiration	The process by which plants lose water, as vapour, from their leaves through the stomata.
Chlorophyll	Green pigment in leaves, needed for photosynthesis, kept inside chloroplast

**Roots**

- Plants absorb **all** their water in the roots by osmosis and keep water moving constantly through the plant by losing water as vapour from the leaves – transpiration
- Root hair cells increase the surface area for absorption of water.
- Root hair cells have a thin cell wall to allow water to pass through by osmosis easily
- Root hair cells don't contain chloroplasts as they are not performing photosynthesis
- Root hair cells absorb minerals through active transport. This requires an input of energy from the cell



**Anaerobic respiration**

Anaerobic respiration occurs when there is not enough oxygen present and takes place in the cytoplasm. Much less energy is released from anaerobic respiration than from aerobic respiration.

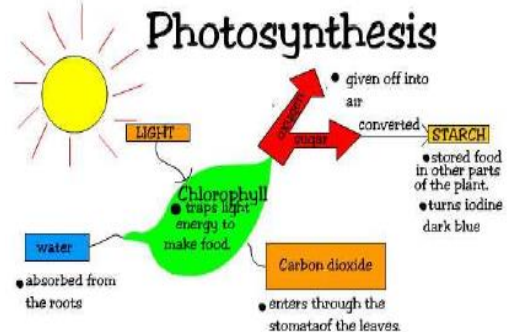
In animals the equation for anaerobic respiration is:  
glucose → lactic acid

If lactic acid builds up in muscle cells it causes fatigue. We continue to have an elevated heart rate and breathing rate after exercise so that more oxygen enters the cells. This oxygen reacts with the lactic acid removing it from our muscles allowing them to work efficiently again.

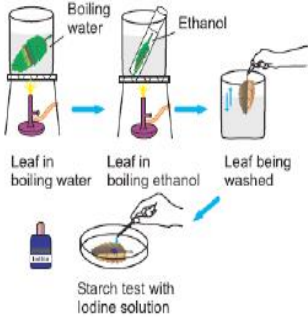
In plants and yeast the equation for anaerobic respiration is:  
glucose → ethanol and carbon dioxide

This process can also be called fermentation and is useful as the ethanol can be used to make alcoholic drinks and the carbon dioxide is what makes bread rise.

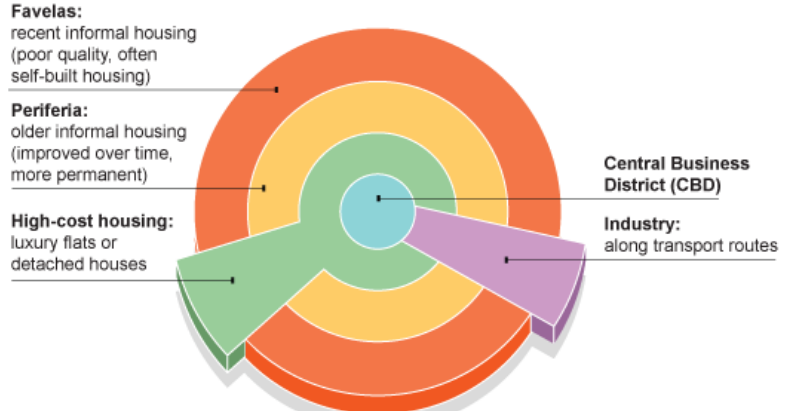
**Photosynthesis**



Leaves can be tested for starch using iodine. The leaf is boiled to break open cells and then boiled in ethanol to remove the chlorophyll before testing with iodine. Blue/black is a positive result.



	Mexico Key Facts		UK Facts for comparison
1	Continent	South America	Europe
2	Level of affluence	Emerging Country	Developed
3	GDP per capita	\$9821 US	\$39 720 US
4	Population	129.2 million	66.4 million
5	Percentage living in urban areas	83.5%	82%
6	Fertility Rate	1.7	1.8
7	Infant mortality rate	12.2 per 1000 live births	3.8 per 1000 live births.
8	Average age	27.4 years	40
9	Percentage working in the tertiary sector	63.1%	79%

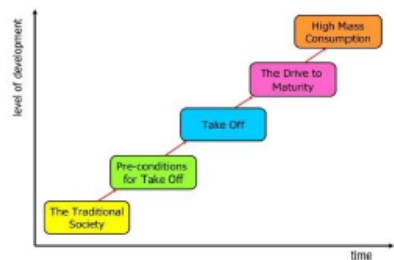


10. Typical model of a emerging country city.

What is an development?	How can development be measured?	
Development is the progress in economic growth, use of technology and improving welfare that a country has made. When a country develops it basically gets better for the people living there- their quality of life improves (e.g. wealth, health and safety).	Geographers find it useful to be able to measure how developed places are, and to compare them and see how they change over time. To do this they use development indicators.	
What are the four types of development?	<b>Social measures of development</b>	<b>Economic measures of development</b>
Social development is to do with people and society. It is about the improvement that has been made by a country improving the quality of life of people who live there. This could be by improving literacy levels through access to education, healthcare and increasing life expectancy.	1. Quality of life	-tend to focus upon money and a country's economy.
Economic development is about the improvement that has been made by a country in terms of wealth. This could include the value of goods and services that a country is producing or the proportion (amount) of people who are working in primary, secondary, tertiary or quaternary jobs.	2. Infant mortality	1. Standard of living
Environmental development recognises the importance of the natural world and includes looking at how countries are monitoring greenhouse gas emissions (air quality), or what they are doing to improve water quality.	3. Birth rate	2. GDP per capita
Sustainable development means that the needs of the present generations will be met while protecting the needs of the future. Resources can not be exhausted and environments need to be protected. It is a balance. For example: using renewable energy sources rather than depleting stocks of oil and gas.	4. Doctors per 1000	3. GNI per capita
	5. Literacy rate	4. Absolute poverty
	6. Death rate	5. Relative poverty
	7. Life expectancy	6. Employment type
	8. Access to education	

**What is Rostow's Model**

In 1960 an American economist named Walt Rostow created a model to show the stages that countries are likely to pass through on their way to being more developed. There are five linear stages. It has been criticised for being too simplistic and outdated



**Stages of Rostow's Model**

- 1. Traditional society:** Characterised by subsistence economy which relies on collecting natural resources (logging, mining- primary industry). High levels of agriculture and labour intensive agriculture.
- 2. Pre-conditions:** Infrastructure starts to improve, so trade is easier. Agriculture develops into a larger scale- less workers and more machinery. Secondary industries- such as manufacturing start to take off. Introduction of TNCs.
- 3. Take off:** Increasing industrialisation- secondary manufacturing dominates. TNCs often dominate the economy. Rural to urban migration happens on a greater scale. Nation becomes more modernised- airports, roads, railways, education, healthcare and internet access.
- 4. Drive to maturity:** Country becomes able to support itself- not relying on foreign investment. As education and aspirations change and improve- more tertiary jobs: sales, nursing and teaching etc. Universities and schools mean that high-tech industry develop and quaternary jobs begin.
- 5. High mass consumption:** High proportion of employment in service sector (tertiary). Secondary manufacturing shifts to smaller factories with less environmental impact. As the population becomes wealthier- consumption (buying new/used goods) increases, focusing on high value goods such as cars and designer labels.

**What is Ethiopia's place in the model?**  
Government spending has led to improvements in healthcare and education, and the arrival of TNCs, suggest that **stage 2 is more appropriate.**

Due to new technologies starting to replace older livestock farming, **the pre-conditions for take off are emerging.**

**What is urbanisation?**

*Urbanisation* is an increase in the amount of people living in urban areas, such as towns and cities, compared with those living in rural areas, such as the countryside- potentially due to migration.



**What is a city?**

Cities can be found nearer the top of the hierarchy.  
Settlements move up the hierarchy as more people live in them; they develop more functions and provide more services as a result.

↑  
Settlements increase in size but decrease in frequency.

**What is a city?**

Cities can be found nearer the top of the hierarchy.  
Settlements move up the hierarchy as more people live in them; they develop more functions and provide more services as a result.

**What is a megacity?**

The rapid rate of growth which has taken place in ACs, and more recently LIDCs, has led to the creation of cities with a population over 10 million.  
Cities with a population of this size are known as megacities such as Tokyo, Delhi and Mumbai.

**Why are megacities important?**  
Pros/Cons

- + Smaller ecological footprint – many people live in apartments or smaller connected houses rather than larger homes in sprawling neighbourhoods.
- + Cities are also walkable and have public transportation options that can make cars less of a necessity.
- Concentrations of people mean concentrations of pollutants and rubbish.
- Cities produce up to 70 percent of global CO2 emissions and smog is becoming a common feature in many urban landscapes.
- Cities across the globe producing 1.3 billion tons of waste annually, that's a lot for one area to handle.

**What is a World City?**

A World City (also known as a global or alpha city) is one which is considered to be an *important hub in the global economic system.*

**A World City may have:**

- o Headquarters of TNCs based in the city
- o A centre for media and communication
- o A major centre for manufacturing
- o Important port (can handle bulk carriers)
- o Financial services- banks or stock exchange
- o High rated universities- high quality of healthcare
- o Cultural opportunities- cinema/live music etc



London is an example of a world city.

*Its status as a world city comes from:*

- o Its financial importance (London Stock Exchange)
- o Scientific research from its universities
- o Power of companies located there
- o Landmarks both new and old, are recognised worldwide

**What causes rapid urban growth of cities in LIDCs?**

*Urbanisation is driven by two key factors...*

- o **Rural-urban migration:** people being drawn from the rural areas to live in cities.
- o **Internal growth:** when people who have moved into the cities have lots of children.

**Rural-urban Migration**

The factors which draw people to cities are referred to as *pull factors.*

These work in combination with *push factors* which tend to drive people away from rural areas.

Push Factors	Pull Factors
Opportunities for employment other than agricultural work- wages in rural areas are limited and are in poverty levels in most cases.	There are more opportunities for employment-wages offered are better.
Rural areas often have fewer services (including access to healthcare and education) and poorer infrastructure.	Better healthcare systems and education in urban areas.

**Internal Growth**

Once people arrive in cities and find employment and housing- they will tend to have children.

This increase in population is known as *internal growth* and can result in rapid population growth- particularly in LIDCs where cities have youthful populations.

### Development Dynamics

**Case Study: India**

**Where is India located?**

**Continent:** Asia  
**Nearby countries:** Pakistan, Sri Lanka, Bangladesh, Nepal  
**Nearby oceans:** Indian Ocean, Arabian Sea, Bay of Bengal

India is the 7<sup>th</sup> largest country in the world by land mass.

**Think like a geographer: How does India's location promote economic development?**

- What other major economies are nearby? China! Now a major economy and superpower. India and China have existing political tensions. India is a former British colony.
- Is India landlocked? Which countries are easily accessed? India is not landlocked, meaning it can easily transport goods internationally by boat. India aims to become a major transport hub within south east Asia.
- Is India a large or small country? What about its population? India is a large country, with good access to resources such as coal. India's population is rapidly growing, totals 1.324 billion (2016). This makes India the second most populous country in the world.

Development Indicator	Social, Economic or Environmental	Value
HDI (Human Development Index)	Social, Economic and Environmental	0.621 (131 <sup>st</sup> in the world)
Life Expectancy	Social	68 years
Adult Literacy	Social	74%
Infant Mortality	Social	34 per 1000 birth
GDP (Gross domestic Product per capita)	Economic	\$1,709

### India's Economic Development

India has undergone rapid development in recent decades which has resulted in India now being identified as an emerging country, rather than a developing country.

The general trend in employment has been a loss of primary employment, with an expansion of the services sector.

India's imports and exports have grown, as India buys and sells more products internationally. India's total imports have grown by almost 1500% since 1980.

India's development has been unequal, and has led to contrasting development levels. Compare the dark regions (higher GDP) to the lighter colours (lower GDP).

**Who/What does India trade with?**

**Export: Goods sold to other countries**

**Import: Goods bought from other countries**

**The types of products India makes and sells**

### Geopolitics

**Definition:** How are a countries world politics influenced by geographical factors.

What controls India's geopolitics?: It's history, geography, international context and domestic policies

**Globally:** India is a member of the G20. The G20 are the twenty most developed economies in the world. These countries meet every year, and discuss world trade issues.

**In Asia:** The partitioning of India and Pakistan in 1947 was accompanied with riots and mass casualties. The effects of this are still felt today: The relationship between India and Pakistan is still far from healthy Both countries are nuclear armed.

### The rise of the call centre

A large transnational corporation (TNC), with headquarters in the UK.

**AVIVA**

Aviva have call centres in Perth (Australia), Norwich (UK) and Sheffield (UK).

Aviva is the UK's largest insurance company

**Why India?**

- Wages much lower (India = £1,200, UK = £12,000)
- The cost of operation is lower by up to 60%.
- Improvements in education levels.
- Fewer safety restrictions = longer hours

Bangalore, India.

Advantages of Aviva	Disadvantages of Aviva
Bring much needed money to the Indian economy, creating 1000s of jobs .	A fifth of all call centre jobs outsourced, weakening the UK economy.
Increase development levels, investing in infrastructure.	Retain profits, and pay tax in the UK. This limits the economic benefit to Bangalore.

### Impact of Development

**Economic Development on Different Age and Gender Groups**

**The Elderly (50+):** Access to better healthcare, which may prolong their life. Do not possess necessary skills so may lag behind. Socially, changes to the Indian society may be difficult to adapt to.

**Females: The BIGGEST winners:** Emancipation of women = equal access to a high quality education and healthcare system, which enables them access to highly skilled jobs that are well paid.

Indicator	2001	2011
Literacy rate (%)	54.8	74.0
Male literacy rate (%)	75.3	82.1
Female literacy rate (%)	53.7	65.5

**Rate of change in female literacy rates (11.8%) greater than males (6.8%) between 2001-2011.**

**Young adults:** Access top universities, receiving a world class education = compete for the highest skilled and paid jobs = more equal society.

### Impact on the environment

**Environment:** The atmosphere (pollution), the green space, wildlife, rivers and water systems etc.

India is ranked as the 155<sup>th</sup> country out of 177 in a global ranking on environmental quality. This costs India around \$80 billion per year (5.7% of its total economy)

**The effects**

**Solid Waste Pollution:**

- Indian cities generate 100 million tonnes of waste each year.
- 40% of urban waste in India is just simply not collected, and is allowed to rot on the streets.

**Water Pollution:**

- India has the capacity the deal with just 1/6 of its sanitation produced.
- Over 100 Indian cities directly dump untreated sewage into the Ganges.

**Air Pollution:**


- Major issue in India, with wood burning and vehicle emissions behind the primary cause.
- Natural methods of fuel production (wood burning) constitutes 90% of rural energy, and 24% of urban energy. These biomass house burners are the leading cause of greenhouse gas emissions.

Challenges of an Urbanising World

**Case Study: Mumbai**

Mumbai has a total population of 18 million people! Compare this to Birmingham, which has population of just 1 million!


Mumbai is located in the region of Maharashtra



Notice how well connected Mumbai is to other areas in India. This allows for the easy flow of resources and people into, and out of Mumbai.

**Think like a geographer: How does Mumbai's location and connectivity promote economic development?**


- Access to the ocean: Natural deep harbour, easily accessible for modern container ships, promoting exports and imports.
- Mumbai's location in India: Western coastline of India. Quick access via boat or plane to the major emerging economies of the middle east.
- So how important is Mumbai's location? 25% of all international trade within India is handled by the dock in Mumbai.



The suburban railways of Mumbai are vital to the connectivity of the city. The roads are often gridlocked. In a single day, the suburban train network carries around 7.5 million people.

The structure of Mumbai


Does it fit with the Burgess Model?



**Outer Suburbs**

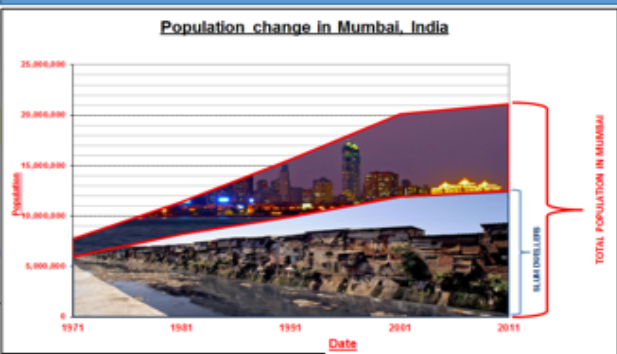
CBD: Tip of Mumbai, major historic centre. Bank of India and Walt Disney located here. Large port shipping internationally.

**Inner Suburbs:** First area developed to house workers. Large percentage in poverty and in slum housing. This does not match Burgess model.



**Inner City:** Major contrasts in development levels. Some very expensive, some old slum housing (25,000 people)

Rapid Population Growth




Convinces a person to move away from their rural home

Attracts a person to Mumbai


Push factors	Pull factors
Difficult rural conditions making it harder to make a living from farming. Population increase has also meant lower farming wages	Mumbai's rapid economic growth has created a huge range of jobs, from the most highly skilled to small-scale service jobs and low-skilled manual labour.
There are few services in rural India – education and health care is often basic, there are few leisure or entertainment facilities	Education opportunities are much better in Mumbai; there is a much bigger range of health care options and lots to see and do
New farming techniques in India have meant fewer jobs in farming	Wages in Mumbai are much higher, even for low-skilled jobs, than they are in the countryside

The Challenges of Living in Mumbai


**Traffic Congestion:** Rapid rise to 1.8 million privately owned cars in Mumbai as people gain wealth and cars become affordable.




**Slum settlements:** Slums = inner city/suburbs, making travel to work cheap. Slums are not officially recognised. In Dharavi, water is only available from a standpipe for a 2 hour period each day.



**Working Conditions:** Most work in the 'informal' sector (unregulated), which means low pay, long working hours and dangerous working conditions. These conditions exist due to extreme poverty, and the need for any work to earn a wage.



**Rapid Expansion:** Major strain on infrastructure and services. Ensuring a reliable electric supply and adequate water supplies is difficult. No waste collection = 800 million tonnes of untreated sewage dumped Mithi River.



Contrasting Qualities of Life (QOL)

Mumbai is a globally important megacity, but falls short in terms of quality of life. Mumbai has a poor level of infrastructure when compared with megacities in other emerging Asian economies.

Why is QOL so low in Mumbai?

Factor	Effect
<b>Inefficient Government</b> (political, economic)	The government is ineffective. Housing projects take a long time to develop, with a lack of sanitation systems being a major hold up.
<b>Rent Controlled</b> (economic)	Limits put on how much rent can cost. This discourages the property owner from investing in the property as they cannot make as much profit.
<b>Corruption</b> (economic, social)	Housing that is redeveloped is often sold to developers that build expensive properties, far out of reach of most local Mumbai residents.

Top Down Development

The Mumbai Monorail

**Definition =** Large, expensive infrastructure projects often funded by governments or FDI.




**Why a monorail?**

- Monorails are a form of public transport, reducing the congestion of cars.
- Green transport – Reduction in total emissions due to fewer cars generating atmospheric pollutants.

In 2005, the Mumbai government agreed to invest £310 million pound in a 9km stretch of Monorail.

Tickets are cheap (10p per person), but the route DOES NOT travel through the main area of the city. As a result, only 15,000 journeys are made each day, most of these being tourists!!!

**Conclusion:** The monorail is arguably an attention grabbing prestige project, designed to impress other countries by showing how developed and futuristic Mumbai is. This is FAR from the truth!



Are they the solution to Mumbai's development crisis?



# YEAR 8— MICHAELMAS TERM- HISTORY- THE TRANSATLANTIC SLAVE TRADE

1	<b>Slavery</b>	A relationship where one person has absolute power over another. They control their life, freedom and wealth.
2	<b>Plantation</b>	A large farm that slaves worked on to produce cotton, tobacco and sugar.
3	<b>Middle Passage</b>	The term given to the slave journey from West Africa to the Americas
4	<b>Triangular Trade</b>	Trade system importing and exporting goods to and from three destinations (mainly slaves)
5	<b>Olaudah Equiano</b>	A freed slave who moved to London and wrote a book detailing his experiences as a slave.
6	<b>Abolition</b>	Is the act of putting an end to something by law e.g. slavery.
7	<b>The Slavery Abolition Act 1833</b>	The Act passed in Britain that abolished slavery.

## Abolition in Britain

Britain was one of the first countries to abolish slavery. It introduced **the Slavery Abolition Act in 1833**. This abolished slavery throughout the British Empire.

**Politics** – Granville Sharp used the law courts to try and give slaves their freedom. He fought many court cases, e.g. the *Zong* ship.

**Economics** – Sugar plantations were closing as cheap sugar could be bought from Brazil and Cuba. People argued that slaves would work harder if they were freed and paid.

**Beliefs and Ideas** - The Society for the Abolition of the Slave Trade was set up in 1787. Anti-slavery **petitions** were signed in British towns

**Media** – Thomas Clarkson collected evidence against slavery. He spread his message all over the country by publishing posters, pamphlets and making public speeches.

**Key Individuals** - William Wilberforce campaigned against the slave trade. The first time he introduced the idea he lost the debate by 163 votes to 88 but he never gave up.

## Abolition in USA

The USA abolished slavery on the 31st January 1865. It was known as the **13th Amendment** and it declared that all people in the United States were free. However the abolition of slavery was a huge issue in America and even caused **the American Civil War** between the North and the South states.

**Economics** - Southern slave owners feared the loss of their slave labour force. The **northern states** were going through an **industrial revolution** and needed more people to work in their factories, but the mainly agricultural south depended on trade and was therefore against this.

**Politics** - Eleven states decided to leave the Union to form their own separate nation called the '**Confederate States of America**'. This resulted in the outbreak of a civil war

**Key Individuals** - **Abraham Lincoln** was elected as president of the United States in 1860. He had spoken out against slavery and the South feared he would try to end slavery.

8	Domestic slaves	were butlers, cooks and maids, who had to look after the plantation owner, his family and his house. usually treated better than plantation slaves, they were given better food and were clothed.
9	Plantation slaves	were those who worked 18 hour days on the plantations growing cotton and tobacco.
10	Accommodation	slaves lived in wooden shacks with mud floors, with up to as many as 15 people sharing 1 room. There was no furniture and old rags would be used to make beds.
11	Could slaves marry?	Slaves could marry but they had no legal protection. Marriages and families could be broken up lawfully by a slave owner. 32% of slave marriages were dissolved by masters selling slaves away from the family home.
12	What was the trans-Atlantic slave trade?	Between 1600-1800 slaves were traded across the world. A) Ships were loaded in England with guns, cloth and alcohol. This was taken to Africa and traded for slaves. B) Slaves were transported on a two month journey known as the Middle Passage to the Caribbean and the Americas. Slaves were sold to work on the plantations. c) ships were loaded with cotton, sugar and alcohol to be sold in England for huge profits.
13	More detail on the Middle Passage	Conditions on the boat were terrible and many died. Slaves were packed into the ship in very tight quarters and laid down for most of the journey. They were only given basic food to keep them going and were severely punished should they disobey orders. Slaves were chained up for the entire journey, meaning that diseases spread quickly. A lot threw themselves overboard in order to avoid their fate as a slave.
14	Who benefitted from the Slave Trade?	<ol style="list-style-type: none"> <li>1. Plantation Owners - Plantation owners, owned large pieces of land which farmed different crops. Plantation owners grew 'cash' crops of sugar, tobacco, coffee, spices and cotton for sale back in Europe which would be worked on by the slaves. By the constant supply of 'free' labour and good trading links plantation owners lived very lavish lifestyles.</li> <li>2. African Tribal Leaders - African Tribe Leaders captured slaves through war between rival communities over land. They would then trade their captures for weaponry and gunpowder to increase their power in their native land.</li> <li>3. British Business Men - The Slave Trade made areas such as, Liverpool and Bristol extremely rich. Factory owners and business men that were involved in the production of weapons and gunpowder.</li> <li>4. African Slaves - Some slaves worked in the plantation owner's house as butlers, cooks or housemaids. They were able to learn new skills, such as cooking and cleaning. They were often dressed in finer clothing and given a better diet than those that worked in the fields.</li> </ol>



Key Terms		
1	American Civil War	A war waged between the North (union states) and the South (confederacy) from 1861-1865
2	Emancipation Proclamation	Released by Abraham Lincoln which made slavery in the US illegal.
3	Segregation	An action where things can be separated, in this instance, groups of people.
4	Ku Klux Klan	A racist organisation formed in 1866 but by 1925 it had 5 million members. They killed African Americans in the southern states of America.
5	Lynching	Murder of African-Americans, sometimes in public, for violating racial codes operating in the southern states.
6	Sharecropper	Farmer who rented land and paid for it though a share of the crop—often cotton
7	Bigotry	Intolerance against people who may have a different opinion compared to themselves.
8	'Jim Crow' laws	Named after a fictional character in the popular minstrel shows that made fun of black people. These laws enforced the strict segregation of the races and rigidly maintained the inferior status of black citizens.
9	Literacy Tests	Very complex tests which African-Americans were forced to pass in order to register to vote.
10	Grandfather Clauses	Only if your grandfather was registered to vote, could you register. Used to block African-Americans.
11	13th Amendment	Abolished (ended) slavery in the US
12	14th Amendment	This said black people were citizens
13	15th Amendment	This said black people could vote

Key ideas	
1	<p><b><u>Segregation</u></b>                      In many of these states discrimination was not just commonplace - it was legal. States such as Alabama introduced a series of laws to keep the races separated and the black population under control. These measures were nicknamed the 'Jim Crow' laws. Typical laws included:</p> <ul style="list-style-type: none"> <li>- Public transport waiting rooms were strictly segregated.</li> <li>- Places open to the public such as shops, hotels, cinemas, - theatres and libraries had to provide separate rooms and facilities for the different races.</li> </ul>
2	<p><b><u>Education</u></b>                      Legally, black children could be educated in separate schools, so long as the schooling was of an equal educational standard. In reality, schools for black Americans were far from equal, and the quality of education provided was inferior. In 1896, the Supreme Court upheld that this policy was legal and fair.</p> <ul style="list-style-type: none"> <li>- In most of the Southern states, inter-marriage between blacks and whites was illegal.</li> </ul>
3	<p><b><u>Voting rights</u></b>                      Very limited in the south, as Grandfather Clauses and literacy tests were introduced stop the registration of African Americans.</p> <ul style="list-style-type: none"> <li>- African-Americans largely did menial and poorly paid work—as sharecroppers or domestic servant</li> </ul>
4	<p><b><u>Violence and intimidation:</u></b>                      It was virtually impossible for African- Americans to challenge segregation in the South. To do so ran the risk of serious violence at the hands of white racists, particularly the Ku Klux Klan. In the years after World War I, there had been a major revival in the strength of the Ku Klux Klan, the most well known of the racist organisations.</p> <p>By the mid-1920s, the Klan had over 100,000 members across the South and had begun to extend its influence into Northern and Western states. Its campaigns of hate and violence intensified and Klan violence, beatings, burnings, brandings, attacks with acid and lynching increased rapidly. In 1919, 70 black Americans were lynched, 10 of them former soldiers.</p>

Key Terms		
1	Civil Rights Movement	To achieve equality between white and Black people in the 50s and 60s in America
2	Civil Rights	The rights an individual is entitled to - political and social freedom and equality.
3	Supreme Court	Highest court of law in the United States
4	NAACP	National Association for the Advancement of Colored People
5	SCLC	Southern Christian Leadership Conference
6	CORE	Congress on Racial Equality
7	SNCC	Student Non-Violent Coordinating Committee
8	Rosa Parks	Civil Rights activist who refused to move seat on a bus. This led to the Montgomery Bus Boycott.
9	Martin Luther King	Figurehead and adopted leader of the Civil Rights movement. Promoted passive resistance.
10	Malcom X	Civil rights fighter who believed in violent active resistance in fighting for the rights of black Americans

Significance of Martin Luther King	
1	Martin Luther King Jnr was an American campaigner for the fair and equal treatment of all people and an end to racial discrimination. -His father was the pastor of the Ebenezer Baptist Church in Atlanta, Georgia, USA
2	In December 1955, in Montgomery Alabama, Rosa Parks, a black woman, was arrested for failing to give up her bus seat to a white man. King, having become a minister in the city, was appointed president of the Montgomery Improvement Association which led the boycott of the Montgomery bus services
3	King was a very powerful speech maker. -His most famous I Have A Dream speech was delivered to an audience of 250,000 people during the March on Washington. -King led other important events such as the Selma March and set up the Southern Christian Leadership Conference (SCLC)

Key events in 1950's	
1	<b>Brown vs Board of Education 1954:</b> On May 17, 1954, the Supreme Court ruled that "separate but equal" public schools for different races were unconstitutional, following a legal challenge by the National Association for the Advancement of Colored People (NAACP).
2	<b>The murder of Emmett Till 1955:</b> Fourteen-year-old Emmett Till was visiting relatives in Money, Mississippi, on August 24, 1955, when he reportedly flirted with a white cashier at a grocery store. Four days later, two white men kidnapped Till, beat him and shot him in the head. The men were tried for murder, but an all-white, male jury acquitted them. The nation was shocked by these events.
3	<b>The Montgomery Bus Boycott 1955:</b> On December 1, 1955, four days before the boycott began, Rosa Parks, an African-American woman, refused to give up her seat to a white man on a Montgomery bus. She was arrested and fined. The boycott of public buses by African Americans in Montgomery began on the day of Parks' court hearing and lasted 381 days. Montgomery's buses were then officially desegregated.
4	<b>Little Rock, Arkansas 1957:</b> Nine black students enrolled at formerly all -white Central High School in Little Rock, Arkansas, in September 1957, testing Brown vs Board of Education. On September 4, 1957, the first day of classes at Central High, Governor Orval Faubus of Arkansas called in the state National Guard to bar the black students' entry into the school.

Key events in 1960's	
1	<b>Sit-Ins 1960</b> Began at a lunch counter in Woolworth's in Greensboro when four students refused to move from whites-only seats. The movement rapidly spread and led to the formation of SNCC. Much desegregation followed.
2	<b>Freedom Rides 1961</b> Members of CORE rode the Greyhound bus route through the south to see if previously agreed desegregation was being followed. The bus was firebombed at Freedom Riders were viciously attacked at Birmingham.
3	<b>Birmingham, Alabama 1963</b> King and SCLC led a series of events in this highly-segregated city. Teenagers were used in some marches and were attacked by police using dogs and high-pressure fire hoses. King was arrested and locked up in prison. Contributed to passage of 1964 Civil Rights Act
4	<b>March on Washington 1963</b> 250,000 people, about one-fifth of them white, came to listen to speakers, including King's famous 'I Have a Dream speech. Parts of the event were filmed live on TV.
5	<b>Freedom Summer 1964</b> Civil Rights workers went to Mississippi to help African-Americans to register to vote. Three of them were murdered, leading to an FBI investigation.
6	<b>Selma 1965</b> A march from Selma to Montgomery, led by King, to campaign for African-American voting rights. Stopped by police, who used great violence on protesters. Contributed to passage of 1965 Voting Rights Act.

### 1. What do Buddhists believe?

There is no belief in a personal god. Buddhists believe that nothing is fixed or permanent and that change is always possible. The path to Enlightenment is through the practice and development of morality, meditation and wisdom.

Buddhists believe that life is both endless and subject to impermanence, suffering and uncertainty. These states are called the tilakhana, or the three signs of existence. Existence is endless because individuals are reincarnated over and over again, experiencing suffering throughout many lives. It is impermanent because no state, good or bad, lasts forever. Our mistaken belief that things can last is a chief cause of suffering.

**The history of Buddhism** is the story of one man's spiritual journey to enlightenment, and of the teachings and ways of living that developed from it.

#### The Buddha:

Siddhartha Gautama, the Buddha, was born into a royal family in present-day Nepal over 2500 years ago. He lived a life of privilege and luxury until one day he left the royal enclosure and encountered for the first time, an old man, a sick man, and a corpse. Disturbed by this he became a monk before adopting the harsh poverty of Indian asceticism. Neither path satisfied him and he decided to pursue the 'Middle Way' - a life without luxury but also without poverty.

Buddhists believe that one day, seated beneath the Bodhi tree (the tree of awakening), Siddhartha became deeply absorbed in meditation and reflected on his experience of life until he became enlightened.

By finding the path to enlightenment, Siddhartha was led from the pain of suffering and rebirth towards the path of enlightenment and became known as the Buddha or 'awakened one'.

### 2. Where do Buddhists learn about their faith?

#### Home and temple:

##### Buddhist worship

Buddhist temple, Khatmandu, Nepal

Buddhists can worship both at home or at a temple. It is not considered essential to go to a temple to worship with others.

#### At home

Buddhists will often set aside a room or a part of a room as a shrine. There will be a statue of Buddha, candles, and an incense burner.

#### Temples

Buddhist temples come in many shapes. Perhaps the best known are the pagodas of China and Japan.

Another typical Buddhist building is the Stupa, which is a stone structure built over what are thought to be relics of the Buddha, or over copies of the Buddha's teachings.

### 3. Meditation

Meditation is a mental and physical course of action that a person uses to separate themselves from their thoughts and feelings in order to become fully aware.

It plays a part in virtually all religions although some don't use the word 'meditation' to describe their particular meditative or contemplative practice.

Meditation does not always have a religious element. It is a natural part of the human experience and is increasingly used as a therapy for promoting good health and boosting the immune system.

Anyone who has looked at a sunset or a beautiful painting and felt calm and inner joy, while their mind becomes clear and their perception sharpens, has had a taste of the realm of meditation. Successful meditation means simply being - not judging, not thinking, just being aware, at peace and living each moment as it unfolds.

#### What is Buddhist meditation?

In Buddhism the person meditating is not trying to get into a hypnotic state or contact angels or any other supernatural entity. Meditation involves the body and the mind. For Buddhists this is particularly important as they want to avoid what they call 'duality' and so their way of meditating must involve the body and the mind as a single entity.

In the most general definition, meditation is a way of taking control of the mind so that it becomes peaceful and focused, and the meditator becomes more aware.

#### 4. The Five Precepts

**The Five Precepts** are the Buddhist version of a code of conduct or rules to help people behave in a moral and ethical way.

Buddhists should follow the Five Precepts to ensure they are living a morally good life. This helps them to get rid of suffering and achieve **enlightenment**.

#### The five precepts are as follows:

- Refrain intoxicants that can cloud the mind
- Refrain from wrong speech
- Refrain from the misuse of the senses or sexual misconduct
- Refrain from taking what is not given
- Refrain from taking life



## Christian Worship

### 5. What are Buddhist attitudes to rights and responsibilities?

To become a Bodhisattva a Mahayana Buddhist must become perfect in six areas of their lives. These are: generosity, morality, patience, energy, meditation, wisdom. **Six Perfections.**

The Six Perfections are:

1. Be generous and give to others.
2. Live a life in which you do the right thing.
3. Have patience with all people.
4. Sustain your energy so that you keep going through difficult times.
5. Work on concentration by meditating.
6. Gain wisdom

### 6. What do Buddhists believe about religion and science?

#### What accounts of the origins of the universe are found in Buddhism?

There is no story of the creation of the Earth within Buddhism, or any mention of scientific explanations for the Earth's existence. This is partly due to the fact that Buddhists do not believe in any God who has created the world. Most other religions consider there to be a designer of the universe who was involved in the process of creation.

According to Buddhist teaching, the **Buddha** refused to answer questions about the origins of the Earth. As a result, Buddhists do not tend to focus on questions that they cannot answer. Rather, the focus is on the concerns of the present and how to avoid suffering in the here and now. Nevertheless, Buddhists believe that as with life, worlds follow a cycle of decay, death and **rebirth**.

#### Is the theory of evolution compatible with Buddhism?

The Buddha taught his followers not to concern themselves with questions they could not answer but instead to focus their minds on seeking enlightenment and escaping suffering. This is to do with the here and now and not the distant past.

Many Buddhists have no problem accepting many scientific theories because there is no specific conflict with Buddhist belief, which seeks answers to different types of questions, such as how to achieve **enlightenment** and, therefore, how to escape from the cycle of **samsara**. The **Dalai Lama** summed this up:

“The actions of each of us, human or non-human, have contributed to the world in which we live. We all have a common responsibility for our world and are connected with everything in it.” - **Dalai Lama**

This implies that we are all responsible for the world in the way that it now exists, but the only part of this process that Buddhists focus on is the cause and effects of good and bad actions. This is the only part of the process what has religious significance for Buddhists.

In Buddhist countries people are likely to believe the dominant idea of how the world came about, which nowadays is mainly the scientific description.

### 1. What do Christians believe about worship?

Christian worship involves praising God in music and speech, readings from scripture, prayers of various sorts, a sermon, and various holy ceremonies (often called sacraments) such as the Eucharist. While worship is often thought of only as services in which Christians come together in a group, individual Christians can worship God on their own, and in any place.

**Origins** - Christian worship grew out of Jewish worship. Jesus Christ was a religious Jew who attended the synagogue and celebrated Jewish festivals, and his disciples were familiar with Jewish ritual and tradition.

The first obvious divergence from Judaism was making Sunday the holy day instead of Saturday. By doing this the day of Christian worship is the same as the day that Jesus rose from the dead. Jesus's promise to stay with his followers, fulfilled in the sending of the Holy Spirit, illuminated the development of Christian worship from early times.

**God is present** - So Christians regard worship as something that they don't only do for God, but that God, through Jesus's example and the presence of the Holy Spirit is also at work in.

**The Eucharist and the Word** - Church services on a Sunday divide into two general types: Eucharistic services and services of the Word.

Both types of service will include hymns, readings and prayers.

The Eucharistic service will be focused on the act of Holy Communion.

### 2. Where do Christians learn about their faith?

Christians learn about the rites of their faith by living in community with other Christians, observing and experiencing the rituals.

### 3. How do Christians express/demonstrate their faith, beliefs and spirituality? – Different styles of Christian worship, purpose of prayer and the sacraments

Christian practices vary by denomination, but common elements include a Sunday worship service, private and corporate prayer, study and reading of the Scriptures, and participation in rites such as baptism and communion (known as sacraments).

From the earliest times Christians have met together on Sunday to worship God. Sunday is the first day of the week and the day of Jesus' resurrection.

There is no audience at a service of worship, instead there is a congregation.

People have all come together in order that they might share in the offering of worship to God.

#### 4. Ethics and relationships in Christianity - similarities and differences in Christian worship across denominations

The starting point for a Christian understanding of human sexuality is the belief that all humans are made 'in the image of God'. Christians hold some key beliefs about sexual relationships, including the belief that a sexual relationship should only take place between a man and woman who are married to each other.

Christians believe sex is a gift from God intended for procreation, therefore they believe that sex should take place only within a marriage. They believe that sex is an important way for man and woman to show commitment to each other. All forms of sexual activity are forbidden outside of marriage.

#### 5. Christian attitudes to rights and responsibilities, global issues and interfaith dialogue – Christian responses to persecution of Christians

Today's natural world faces many threats, often from humans. Issues in the natural world put our world at risk of global environmental catastrophe.

##### Threat in the world:

The world today is being damaged by pollution, global warming and humanity's excessive use of natural resources. Many animal species are threatened with extinction, while the world's fast-growing human population is becoming unsustainable.

##### Christian response:

Christians believe they should care for the world and not waste its resources because:

1. the Bible teaches that we should care for the world.
2. Christians see the world as a sacred gift from God.
3. Christianity teaches that humans will be judged after death on how they treated the Earth.
4. God gave humans the responsibility of stewardship of the Earth – caring for it for future generations.

#### The Christian Declaration on Nature, Assisi 1986:

At the meeting in Assisi, Italy, religious leaders of Buddhism, Christianity, Hinduism, Islam and Judaism met to discuss how their faith could combine to save the natural world. The outcome was a shared commitment to working to help the environment. Beliefs such as the stewardship – where individuals believe they have a responsibility to care for the world – were crucial here.

##### SOWA:

God blessed them and said to them, 'Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish in the sea and the birds in the sky and over every other living creature that moves on the ground.' (**Genesis 1:28**)




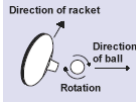
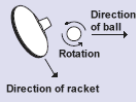
The Lord God took the man and put him in the Garden of Eden to work it and take care of it. (**Genesis 2:15**)

#### 6. Christian beliefs about religion and science:

The difference between science and religion exist in their principles and concepts. In other words, science and religion are two fields that are often distinguishable from each other when it comes to their principles and concepts. The principles applied in religion often are not applicable to science. The converse is also true. The relationship between science and religion is a very controversial one. Religion is based on faith while science is based on logic. That is why the two are often not compatible. This is also the reason for most of the disputes between the church and the scientists in the past.

##### What is the difference between Science and Religion?

- The existence of God is one of the chief concepts in religion. On the other hand, there is no proof for the existence of God according to science.
- According to religion, God created world. However, according to science, the world came into being as a result of the Big Bang.
- However, some religious beliefs have been proven true by science later such as the Big Bang Theory.
- Religion has paved the way for varied cultures and customs whereas science has paved the way for discoveries and inventions.
- Different countries across the world may have different religions for that matter. On the other hand, the scientific principles are common wherever you go.

BASIC RULES	STROKE TECHNIQUES
<p><b>1. What is the aim of table tennis?</b> The aim of table tennis is to score more points than your opponent by volleying the ball across the net and landing on the table.</p>	<p><b>6. The forehand Push</b> Stand close to the table front ways on. Using a short stroke, hit the ball at the top of the bounce (at its highest point), strike the ball on the back bottom portion so that you use slight backspin</p> 
<p><b>2. Rules of the Game?</b> If the ball touches the table surface, it is declared in If it touches the side of the table, it is declared out A player is not allowed to strike the ball in volley, unless the opponent's ball leaves the table and I strike the ball in volley behind the table, in which case the point would be given to me.</p>	<p><b>7. The Forehand Drive</b> Stand close to the table, sideways on, facing the line of play. Using a medium stroke, racket arm should move slightly upwards in direction that the ball is going to travel. During the stroke your upper body should rotate 45 degrees to the right then turn back to face the ball, moving from right foot to your left.</p> 
<p><b>3. How is table tennis scored?</b> The winner of a game is the first to 11 points. There must be a gap of at least two points between opponents at the end of the game though, so if the score is 10-10, the game goes in to extra play until one of the players has gained a lead of 2 points. The point goes to the player who successfully ends a rally, regardless of who has served. A match can consist of the number of games you like, just make sure you agree this in advance!</p>	<p><b>8. The backhand Drive</b> Using a medium stroke your racket arm should move forward and upwards. Racket angle should be slightly closed, loose wrist to help with topspin. Hit the ball at the top of the bounce, using 50% of stroke action before hitting it, and 50% of stroke action after you have hit the ball.</p> 
<p><b>4. What are the rules of service?</b> The ball rests freely on the open palm of the hand. The hand holding the ball must be above the level of the table. The ball should be projected upwards (at least 16 cm/6inches) The ball should be struck when it is falling and behind the table. The ball should first bounce in one's court, then in the opponent's court. Service can be diagonal and also in a straight line in singles Service can be replayed when : The ball touches the net or its supporting posts before touching the opponent's court ("let" service) The ball touches the net then is struck in volley by the opponent without it touching his court. The receiver was not ready at the time of service.</p>	<p><b>BASIC TACTICS AND STRATEGIES</b></p> <p><b>9. Top Spin</b> – is produced by starting your stroke below the ball and brushing your racket against the ball in an upward and forward motion. This increases the downward pressure on the ball, so after it bounces on the table it will stay low and accelerate forwards, causing it to rebound upwards off your opponents racket.</p>  <p><b>10. Back Spin</b> – is produced by starting your stroke above the ball and brushing your racket against the ball in a downward and forward motion. This decreases the downward pressure on the ball, so after it bounces on table it rises up and not go as far forward. It will cause a rebound in a downward direction off opponents' racket.</p> 
<p><b>5. What is the ready position?</b> Neutral starting position, slightly bent arm, racket in front of you so you can just reach the end of the table, feet shoulder width apart and knees bent, racket in a neutral position so you can play either a backhand or forehand.</p>	

Skills	Teaching Points
<b>1. The Straddle Jump</b>	<ul style="list-style-type: none"> <li>As you take off, bring your legs apart and extend them out to the sides of you more than 90 degrees and horizontal.</li> <li>Straighten your arms, place them out to sides like legs, and place hands on knees/legs.</li> <li>Keep your upper body and head as still as possible.</li> <li>Ensure your toes are pointed and you are looking forwards.</li> </ul>
<b>2. The Tuck Jump</b>	<ul style="list-style-type: none"> <li>As you take off, bring your arms away from your sides and extend them out in front of you and elevate your arms quickly above your head.</li> <li>Keep your upper body and head as still as possible.</li> <li>As you begin to reach the peak of the jump, bring your knees upwards and into the chest.</li> <li>Ensure that both knees are tucked tight into the chest and the shins are vertical with the floor and parallel to your back.</li> <li>Bring the arms down from the extended position and touch the hands just below the front of the knees.</li> </ul>
<b>3. The Pike Jump</b>	<ul style="list-style-type: none"> <li>As you take off, keep your legs together and straight and extend them out in front of you.</li> <li>Knees should be straight and both knees and feet together touching.</li> <li>Straighten your arms, extend them out forwards and place hands on knees/legs.</li> <li>Keep your upper body and head as still as possible.</li> <li>Ensure your toes are pointed and you are looking forwards.</li> </ul>
<b>4 Seat Drop</b>	<ul style="list-style-type: none"> <li>As you take off, bring your arms away from your sides and extend them out in front of you and elevate your arms quickly above your head.</li> <li>Begin to tilt your pelvis upwards slightly to create a natural leg lift.</li> <li>Keep straight legs and do not purposely lift them up.</li> <li>Keep your upper body and head as still as possible.</li> <li>Maintain position.</li> <li>As you begin to lose height, bring your arms down to make contact with the bed just behind your bottom and extend your feet forwards.</li> <li>Ensure you land with your back close to upright and hands tucked in just behind your bottom with the fingers pointing forwards in the same way as your toes</li> </ul>
<b>5. Swivel Hips</b>	<p>Seat drop as before – except your turn in the air (half twist) and complete another seat drop before returning to feet.</p> <p>Best way to learn is to break it up into the following progressions:</p> <ul style="list-style-type: none"> <li>Seat drop to feet, half twist to feet, seat drop to feet.</li> <li>Seat drop into half twist to feet, seat drop to feet.</li> <li>Full swivelhips</li> </ul>
<b>6. Front Drop</b>	<ul style="list-style-type: none"> <li>As you take off, bring your arms away from your sides and extend them out in front of you and elevate your arms quickly above your head.</li> <li>Hold this upright position and begin to slightly push your hips backwards as you gain height.</li> <li>Keep your arms up and fingers in a position directly above your toes.</li> <li>Ensure extension of your arms and legs and allow the hip movement to provide the forward rotation.</li> <li>Do not look down and keep your eyes focused towards an end wall.</li> <li>Keep your upper body and head as still as possible.</li> <li>Maintain position.</li> <li>As you begin to lose height, bend your arms down to form a diamond shape with the hands overlapping slightly in front of the face.</li> <li>Your legs should be slightly bent at the knee and the body held in tension for a good landing.</li> <li>At impact, ensure that your hips are in a position to help you land in approximately the same place as your take-off position.</li> </ul> <p>Progressions                  Feet to hands and knees bounce, to front drop, to hands and knees bounce to feet.</p>

**Routine 1**

- Full Twist
- Tuck Jump
- Swivel Hips to Feet
- Pike Jump
- Seat drop to Feet
- Straddle Jump
- Half Twist

**Routine 2**

- Tuck Jump
- Straddle Jump
- Seatdrop to Feet
- Half twist
- Seatdrop to Feet
- Pike Jump
- Full Twist

**Routine 3**

- Half Twist
- Straddle Jump
- Swivel Hips to Feet
- Tuck Jump
- Seatdrop to Feet
- Pike Jump
- Full Twist

**Routine 4**

- Straddle Jump
- Swivel Hips to Feet
- Pike Jump
- Front Drop to Feet
- Full Twist
- Tuck Jump
- Straddle Jump



**BASIC RULES**

**1. What is the aim of wallball?** Wallball is a simple activity played by hitting a ball against a wall with your hands. The aim of wallball is to score more points than your opponent by hitting a ball against a wall and landing inside the correct area on the floor.

**2. When is a point won?** A point is won by you if your opponent is unable to return the ball to the wall (e.g. they miss the ball, they hit the ball but it misses the wall, or the ball hits the floor before the wall).

**3. How is wallball scored?** The winner of a game is the first to 11, 15 or 21 points or played a timed game (commonly 15/20 minutes). There must be a gap of at least two points between opponents at the end of the game though, so if the score is 10-10, the game goes in to extra play until one of the players has gained a lead of 2 points. The point goes to the player who successfully ends a rally, regardless of who has served.  
A match can consist of the number of games you like, just make sure you agree this in advance!

**4. What is the ready position?** Neutral starting position, feet shoulder width apart and knees bent, both arms in a neutral position so you can play either.

**5. What is the correct equipment needed to play wallball?** It is recommended to use an official wallball when playing the sport, however, any ball that can be struck safely with the hand can be used e.g. tennis ball, soft play ball, etc. Wallball gloves are optional and usually the player will decide if needed or not. Goggles are required for official tournaments.

**6. Do we need a referee to play wallball?** Wallball is a self-contained game and players are also expected to be referees, giving them experience of controlling a game, making decisions and taking ownership of their actions. It is recommended that the loser referees the next match.

**7. How do we start the game?**  
The game will start by one of the players serving against the wall and the ball must return beyond the service line and inside the court.

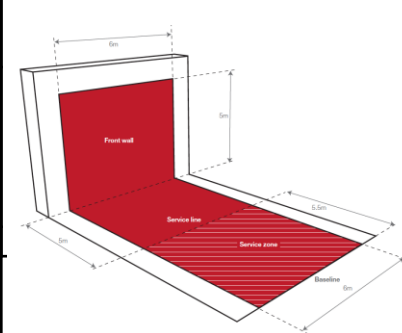
**BASIC TACTICS AND STRATEGIES**

**8. The Target Serve**  
Most professional players believe that a well-controlled serve is the most important shot in the game. Services that rebound and bounce low near the short lines makes it even more difficult for the retriever, specially if he/she does not know which the direction the serve is being aimed.



**9. What are the pass shots?**  
The pass shot is just what the name implies, a shot that is hit past the opponent. Control the passing angles is very important in order to move the opponent out of the advantageous front court position. These shots are usually classified as “cross court” and “down the line” passes.

- 10. Important tactics to win games:**
- a) Always serve first if you win the toss at the beginning of the game
  - b) Serve deep to push your opponent back
  - c) Dominate the centre of the court
  - d) Kill the ball, by hitting it low at the wall
  - e) Hit the ball down the side of the court to move the players away from the centre
  - f) Hit wide angles to push opponents off the court
  - g) Hit to the player weaker hand



**Hardware**

- Definition
- Input devices
- Process devices
- Storage devices
- Output devices
- Von Neumann architecture

**Memory**

Purpose  
Effect on Performance  
Random Access Memory (RAM) (Volatile)  
Read Only Memory (ROM)(Non-volatile)  
Virtual memory  
Flash memory  
Read/Write operations

**Binary logic**

- Why binary? (transistors)
- Logic gates
- Logic Statements:  
**P = T AND NOT(D)**  
Truth Tables

**Secondary storage**

Magnetic hard disk  
Optical disk  
Flash memory  
Cloud Storage  
Non-volatile  
Internal/Removable  
*Considerations for selecting storage:*  
Capacity / Speed / Portability / Durability / Reliability

**Input devices**

Move data into the computer

- Keyboard
- Mouse
- Touch screen
- Microphone
- Camera
- Sensor
- Bar code scanner
- Foot mouse
- Accelerometer
- GPS

**Computer Systems**

The Input-Process-Output model  
Different systems, pros & cons:

- Input-Process-Output model
- General-purpose systems
- Embedded systems
- Expert systems

**Output devices**

Move data out of the computer

- Monitor
- Printer
- Plotter
- Speakers
- Actuators
- LEDs

**Security**

- Malware (viruses)
- Patching
- Authentication
- Access Levels
- Encryption
- Back-ups

Storing data... STORAGE DEVICES

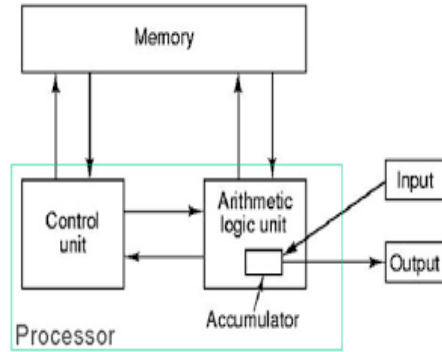


**Central processing unit (CPU)**

- Arithmetic & logic unit
- Control unit
- Registers (Memory Unit)
- Fetch-decode-execute
- Buses and their purposes
- The boot sequence

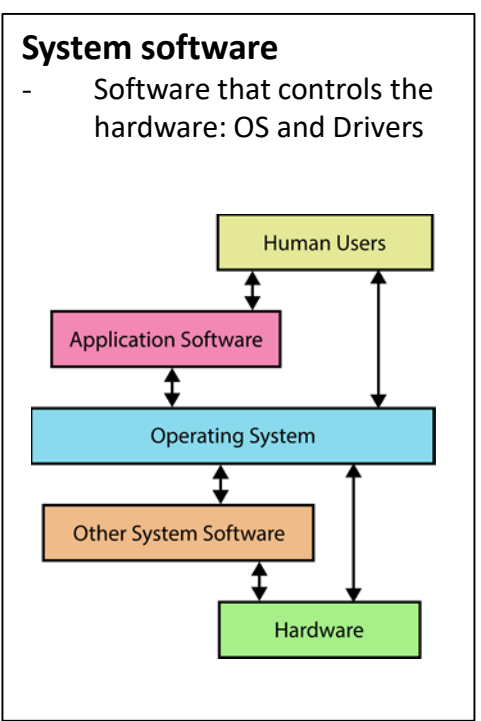
*Features affecting performance:*

- Clock speed (MHz, GHz)
- Cache memory
- Multiple cores



**Programming software**

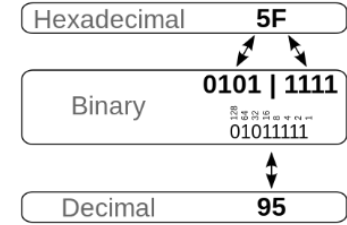
Editors / IDEs  
Translators  
Compiler  
Interpreter  
Assembler  
Pros and Cons of different translators



**Types of Software**

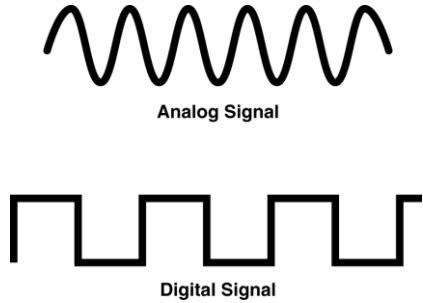
- **Applications:** Software for the End-User
  - Word processor
  - Spreadsheets
  - Image Editor
  - SIMS
  - Ticket booking system
- **Utilities**
  - Antivirus
  - Firewall
  - System clean up
  - Defragmentation
  - Task Manager

- ### Number Bases
- Binary – base 2
  - Denary – base 10
  - Hexadecimal – base 16

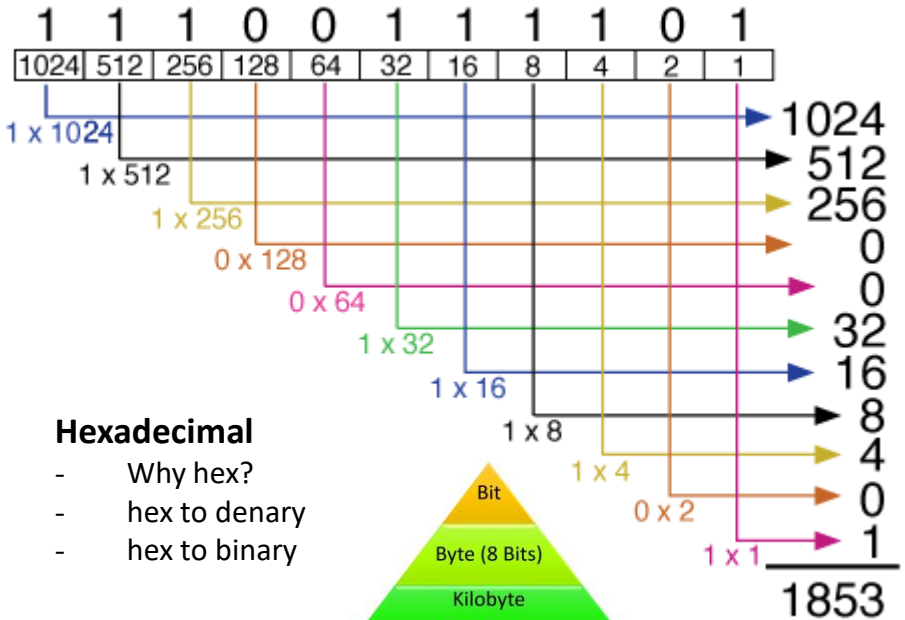


- ### Binary Manipulation
- Addition
  - Subtraction
  - Logical Shifts
  - Arithmetic Shifts

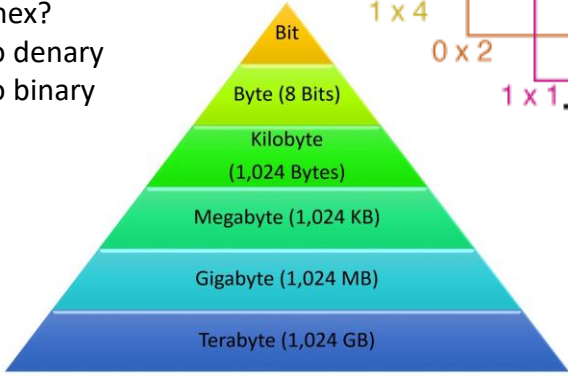
- ### Sound
- Analogue to Digital
  - Metadata
  - Sample rate & bit depth
    - Quality of sound
    - File size
  - Bit rate



- ### Using Binary
- Why? (transistors etc.)
  - Binary to denary
  - Denary to binary
  - Units:
    - Nibble
    - Byte
    - Kilobyte
    - Megabyte
    - Gigabyte
    - Terabyte
  - Sign and Magnitude
  - 2's Complement

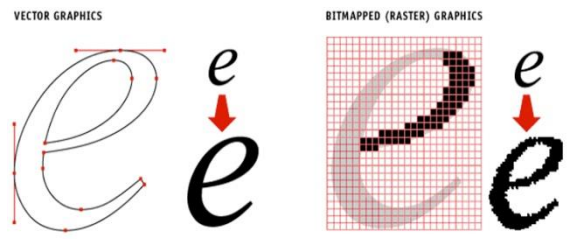


- ### Hexadecimal
- Why hex?
  - hex to denary
  - hex to binary







- ### Images
- Stored in binary
  - Metadata
  - Bitmap images
    - Pixels
    - Colour depth
    - Resolution
  - Vector images
  - File sizes

<b>Opcode</b>	The part of an instruction that tells the CPU the operation to be Executed.
<b>Operand</b>	The part of the instruction that tells the CPU that data or which to Apply the opcode.



Devised: Explanation	Devised: How Assessed
<p>Devising is a way of creating a drama without starting with a script. It usually begins with an idea and a stimulus. Actors and designers research, improvise, develop and shape scenes until they have a drama ready for an audience. The play you create will use either the techniques from a theatre practitioner (e.g. Brecht or Stanislavski) or in the style of a theatre genre (e.g. Physical Theatre or Theatre in Education). You will research your chosen topic, create a performance and document the development in a devising log portfolio. You will then write an evaluation of the final performance. This knowledge organiser will focus on Theatre in Education.</p> <p><b>Higher Level Challenge</b> In order to gain the most marks in your performance exam and your portfolio remember to consider and refer to the following contexts:</p> <ul style="list-style-type: none"> <li>▪ <b>Social Context:</b> A social setting or environment which people live.</li> <li>▪ <b>Historical Context:</b> A part of history which has happened (this could be when the play was set)</li> <li>▪ <b>Political Context:</b> The political party in power at the time and how this impacted on society.</li> <li>▪ <b>Cultural Context:</b> How culture can effect behaviour, choices and decisions for characters.</li> </ul>	<p><b>Performance</b> A performance live on stage which is designed to realise your original intentions.</p> <p><b>Devising Log : Portfolio</b> A record of the creation and development of your ideas to communicate meaning through and the development of your play.</p> <p><b>Devising Log: Evaluation</b> An analysis and evaluation of your individual contribution to the devising process and the final devised piece.</p>

Theatre in Education: A Brief History	Theatre in Education: Definition	The main elements
<p>After the Second World War, people became aware that drama or theatre techniques might be useful as a way of fostering effective learning in schools. This is known as Theatre in education or 'TIE' for short. Brian Way, who founded the Theatre Centre in 1953, was an early practitioner, and influenced the team, including Gordon Vallins, who established TIE at the Belgrade Theatre, Coventry in 1965. Their work was so influential that it spread nationwide.</p>  <p>The idea of a high impact performance for a specifically targeted school audience became hugely popular. Because the audiences are small, they can be encouraged to participate through work in role and through debate. Projects can be supported with resource materials and training or support for the students' teachers.</p> <p>Originally, a Theatre in education project would probably be centrally funded. These days, companies have to seek their funding from individual schools so they have to provide the product the schools want.</p>	<p>Theatre in Education (also called T.I.E.) is a play with an educational focus designed to teach school audiences (or other groups) about a certain issue or topic.</p> <p>You may have seen a Theatre in Education play in your school. They cover topics such like the following:</p> <ul style="list-style-type: none"> <li>▪ Stranger Danger</li> <li>▪ Road Safety</li> <li>▪ Internet Safety</li> <li>▪ How to tackle bullying</li> </ul> 	<p>It's important for you to remember the following characteristics that typify T.I.E.:</p> <ul style="list-style-type: none"> <li>▪ There is a clear aim and educational objective running throughout.</li> <li>▪ A small cast so actors must be versatile and often have to multi-role.</li> <li>▪ A low budget so actors often play instruments too.</li> <li>▪ The production must be portable so the design is simple and representational.</li> <li>▪ They explore issues from various viewpoints, so we can see the effect of an action upon a range of people.</li> <li>▪ There is some level of audience involvement.</li> <li>▪ They are rarely wholly naturalistic because direct address or narration is used to engage the audience.</li> <li>▪ The costumes are simple and representational, especially if actors have to multi-role.</li> <li>▪ They may include facts and figures to educate the audience.</li> <li>▪ They may have a strong message or moral running throughout.</li> </ul> 

<p><b>Planning a T.I.E. Performance</b></p> <p>When planning a Theatre in education piece companies must take into account:</p> <p>The <b>age</b> and <b>size</b> of the <b>audience</b>. The performance needs to suit the audience.</p> <p>The <b>venue</b>, its <b>size</b> and <b>facilities</b> such as lighting and whether there are any particular restrictions, eg they might not be allowed to tap dance as taps would damage the floor.</p> <p><b>Health and Safety issues</b>. They'll probably have to complete paperwork for this. It could cover anything from risk assessment for the journey to the venue, to checking there are no asthmatics in the audience if they plan to use dry ice.</p> <p><b>Teaching and Learning Objectives</b>. What they have been asked to do and how they can deliver what's required.</p> 	<p><b>Ideas for Engaging a Young Audience</b></p> <p><b>A Quest</b> A quest is a concept all will recognise and is familiar from superhero stories and fairy tales. Somebody needs to be rescued, evil must be defeated or there is treasure to discover. If you're going to involve a large group of children it's probably best to have a number of mini missions that they can be a part of, leading up to the final triumph. You could set a challenge involving number tasks for five-year-olds to solve. It's a good idea to include a little art work with this age group, if the size of the group and the time available allow this. Art work would sustain engagement and help them see where their imagination is taking them.</p> <p><b>A modern fairy story for 7 to 11-year-olds</b> Children in this age range will be familiar with most of the well-known fairy tales and many of them will have come across the idea of adaptation. Your task will be to take them a little further with the story so that they see its structure and the ideas it contains. Cinderella is a story about bullying being punished. That's readily transferable, as is the ball or party idea. Maybe the prince took a photo of Cinderella on his mobile phone and is trying to find her on social media networks. The ugly sisters could go online and pretend that they are Cinderella which could serve as a warning to children that online interaction can be dangerous.</p>
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<p><b>Theatre in Education Skills</b></p>	
<p><b>Target Audience</b> It is important that the creators and performers in a T.I.E. play know exactly who their audience are so that the materials they produce are appropriate and beneficial for the specific audience.</p> <p><b>Specific Message</b> T.I.E. plays must have a specific message that they are teaching the audience.</p> <p><b>Facts</b> T.I.E. plays are designed to educate the audience about a specific topic. It is therefore essential that the information given out is accurate. Facts can be used to help devise the play and they should also be included within the performance</p> <p><b>Communal Voice/Chorus</b> Chorus is when the performer use the same movement and say the same lines. Communal voice is a variation of Chorus used in T.I.E. The performers speak with 'one voice' and usually reinforce the message of the play.</p> <p><b>Where to get help.</b> At the end of watching a T.I.E. play, the audience should know what to do if they face a similar situation to the characters in the play. Where do they go for help/support?</p> <p><b>Directly Engaging the Audience:</b></p> <ol style="list-style-type: none"> <li><b>Direct Address</b> – The actor or character breaks the forth wall and speaks directly to the audience.</li> <li><b>Forum Theatre</b> – The audience are given tasks to do which involve them within the performance.</li> </ol> <p><b>Episodes</b> A series of scenes which can be related or unrelated.</p> <p><b>Placards/PowerPoints</b> A placard is a sign presented onstage. Using placards might be as simple as holding up a card or banner. Multimedia or a PowerPoint slideshow can also be used for this effect. For example Scene One – The Bad News</p>	<p><b>Narration</b> Narration is used in T.I.E. to guide the audience through the plot. There are two types of narration as follows:</p> <ol style="list-style-type: none"> <li><b>In role</b> The character narrates in first person For example "My name is Little Red Riding Hood. I live in the forest".</li> <li><b>Third Person/Out of role/All Knowing</b> Commenting upon a character as an actor is a clear way of reminding the audience of theatricality. The narrator speaks in third person. For example "This is Little Red Riding Hood.. She lives in the forest".</li> </ol> <p><b>Stereotypical characters</b> These are easily recognisable stock characters. They are often exaggerated and represent a type of character rather than a specific individual. For example, the mum, the teenager, the teacher.</p> <p><b>Multi-roling</b> Multi-roling is when an actor plays more than one character onstage. The differences in character are marked by changing voice, movement, gesture and body language but the audience can clearly see that the same actor has taken on more than one role. This means the audience are more aware of the fact that they are watching a presentation of events. Cross-sex casting is also possible in Epic theatre as we don't need to suspend our disbelief.</p> <p><b>Split-role</b> This is where more than one actor plays the same character. For instance, the actor playing the main character might rotate from scene to scene. This keeps that character representational and inhibits emotional involvement and attachment on the part of the audience.</p> <p><b>Basic Set, Props, Lighting and sound</b> T.I.E. has to travel to a variety of performance venues. Therefore actors use minimal set and props. They usually carry their own sound equipment with them and rarely use stage lighting.</p> <p><b>Song /Dance/Movement</b> Song, dance and movement are often used in T.I.E. plays to engage the audience and make the performances more visually/orally interesting.</p>

Gaelic Folk/Rock Music	African/Celtic/Dance
<p><b>Set Work:</b> Skye Waulking Song, Capercaille</p> <p><b>Instruments:</b> Rock: Synthesiser, Wurliitzer Piano; Bass; Drum kit. Folk: violin; accordion; pipes; bouzouki.</p> <p><b>Musical features:</b> 12/8 (12 quavers in a bar, grouped in sets of 3s); simple modal harmony; strophic form; pentatonic vocals</p>	<p><b>Set Work:</b> Release, Afro Celt Sound System</p> <p><b>Instruments:</b> African – Kora, talking drum; Celtic – hurdy-gurdy, uilleann pipes, bodhran, fiddle, whistle, accordion; Dance – vocals, dance, samples, drum machine, electric piano.</p> <p><b>Musical features:</b> Heterophonic texture; loops; repetitive chords; drone; nonsense syllables; improvisation; strophic; syncopation; riffs.</p>

Salsa – Latin Music/Jazz	Bhangra – Indian folk/Hindi film music/Western Pop
<p><b>Set Work:</b> Salsa Y Sabor, Tito Peunte.</p> <p><b>Instruments:</b> Latin Percussion (bong, conga, timbales, cowbells); Jazz piano, brass &amp; woodwind</p> <p><b>Musical features:</b> clave rhythms; syncopation; simple harmony; call &amp; response; simple melodies followed by improvisations; short riffs</p>	<p><b>Set Work:</b> Mundian To Bach Ke, Panjabi MC</p> <p><b>Instruments:</b> dhol; tabla; Punjab fiddle; sitar; electric guitar;</p> <p><b>Musical features:</b> triplets; simple harmony; Indian &amp; electronic instruments; fast tempo; chaal rhythm pattern; ornamentation; Verse-chorus structure.</p>

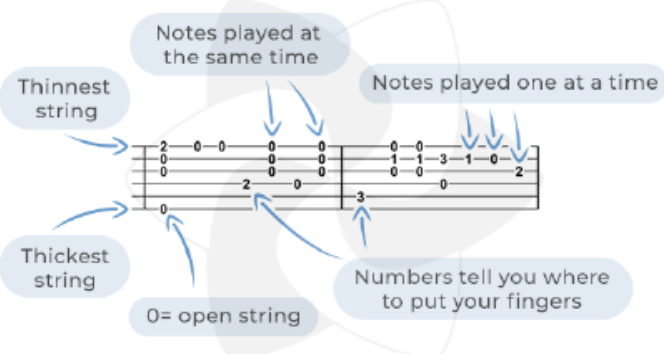
Compositional Techniques		
Starting Points	Parts/Structure	Developments
<ol style="list-style-type: none"> <li>Pick your styles – identify key musical features you want to include.</li> <li>Experiment with these coming up with a number of musical ideas, melodic, rhythmic and harmonic.</li> <li>Listen to examples of the styles or other fusions – identify the features used and HOW they are used.</li> </ol>	<ol style="list-style-type: none"> <li>Think about your different parts:                             <ul style="list-style-type: none"> <li>Melody</li> <li>Chords</li> <li>Bassline</li> <li>Rhythm</li> <li>Vocals</li> </ul> </li> <li>Develop your piece into a clear structure:                             <ul style="list-style-type: none"> <li>Strophic (all verses) with instrumentals in the middle</li> <li>Verse-Chorus form</li> <li>repeated patterns/motifs</li> <li>Jo, Ha, Kyu</li> </ul> </li> </ol>	<p>How can you add contrast? How could you adapt and extend your composition?</p> <ul style="list-style-type: none"> <li>Harmony parts</li> <li>New melodies</li> <li>Change of key</li> <li>Change of texture</li> <li>Repetition</li> <li>Bridge/instrumental/improvisation section</li> </ul>

**KEYWORDS**

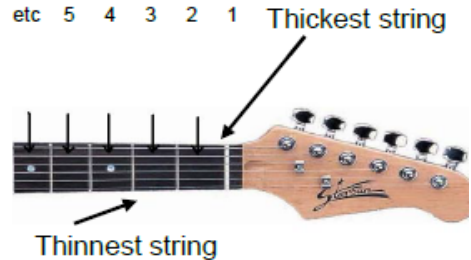
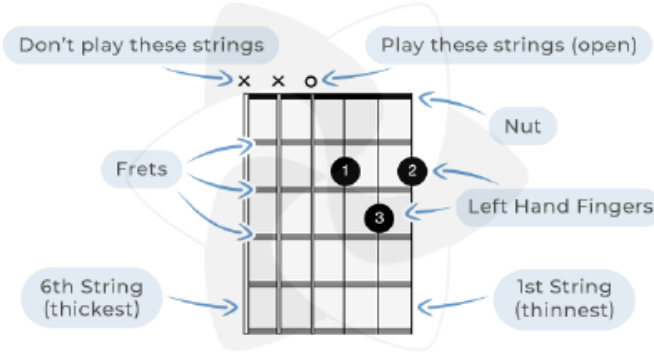
<b>1-Ostinato</b> - a repeated pattern.	<b>7- Motif</b> – a short idea (melodic or rhythmic).	<b>13-Rag</b> – an Indian scale.
<b>2-Layering</b> – parts build up on top of each other.	<b>8-Pentatonic</b> – 5-note scale.	<b>14-Tala</b> – Indian rhythmic pattern.
<b>3-Polyrhythms</b> – many rhythms interweaving.	<b>9- Static Harmony</b> – slow moving chord changes.	<b>15-Drone</b> – a continuous low note.
<b>4-Call and response</b> – singer singers melody responded to by a group.	<b>10-Accompaniment</b> - a musical part which supports or partners an instrument, voice, or group.	<b>16-Off-beat</b> – playing on the unaccented notes in a bar.
<b>5-Improvisation</b> – making something up on the spot, within a given structure.	<b>11-Heterophonic texture</b> – simultaneous variation of a melody line.	<b>17- Jo, Ha, Kyu Structure</b> – Slow intro in free rhythm; pulse develops; fsater.
<b>6-Syncopation</b> – playing on/stressing the weak beat.	<b>12- Chord</b> – 2 or more notes played simultaneously.	<b>18-Riff</b> – short repeated phrase in popular music.

KEYWORDS		Guitar Tab	
1- Scale – a bassline that moves by step.		<b>What is Guitar Tab?</b>	<ul style="list-style-type: none"> <li>• Tab or tablature is a way of notating or writing down music.</li> <li>• It shows a graphic representation of the strings and frets on the guitar fretboard.</li> <li>• Each note is indicated by placing a number, which indicates the fret to play, on the appropriate string.</li> </ul>
2- Riff – A chord structure of 12-bars using chords I, IV and V.		<b>The Lines</b>	<ul style="list-style-type: none"> <li>• When reading guitar tab you will see six lines.</li> <li>• The thickest string on the guitar or bass is the one nearest your chin, with the thinnest string being the closest to the floor.</li> </ul>
3- Chord – 2 or more notes played simultaneously.		<b>The Numbers</b>	<ul style="list-style-type: none"> <li>• The numbers show which fret to play – where the number is written will show which string is to be played.</li> </ul>
4- Improvisation – making something up on the spot, within a given structure.		<b>Frets</b>	<ul style="list-style-type: none"> <li>• Frets are the metal strips that run across the fretboard.</li> </ul>
5- Guitar TAB –musical notation indicating fingering rather than musical pitches.			
6- Strumming - sweeping the thumb or a plectrum up or down across the strings.			

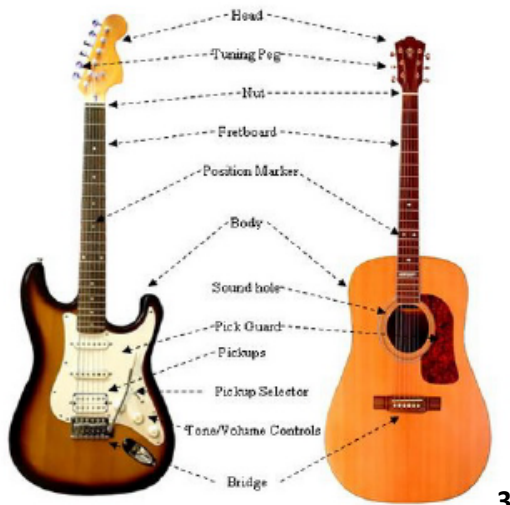
### READING TAB



### READING CHORD BOXES



<b>What are the similarities between the 2 types of guitar notation?</b>	They are pictorial representations of the guitar They show the 6 strings (4 on bass) They show which fret to push down They show which strings to pluck/strum
<b>What are the differences between the 2 types of guitar notation?</b>	TAB shows the guitar horizontally while chord boxes show the guitar vertically The numbers on TAB show which frets to press down The numbers on chord boxes say which fingers to use On TAB you only play the strings with numbers on On chord boxes you play all strings, unless they have a 'x' above them
<b>Chords are generally played by which guitarist?</b>	Rhythm guitar
<b>Riffs are played by which guitarists?</b>	Bass & lead guitars
<b>What are the names of the strings (from thickest to thinnest)?</b>	E – A – D – G – B – E (Eddie Ate Dynamite Good Bye Eddie)



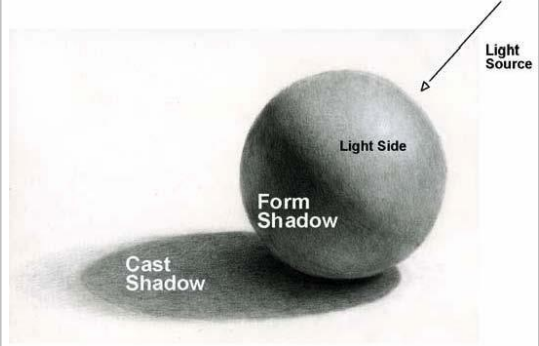
**A. Key Terms**

Keyword	Description
1. Tone	This refers to the lightness or darkness of something. This could be a shade or how dark or light a colour appears. Tones are created by the way light falls on a 3D object. The parts of the object on which the light is strongest are called <b>highlights</b> and the darker areas are called <b>shadows</b> .
2. Texture	This is to do with the <b>surface quality</b> of something, the way something feels or looks like it feels. There are two types of texture: <b>Actual texture</b> really exists, so you can feel it or touch it; <b>Visual texture</b> is created using marks to represent actual texture.
3. Pattern	A design that is created by repeating lines, shapes, tones or colours. The design used to create a pattern is often referred to as a <b>motif</b> . Motifs can be simple shapes or complex arrangements
4. Media	The materials and methods used to produce a piece of art or design.
5. Composition	how objects or figures are arranged in the frame of an image
6. Annotation	Key information alongside your work. A record of your experiences, thoughts and emotions connected to an image.
7. Refinement	Developing your idea or image

**B. Command Words**

Keyword	Description
8. Study	To examine, consider, investigate, research and show an in-depth understanding of what you have found or experienced.
9. Explore	To investigate, examine and look into with an open mind about what might be found and developed.
10. Create	To conceive, make, craft or design something new or invent something.
11. Analyse	To examine in depth, study thoroughly, question, investigate and consider your own opinion or visual investigation of something






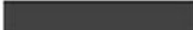
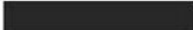
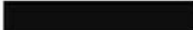
**D. Tonal Shading**



- 13. **Cast Shadow:** The shadow created by an object
- 14. **Form Shadow:** The shadow on an object
- 15. **Light Side:** The area of an object with the most light
- 16. **Light Source:** The Direction of the light in an image.

**C. Value Scale**

**Denman Ross nine step value scale**

Value	Sample	Value Name
1		white
2		high light
3		light
4		low light
5		midvalue
6		high dark
7		dark
8		low dark
9		black

12. This is called a **tonal scale**. You will need to identify different light and dark values.



**Key words: Nutrients and Eatwell Guide**

- Wholegrain** - All parts of the cereal grain is used.
- Nutrient** - Chemical in food that give nourishment.
- Energy** - the strength needed for physical effort
- Immune system** - the body's defence against infectious diseases
- Clotting** - the process that blood undergoes to prevent bleeding
- Antioxidant** - a molecule that is able to stop the oxidation process in other molecule
- Haemoglobin** - a protein responsible for transporting oxygen in the blood
- Saturated fats** - Type of fat mostly from animal sources
- Absorb** - to take in or soak up
- Maintenance** - routines that are necessary for keep the body in good health.
- Diabetes** - a condition that causes a person's blood sugar level to become too high.
- Obesity** - diet related disease where the body contains too much stored fat.
- Cardiovascular disease (CHD)** - The narrowing of the arteries that supply your heart with oxygen rich blood, due to the build up of fatty deposits within the artery walls

The Eatwell Guide is the UK Healthy Eating Model. It shows what we should eat as a balanced diet. The size of the sections represents the proportion of our diet that particular food group should make up.

- Starchy Foods**
- Provide slow release carbohydrate used by the body for energy
- Choose wholegrains for increased fibre (good digestion, reduced risk of heart disease)

37%

**Water Intake**

A balanced diet must include water, it is required for nearly all brain and other bodily functions

**Fats, Oils & Spreads**

- Provide fat soluble vitamins A,D,E & K
- Are high in calories & energy so keep use to a minimum
- choose unsaturated oils like olive oil

1%

39%

**Fruits & Vegetables**

- Eat 5 portions a day!
- Choose a variety
- Provides fibre for healthy digestion
- Provides vitamins and minerals

3%

12%

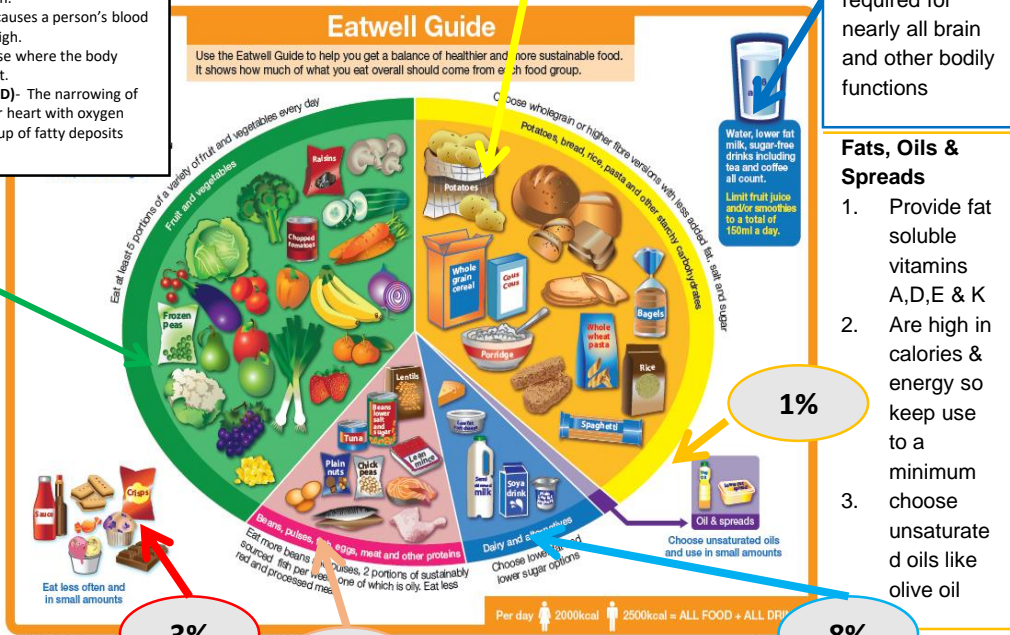
**Beans, Pulses, Eggs, Meat, Fish**

- Provide protein for growth, repair and maintenance of body cells
- Choose a combination of plant proteins
- Avoid eating too much processed meat like bacon and sausages

**Dairy Foods**

- Provide calcium for healthy bones, teeth and nails
- The body needs Vitamin D to absorb calcium effectively

8%



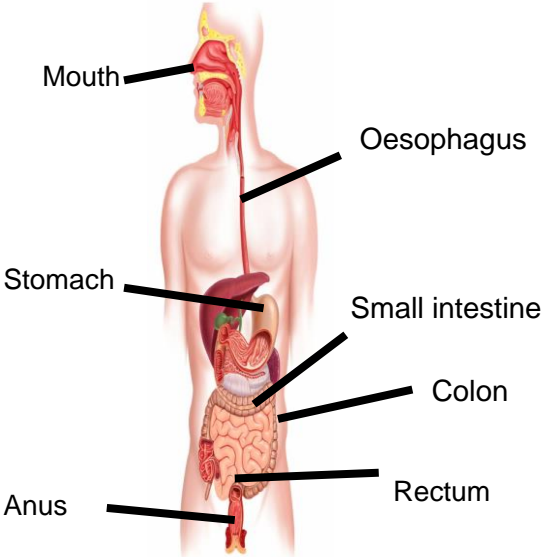
Nutrient	Function in the body
<b>1. Macronutrient: Carbohydrates</b> (Starch, sugar, fibre)	Needed by the body because they are the main source of energy in the body for movement. Needed by the body for digestion. (fibre0
<b>2. Macronutrient: Protein</b>	Needed by the body for growth Repair the body when it is injured Gives the body energy ( only if the body doesn't have enough carbohydrates
<b>3. Macronutrient: Fat</b>	Insulates the body from the cold and provides a 'cushion' to protect bones and organs such as the kidneys The body breaks down the fat stores to release energy Vitamins A, D, E and K are fat soluble vitamins so are stored in our body fat and released when needed.
<b>1. Micronutrient: Vitamin A</b>	Maintains normal vision Good maintenance of skin and the mucus membranes Helps with a healthy immune function <b>Fat soluble</b>
<b>2. Micronutrient: Vitamin D</b>	Absorption and use of calcium Maintenance and strength of bones and teeth <b>Fat soluble</b>
<b>3. Micronutrient: Vitamin E</b>	Antioxidant that helps protect cell membranes Maintains healthy skin and eyes <b>Fat soluble</b>
<b>4. Vitamin K</b>	Normal clotting of the blood <b>Fat soluble</b>
<b>1. Micronutrient: Vitamin B complex</b>	Healthy nervous system Energy release from foods <b>Water soluble</b>
<b>2. Micronutrient: Vitamin C</b>	Absorption of iron Production of collagen that binds connective tissues An antioxidant <b>Water soluble</b>
<b>1. Mineral Calcium</b>	Strengthens bones and teeth Bones are able to reach peak bone mass Clots blood after injury Promotes nerves and muscles to work properly
<b>2. Mineral Iron</b>	Supports the production of haemoglobin in red blood Helps transport oxygen around the body Vitamin C is required for absorption of iron

Food high in sugar are saturated fats are not part of a healthy diet and should be eaten in moderation

- increased risk of weight gain/obesity
- diabetes
- tooth decay cardiovascular disease (CHD)

	Keyword	Definition
1	Gluten	A protein found in wheat flours, that makes the dough elastic
2	Coeliac disease	An intolerance to Gluten which causes the inflammation of the intestine walls and damage them making nutrient absorption more difficult for the body
3	Amylase	Releases when starch is heated and enables sauces to thicken
4	Viscosity	The thickness of a liquid
5	Gelatinisation	When starch particles swell and burst, thickening a liquid
6	Durum wheat	A yellowy, high-protein wheat that is grown especially for making pasta
7	Milling	The process which separates the different parts of the grain
8	Semolina	A coarse-ground flour which comes from wheat
9	Whole grain	The whole seed in its natural state, none of the layers have been removed
10	Gluten -free	Products which does not have any wheat, rye, barley and sometimes oats
11	Al dente	'Firm to the bite' describes the texture of pasta
12	Extraction Rate	The keyword for how much of the original wheat grain is in the flour and used in products
13	Fermentation	A chemical breakdown of sugar to acid, gas or alcohol by bacteria, yeasts or other microorganisms
14	Proving	When bread is left to rest in a warm, damp environment to enable fermentation
15	Germ	Part of the grain which provides fat and B vitamins, it is also used to grow new plants
16	Glutenin and Gliadin	The two names of the proteins which are kneaded and stretched in the production of bread.
17	Harvesting	The process of gathering or reaping crops
18	Knocks back	To re-knead the dough which knocks out some of the carbon dioxide allowing the yeast to produce more carbon dioxide
19	Starch	A polysaccharide and a complex carbohydrate
20	Strong flour	A type of flour with the highest gluten content
22	Unleavened	Refers to bread, cake and biscuits made without raising agents
23	White flour	Contains just the endosperm, the bran and the germ have been removed
24	Yeast	A microorganism belonging to the fungi family, made up of single oval cells that reproduce by budding, this means they multiply and the one cell divides into two
25	Weevils	Tiny black bugs that can live and breed in flour






### The digestion process




The gastrointestinal (GI) tract comprises:

- mouth;
- oesophagus;
- stomach;
- small intestine – duodenum, jejunum and ileum;
- liver and gall bladder;
- pancreas;
- colon
- anus.


**MATERIALS AND SOLDERING PROCESS**

<p><b>M1 Manufactured</b>— make (something) on a large scale using machinery.</p> 	<p><b>M2 Switch</b>— a device for making and breaking the connection in an electric circuit.</p> 	<p><b>M3 Battery</b>—a container in which chemical energy is converted into electricity and used as a source of power.</p> 	<p><b>M4 Motor</b>— a machine, especially one powered by electricity that supplies motive power for a device with moving parts.</p> 	<p><b>S1 Strip the wires</b>—Use the wire strippers to remove the insulating plastic</p> 
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1. Measure the wood carefully with a steel rule. Draw a line with a sharp pencil.




2. You must use a tri square to draw a 90° line on the MDF



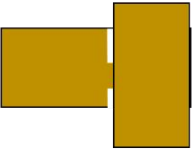
3. You must cut in a waste part of the wood. Draw TWO lines (black) and cut in the middle (white).




4. Cut the wood using a bench hook and tenon saw

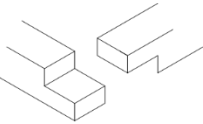


5. Using the piece of wood as a measure, draw around the piece.



6. Using the tenon saw remove half the wood to make the half joint.





**Types Of Wood**


Softwood—noun The wood from a conifer (such as pine, fir, or spruce) as distinguished from that of broadleaved trees.




Hardwood—noun The hard, compact wood or timber of various trees, as the oak, cherry, maple, or mahogany.

**CAR PARTS**



**Axel** - a rod or spindle (either fixed or rotating) passing through the centre of a wheel or group of wheels.











**Chassis** - the base frame of a car, carriage, or other wheeled vehicle.

Motor - a machine that supplies motive power for a vehicle or for another device with moving parts.

**(T) TOOLS AND EQUIPMENT**

<p>Coping saw – cutting curves</p> 	<p>Tenon Saw – cutting straight</p> 	<p>Bench hook – holding wood</p> 	<p>Glass paper – file filing</p> 
<p>Hand file – rapid filing</p> 	<p>Pillar drill – making holes</p> 	<p>Steel rule – accurate measure</p> 	<p>Disc sander – rapid sanding</p> 

**Properties and characteristics of materials**

	Absorbency	To be able to soak up liquid easily.
	Strength	The capacity of an object or substance to withstand great force or pressure.
	Elasticity	The ability of an object or material to resume its normal shape after being stretched or compressed; stretchiness.
	Plasticity	The quality of being easily shaped or moulded.
	Malleability	To be able to be hammered or pressed into shape without breaking or cracking.
	Density	The quantity of mass per unit volume of a substance
	Effectiveness	The degree to which something is successful in producing a desired result; success.
	Durability	The ability to withstand wear, pressure, or damage.

**Understand the making Process**

1 Preparation	Drawing, CAD, sketches, plans.
2 Marking Out	Pencil, scribe, steel rule, tri square, marking gauge, calipers, centre punch.
3 Modification	Saw, jigsaw, scroll saw, laser cutter, pliers, hammer, drill, file, glass paper.
4 Joining	Riveting gun, spanner, screwdriver, hot glue, gun, soldering iron, nail gun.
5 Finishing	Hand sander, glass paper, disc sander, buffing wheel, polish, spray paint, varnish.

**Health & Safety Legislation**

Health and Safety at work Act	Personal Protective Equipment	Manual Handling Operations	Control of Substances Hazardous to Health	Reporting of Injuries RIDDOR
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### Semana 1

#### De vacaciones On holiday

¿Adónde fuiste de vacaciones?	Where did you go on holiday?
el año pasado	last year
el verano pasado	last summer
Fui a...	I went to...
Escocia	Scotland
España	Spain
Francia	France
Gales	Wales
Grecia	Greece
Inglaterra	England
Irlanda	Ireland
Italia	Italy
¿Con quién fuiste?	Who did you go with?

### Semana 2

Fui con...	I went with...
mis amigos/as	my friends
mi clase	my class
mi familia	my family
mis padres	my parents
¿Cómo fuiste?	How did you get there?
Fui/Fuimos en...	I/We went by...
autocar	coach
avión	plane
barco	boat/ferry
coche	car
tren	train
No fui de vacaciones.	I didn't go on holiday.

### Semana 5

#### ¿Cuándo? When?

luego	then	el último día	on the last day
más tarde	later	otro día	another day
después	afterwards	por la mañana	in the morning
el primer día	on the first day	por la tarde	in the afternoon

### Semana 6

#### ¿Cómo te fue? How was it?

Fue divertido.	It was fun/funny.	Me gustó.	I liked (it).
Fue estupendo.	It was brilliant.	Me encantó.	I loved (it).
Fue fenomenal.	It was fantastic.	¿Por qué?	Why?
Fue flipante.	It was awesome.	porque	because
Fue genial.	It was great.	Hizo buen tiempo.	The weather was good.
Fue guay.	It was cool.	Comí algo malo y vomité.	I ate something bad and vomited.
Fue regular.	It was OK.	Llovió.	It rained.
Fue un desastre.	It was a disaster.	Perdí mi pasaporte/ mi móvil.	I lost my passport/ my mobile.
Fue horrible.	It was horrible.		
Fue horroroso.	It was terrible.		
Fue raro.	It was weird.		

### Semana 3

#### Exclamaciones Exclamations

¡Qué bien!	How great!	¡Qué aburrido!	How boring!
¡Qué bonito!	How nice!	¡Qué horror!	How dreadful!
¡Qué divertido!	What fun!/How funny!	¡Qué lástima!	What a shame!
¡Qué guay!	How cool!	¡Qué mal!	How bad!
¡Qué rico!	How tasty!	¡Qué rollo!	How annoying!
¡Qué suerte!	What luck!/How lucky!		

### Semana 4

#### ¿Qué hiciste? What did you do?

¿Qué hiciste en tus vacaciones de verano?	What did you do on your summer holiday?	No nadé en el mar.	I didn't swim in the sea.
Bailé.	I danced.	El último día de tus vacaciones, ¿qué hiciste?	What did you do on the last day of your holiday?
Compré una camiseta.	I bought a T-shirt.	Bebí una limonada.	I drank a lemonade.
Descansé en la playa.	I relaxed on the beach.	Comí paella.	I ate paella.
Mandé SMS.	I sent texts.	Conocí a un chico/a guapo/a.	I met a cute boy/girl.
Monté en bicicleta.	I rode my bike.	Escribí SMS.	I wrote texts.
Nadé en el mar.	I swam in the sea.	Salí con mi hermano/a.	I went out with my brother/sister.
Saqué fotos.	I took photos.	Vi un castillo interesante.	I saw an interesting castle.
Tomé el sol.	I sunbathed.		
Visité monumentos.	I visited monuments.		

#### Palabras muy frecuentes High-frequency words

a/al/a la	to (the)	¿Dónde...?	Where...?
en	by	¿Adónde...?	Where... to?
con	with	¡Qué...!	How...!
mi/mis	my	además	also, in addition
¿Cómo...?	How...?	pero	but

#### Estrategia 1

##### Looking up new words

Dictionaries can tell you a lot about new words. Most of them use these abbreviations: *nm, nf, adj, vt, prep, adv*. For example, *nm* tells you a word is a masculine noun; *vt* tells you it's a verb. What do you think the others tell you?

Look up the words below in a dictionary. (They are all used in Module 1.) Note down what each word means and what sort of word it is.

Example: espada → sword (noun)

- espada
- descansar
- rico
- salir
- sombrero
- solamente
- ganar
- chocolatina

**Semana 1**

**¿Qué haces con tu móvil? What do you do with your mobile?**

Chateo con mis amigos.	I chat with my friends.	Juego.	I play.
Comparto mis vídeos favoritos.	I share my favourite videos.	Leo mis SMS.	I read my texts.
Descargo melodías o aplicaciones.	I download ringtones or apps.	Mando SMS.	I send texts.
Hablo por Skype.	I talk on Skype.	Saco fotos.	I take photos.
		Veo vídeos o películas.	I watch videos or films.

**Semana 2**

**¿Con qué frecuencia? How often?**

todos los días	every day	a veces	sometimes
dos o tres veces a la semana	two or three times a week	de vez en cuando	from time to time
		nunca	never

**¿Qué tipo de música te gusta? What type of music do you like?**

el rap	rap	¿Qué tipo de música escuchas?	What type of music do you listen to?
el R'n'B	R'n'B	Escucho rap.	I listen to rap.
el rock	rock	Escucho la música de...	I listen to ...'s music.
la música clásica	classical music	Escucho de todo.	I listen to everything.
la música electrónica	electronic music		
la música pop	pop music		

**Semana 3**

**Opiniones Opinions**

Me gusta (mucho)...	I like... (very much)	¿Te gusta la música de...?	Do you like... 's music?
Me encanta...	I love...	Me gusta la música de...	I like... 's music.
No me gusta (nada)...	I don't like... (at all)	mi canción favorita	my favourite song
la letra	the lyrics	mi cantante favorito/a	my favourite singer
la melodía	the tune	mi grupo favorito	my favourite group
el ritmo	the rhythm	En mi opinión...	In my opinion...
porque es guay/triste/horrible	because it is cool/sad/terrible		

**Semana 4**

**Me gustan las comedias I like comedies**

un programa de música	a music programme	el telediario	the news
un programa de deportes	a sports programme	más... que...	more... than...
un concurso	a game show	divertido/a	funny
un documental	a documentary	informativo/a	informative
un reality	a reality show	interesante	interesting
una comedia	a comedy	aburrido/a	boring
una serie policíaca	a police series	emocionante	exciting
una telenovela	a soap opera		

**Semana 5**

**¿Qué hiciste ayer? What did you do yesterday?**

Bailé en mi cuarto.	I danced in my room.	Ví una película.	I watched a film.
Fui al cine.	I went to the cinema.	Salí con mis amigos/as.	I went out with my friends.
Hablé por Skype.	I talked on Skype.	No hice los deberes.	I didn't do my homework.
Hice gimnasia.	I did gymnastics.	ayer	yesterday
Hice kárate.	I did karate.	luego	later, then
Jugué en línea con mis amigos/as.	I played online with my friends.	por la mañana	in the morning
Jugué tres horas.	I played for three hours.	por la tarde	in the afternoon
Monté en bici.	I rode my bike.	un poco más tarde	a bit later

**Semana 6**

**Palabras muy frecuentes High-frequency words**

así que	so (that)	nunca	never
más... que...	more... than...	o	or
mi/mis	my	porque	because
su/sus	his/her	también	also, too
normalmente	normally	y	and
no	no/not		

**Estrategia 2**

**The gender of nouns**

You can often work out whether a noun is masculine or feminine by looking at the ending of the word:

Most nouns ending in **-o, -or** and **-ón** are masculine.  
 Most nouns ending in **-a, -dad, -ión** and **-ción** are feminine.

But be careful! There are exceptions, for example:  
**el problema, la foto**

To check, use a dictionary: look for the abbreviations *nm* (masculine noun) and *nf* (feminine noun).

Can you work out the gender of these nouns from Module 2 without using a dictionary?

- actividad
- concurso
- televisión
- música
- canción
- amigo
- aplicación
- millón



**Semaine 1**

**À la télé • On TV**

je regarde ...	<i>I watch ...</i>
les dessins animés	<i>cartoons</i>
les documentaires	<i>documentaries</i>
les émissions de sport	<i>sports programmes</i>
les émissions de télé-réalité	<i>reality TV shows</i>
les émissions musicales	<i>music shows</i>
les infos	<i>the news</i>
les jeux télévisés	<i>game shows</i>
la météo	<i>the weather</i>
les séries	<i>series</i>
les séries policières	<i>police series</i>
les séries américaines	<i>American series</i>
Mon émission préférée, c'est ...	<i>My favourite programme is ...</i>
j'adore	<i>I love</i>
j'aime bien	<i>I like</i>
je n'aime pas	<i>I don't like</i>
je ne regarde jamais	<i>I never watch</i>
je ne rate jamais	<i>I never miss</i>

**Semaine 3**

**Qu'est-ce que tu lis? • What are you reading?**

je lis ...	<i>I'm reading ...</i>
une BD	<i>a comic book</i>
un livre sur les animaux	<i>a book on animals</i>
un livre d'épouvante	<i>a horror story</i>
un magazine sur les célébrités	<i>a magazine about celebrities</i>
un manga	<i>a manga</i>
un roman fantastique	<i>a fantasy novel</i>
un roman policier	<i>a thriller</i>
un roman d'amour	<i>a love story</i>

**Les films • Films**

j'aime ...	<i>I like ...</i>
je suis fan de ...	<i>I'm a fan of ...</i>
je ne suis pas fan de ...	<i>I'm not a fan of ...</i>
j'ai une passion pour les ...	<i>I have a passion for ...</i>
j'ai horreur des ...	<i>I really dislike ...</i>
je déteste ...	<i>I hate ...</i>
les comédies	<i>comedies</i>
les films d'action	<i>action films</i>
les films d'amour	<i>romantic films</i>
les films d'arts martiaux	<i>martial-arts films</i>
les films d'aventure	<i>adventure films</i>
les films fantastiques	<i>fantasy films</i>
les films d'horreur	<i>horror films</i>
les films de science-fiction	<i>science-fiction films</i>
mon acteur préféré, c'est ...	<i>my favourite actor is ...</i>
mon film préféré, c'est ...	<i>my favourite film is ...</i>

**Semaine 2**

**Semaine 4**

**Les opinions • Opinions**

à mon avis, c'est ...	<i>in my opinion, it's ...</i>
je pense que c'est ...	<i>I think it's ...</i>
je trouve ça ...	<i>I find it ...</i>
amusant	<i>funny</i>
assez bien	<i>quite good</i>
barbant	<i>boring</i>
chouette	<i>excellent</i>
effrayant	<i>frightening</i>
émouvant	<i>moving</i>
ennuyeux	<i>boring</i>
génial	<i>great</i>
intéressant	<i>interesting</i>
nul	<i>rubbish</i>
passionnant	<i>exciting</i>
pratique	<i>practical</i>
stupide	<i>stupid</i>
formidable	<i>great</i>
idiot	<i>stupid</i>

**Semaine 5**

**Sur Internet • On the internet**

J'envoie des e-mails.	<i>I send emails.</i>
Je fais beaucoup de choses.	<i>I do lots of things.</i>
Je fais des recherches pour mes devoirs.	<i>I do research for my homework.</i>
Je fais des achats.	<i>I buy things.</i>
Je fais des quiz.	<i>I do quizzes.</i>
Je joue à des jeux en ligne.	<i>I play games online.</i>
Je mets à jour ma page perso.	<i>I update my homepage.</i>
Je vais sur mes sites préférés.	<i>I go onto my favourite sites.</i>
Je vais sur des blogs.	<i>I go onto blogs.</i>
Je vais sur des forums.	<i>I go onto forums.</i>

**Semaine 7**

**Les mots essentiels • High-frequency words**

assez	<i>quite</i>
aussi	<i>also</i>
car	<i>because</i>
comme	<i>as</i>
et	<i>and</i>
mais	<i>but</i>
très	<i>very</i>
un peu	<i>a bit</i>
parce que	<i>because</i>
par exemple	<i>for example</i>
surtout	<i>above all</i>
<b>Expressions of time and frequency</b>	
d'habitude	<i>usually</i>
de temps en temps	<i>from time to time</i>
en ce moment	<i>at the moment</i>
quelquefois	<i>sometimes</i>
souvent	<i>often</i>
tous les jours	<i>every day</i>
une ou deux fois par mois	<i>once or twice a month</i>
<b>Sequencers</b>	
après (le dîner)	<i>after (dinner)</i>
avant (de me coucher)	<i>before (I go to bed)</i>
d'abord	<i>first</i>
ensuite	<i>next</i>
puis	<i>then</i>
un peu plus tard	<i>a bit later</i>

+ vocabulary learnt in the half term

**Semaine 6**

**Hier soir • Last night**

J'ai discuté.	<i>I discussed/chatted.</i>
J'ai écouté la radio.	<i>I listened to the radio.</i>
J'ai envoyé des SMS.	<i>I sent text messages.</i>
J'ai joué à des jeux en ligne.	<i>I played games online.</i>
J'ai posté des photos.	<i>I posted photos.</i>
J'ai regardé la télé/des clips vidéo.	<i>I watched TV/video clips.</i>
J'ai surfé sur Internet.	<i>I surfed the net.</i>
J'ai tchatté sur MSN.	<i>I chatted on MSN.</i>
J'ai téléchargé des chansons.	<i>I downloaded some songs.</i>

**Improving your pronunciation**

One way of improving your French pronunciation is to listen to famous French people speaking English. They often use French sounds when they're speaking English. They use French intonation too. Intonation is the way the voice goes up and down when you string words together. Can you imitate a French person speaking English? Why not speak English in a French accent to your teacher? Keep it up for a whole lesson. If this really gets on their nerves, try speaking French with the same accent. Your teacher can't complain about that!

**Semaine 1**

**À Paris • In Paris**

J'ai gagné un concours.	<i>I won a competition.</i>
J'ai passé une semaine à Paris.	<i>I spent a week in Paris.</i>
J'ai visité la tour Eiffel.	<i>I visited the Eiffel Tower.</i>
J'ai mangé au restaurant.	<i>I ate in a restaurant.</i>
J'ai admiré la Pyramide du Louvre.	<i>I admired the Louvre Pyramid.</i>
J'ai regardé le feu d'artifice.	<i>I watched the fireworks.</i>
J'ai acheté des souvenirs.	<i>I bought some souvenirs.</i>
J'ai rencontré un beau garçon/une jolie fille.	<i>I met a good-looking boy/a pretty girl.</i>
J'ai envoyé des cartes postales.	<i>I sent some postcards.</i>
J'ai pris des photos.	<i>I took some photos.</i>
J'ai vu la Joconde.	<i>I saw the Mona Lisa.</i>
J'ai attendu le bus.	<i>I waited for the bus.</i>
J'ai très bien dormi.	<i>I slept very well.</i>
Je n'ai pas visité Notre-Dame.	<i>I didn't visit Notre-Dame.</i>
On a fait les magasins.	<i>We went shopping.</i>
On a bu un coca.	<i>We drank a cola.</i>
On a fait un tour de la ville en segway.	<i>We did a tour of the town by segway.</i>
On a fait une balade en bateau-mouche.	<i>We went on a boat trip.</i>

**Semaine 3**

**C'était comment? • What was it like?**

C'était ...	<i>It was ...</i>
J'ai trouvé ça ...	<i>I found it ...</i>
bien	<i>good</i>
bizarre	<i>weird</i>
cool	<i>cool</i>
cher	<i>expensive</i>
effrayant	<i>scary</i>
ennuyeux	<i>boring</i>
fabuleux	<i>wonderful/fantastic</i>
génial	<i>great</i>
horrible	<i>horrible/terrible</i>
intéressant	<i>interesting</i>
marrant	<i>funny/a laugh</i>
nul	<i>rubbish</i>
Ce n'était pas mal.	<i>It wasn't bad.</i>

**Semaine 2**

**Quand? • When?**

aujourd'hui	<i>today</i>
hier	<i>yesterday</i>
avant-hier	<i>the day before yesterday</i>
(mardi) dernier	<i>last (Tuesday)</i>

**C'était comment? • What was it like?**

C'était ...	<i>It was ...</i>
J'ai trouvé ça ...	<i>I found it ...</i>
bien	<i>good</i>
bizarre	<i>weird</i>
cool	<i>cool</i>
cher	<i>expensive</i>
effrayant	<i>scary</i>
ennuyeux	<i>boring</i>
fabuleux	<i>wonderful/fantastic</i>
génial	<i>great</i>
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intéressant	<i>interesting</i>
marrant	<i>funny/a laugh</i>
nul	<i>rubbish</i>
Ce n'était pas mal.	<i>It wasn't bad.</i>

**Semaine 4**

**Des informations touristiques • Tourist information**

horaires d'ouverture ouvert du (mardi) au (dimanche)	<i>opening times open from (Tuesday) to (Sunday)</i>
de 10h00 à 17h00	<i>from 10 a.m. to 5 p.m.</i>
fermé (le lundi et les jours fériés)	<i>closed (on Mondays and bank holidays)</i>
tarifs d'entrée	<i>admission prices</i>
plein tarif	<i>full price</i>
tarif jeune	<i>price for young people</i>
gratuit (pour les enfants jusqu'à 13 ans)	<i>free (for children up to 13 years old)</i>
visites guidées	<i>guided tours</i>
(pas de) toilettes	<i>(no) toilets</i>

**Semaine 5**

**Tu as voyagé comment? • How did you travel?**

en avion	<i>by plane</i>
en bus	<i>by bus</i>
en car	<i>by coach</i>
en métro	<i>by underground</i>
en train	<i>by train</i>
en voiture	<i>by car</i>
à vélo	<i>by bicycle</i>
à pied	<i>on foot</i>

**Semaine 7**

**Qui a volé la Joconde? • Who stole the Mona Lisa?**

Tu as visité le Louvre quand?	<i>When did you visit the Louvre?</i>
Tu es allé(e) avec qui?	<i>Who did you go with?</i>
Tu es allé(e) comment?	<i>How did you get there?</i>
Tu es arrivé(e)/parti(e) à quelle heure?	<i>At what time did you arrive/leave?</i>
Après, tu es allé(e) où?	<i>Afterwards, where did you go?</i>
Tu es resté(e) combien de temps?	<i>How long did you stay?</i>
Qu'est-ce que tu as fait?	<i>What did you do?</i>
Est-ce que tu as volé la Joconde?	<i>Did you steal the Mona Lisa?</i>

When you have to learn less than 10 words, you can expect the test to ask for vocabulary from the previous week(s).

**Semaine 6**

**Un voyage • A journey**

Je suis allé(e) (à Paris).	<i>I went (to Paris).</i>
Je suis parti(e)/arrivé(e) à (dix heures).	<i>I left/arrived at (ten o'clock).</i>
Le train est parti/arrivé à (huit heures).	<i>The train left/arrived at (eight o'clock).</i>
Je suis sorti(e).	<i>I went out.</i>
Je suis resté(e) (chez moi).	<i>I stayed (at home).</i>
Je suis rentré(e) (chez moi).	<i>I went/got home.</i>
Je suis monté(e).	<i>I went up.</i>

**Les mots essentiels • High-frequency words**

à quelle heure?	<i>at what time?</i>
quand?	<i>when?</i>
combien?	<i>how much/how many?</i>
combien de temps?	<i>how long?</i>
comment?	<i>how?</i>
où?	<i>where?</i>
qui?	<i>who?</i>
avec qui?	<i>who with?</i>
alors	<i>so, therefore</i>
donc	<i>so, therefore</i>
car	<i>because</i>
parce que	<i>because</i>
dernier/dernière	<i>last</i>
beaucoup (de)	<i>a lot (of)</i>
d'abord	<i>first of all</i>
ensuite	<i>next</i>
après	<i>afterwards</i>
finalement	<i>finally</i>





