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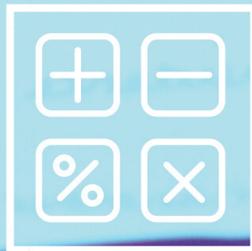
# Year 9 Mid-Year Assessment Booklet



Revision  
Topics



Revision  
Tips



Sparx  
Help

# A message from Miss Merchant

Dear Student

## Mid-Year Assessments

This booklet has been put together to help you prepare fully for your Mid-Year Assessments which are taking place from the **12<sup>th</sup> - 16th January**. These are important assessments which your teachers will use to see whether you are working towards your full potential and to identify areas where you may need support to do so. As a result, it is critical that you prepare yourself fully to show your best on these assessments.

Use the following pages to form a revision timetable which will ensure you have looked over all the relevant information before your assessment. If you are not sure about any of the topics or content listed then please speak to your teacher and ask for more guidance. They will be happy to help!

When revising try to use a variety of strategies and formats to ensure you have materials to help you. This could include making mind maps, writing out key term definitions (and testing yourself!), doing practice questions on Seneca or Sparx, making flashcards with key facts, watching YouTube videos, and much more. When used together they will ensure you are fully prepared for your assessments.

Don't forget to also use your knowledge organisers.

Have a look for more tips on BBC Bitesize by following this link: Top Revision Techniques for Exams - <https://tinyurl.com/4ptxdeuy>

Remember, the effort that you put in will be reflected in your achievements. We are all here to support you to achieve your full potential and if you need any additional guidance or have any concerns please speak to your subject teacher, form tutor, or Head of Year.

Good Luck

**Miss Merchant**

**Assistant Head Teacher**

# Assessment Timetable

## Assessment Timetable

Date	Exam	Year Group	Length	Period
Monday 12th January	Maths	Year 9	45 minutes	P4
Wednesday 14th January	English Reading	Year 9	50 minutes	P5
Thursday 15th January	Science	Year 9	1 hour	P1
Friday 16th January	English Writing	Year 9	45 minutes	P4

\*\* History/Geography & Spanish assessments will be taken in lesson

**HABIT** - Get into the habit of working in a regular routine.

**PLAN** - Plan your weekly revision, homework and leisure time on the timetables provided. Make sure you can realistically keep to the schedule that you have planned.

**PLACE** - Make sure that you work in the best possible environment:

- The room should be well lit to reduce eye strain.
- Quiet with few distractions - no TV or phones.
- Sit on a chair at a table or desk rather than lounging on your bed or so close to a window that you might get distracted.
- Identify a set time and place for studying - most people study best in the mornings and evenings, but you need to work out the best time for yourself.

### **ORGANISATION**

- Be fully prepared. Books, paper, pens, drinks etc. should all be organised before you start.
- Break each subject down into manageable chunks so that you can read over a topic once or twice in about 20 to 30 minutes. If you come across topics that you really don't understand, make a note of them and ask the subject teacher for help.

### **VARIETY**

- Get some variety into your revision. Vary your use of revision materials: notes, revision cards, books, websites, podcasts and videos. Keep a record of what you have done in this booklet to make sure you cover all topics and don't avoid the more difficult ones.
- Begin your revision by re-reading your notes from the previous session. This will improve your recall. At the end of the week revise the whole week's work. Revision should involve checking your notes and writing down the main points may help you learn them more than you would by just reading them.
- As the exam draws nearer have 'key words' which trigger your memory.
- Saying things out loud can help you to learn and can improve your use of appropriate vocabulary. It is important to test yourself after each piece of work. Identify some questions you might think will be on the paper and write an outline answer for each one.

**RELAX** - Try to stop revising at least an hour before you go to bed. Relax to help you sleep. Working late will make you feel tired the next day. Only watch TV programmes that you enjoy rather than to fill in time. Get up early to make good use of your time.

**HONESTY** - Always be honest with yourself. Teachers can help you but they cannot do the work for you. Ask for help when you need it.

**PERSEVERE** - Don't give up: it really is not a long time and it will be worth it!

Goodluck!

# English

## Assessment Format:

Reading: 45 minutes (36 marks)

Writing: 45 minutes (36 marks)



## Reading

You will have a choice of 2 questions: Character or Theme.

You will have a choice to write an essay on **one** of the questions.

The method you should use:

Thesis, 3 'IQEA', 'What', 'How', 'Why', paragraphs, conclusion.

## Writing

This will be a non-fiction writing task. Students write in response to an article: a speech, article, letter or guide.

You should use a range of methods and techniques (DAFOREST)

The method you should use:

Introduction, 3 main ideas, paragraphs, conclusion.

SPaG is important!



## KS4 Blood Brothers Knowledge Organiser

Events		Context		
<b>Act 1</b> <ol style="list-style-type: none"> <li>Prologue</li> <li>Marilyn Monroe</li> <li>Mrs Johnstone vs Mrs Lyons (living conditions)</li> <li>The pact.</li> <li>Mrs Johnstone loses her job.</li> <li>Mickey is envious of Sammy.</li> <li>Mickey and Edward meet.</li> <li>Sammy and his attitude towards Edward.</li> <li>Mrs Johnstone and Mrs Lyons try and separate Mickey and Edward.</li> <li>Edward swears at his mother.</li> <li>Kid's games.</li> <li>The police man</li> <li>Edward moves away and Mrs Johnstone gives him a locket.</li> <li>The Johnstones are rehoused.</li> </ol>	<b>Willie Russell</b> <ol style="list-style-type: none"> <li>Born into a working class family.</li> <li>He grew up near Liverpool.</li> <li>Father had various jobs including mining and factory work.</li> <li>Annoyed at treatment of intelligent working class and associated stereotypes.</li> <li>Left school at 15 with just one O-level: a D in English Language. Went to evening classes and university to become a teacher.</li> </ol>	<b>Skelmersdale</b> <ol style="list-style-type: none"> <li>In the 1960s the government began building New Towns. These were small, existing towns which were extended and redeveloped to provide more housing for nearby cities.</li> <li>Working class families were rehoused here in the 1960s.</li> <li>Working class vs Middle class divide</li> <li>More opportunities for middle classes reflected in education, job prospects and wealth.</li> <li>The Education Act of 1944 led to 'secondary modern schools' and 'grammar schools.'</li> <li>Top 20% went to a grammar school with an academic curriculum. Secondary modern taught more practical subjects.</li> <li>7% of students were educated in private, fee-paying schools. The average boarding school fees in the 1960s would have been approximately 25%.</li> <li>Properly recognised group.</li> <li>Television – Westerns (The Lone Ranger and Rawhide) Police drama - Z Cars fictional town called Newtown</li> </ol>	<b>Margaret Thatcher</b> <ol style="list-style-type: none"> <li>Prime Minister in 1979.</li> <li>Reduced the power of the trade unions and closed down many factories etc leading to widespread unemployment.</li> </ol>	
<b>Act 2</b> <ol style="list-style-type: none"> <li>A fresh new start.</li> <li>Sammy and the bus.</li> <li>Mickey and Edward get suspended.</li> <li>Mrs Lyons and the locket.</li> <li>Mickey and Edward meet again.</li> <li>Nymphomaniac nights and Swedish Au Pairs.</li> <li>Mrs Lyons confronts Mrs Johnstone.</li> <li>Summer montage.</li> <li>Edward leaves for university and Mickey and Linda get together.</li> <li>Linda is pregnant. Mickey and Linda get married.</li> <li>Mickey is made redundant.</li> <li>Mickey and Edward fight</li> <li>The robbery.</li> <li>Mickey goes to prison.</li> <li>Mickey becomes addicted to pills.</li> <li>Linda and Edward begin an affair.</li> <li>Mrs Lyons shows Mickey the affair.</li> <li>Mickey shoots Edward and the police shoot Mickey.</li> </ol>	<b>Liverpool</b> <ol style="list-style-type: none"> <li>A major port and the centre for trade providing lots of jobs at the docks.</li> <li>During the Industrial decline, Liverpool became very vulnerable as the docks were shut and unemployment rates soared.</li> <li>Some men turned to crime and gangs in order to support themselves and their families. There were also riots in 1980s.</li> </ol>	<b>Class</b> <ol style="list-style-type: none"> <li>Working class vs Middle class divide</li> </ol>	<b>Education</b> <ol style="list-style-type: none"> <li>More opportunities for middle classes reflected in education, job prospects and wealth.</li> <li>The Education Act of 1944 led to 'secondary modern schools' and 'grammar schools.'</li> <li>Top 20% went to a grammar school with an academic curriculum. Secondary modern taught more practical subjects.</li> <li>7% of students were educated in private, fee-paying schools. The average boarding school fees in the 1960s would have been approximately 25%.</li> </ol>	
<b>Characters</b> <ol style="list-style-type: none"> <li>Mrs Johnstone</li> <li>Mrs Lyons</li> <li>Mickey</li> <li>Edward</li> <li>Sammy</li> <li>Linda</li> </ol>	<b>Family</b> <ol style="list-style-type: none"> <li>Nuclear structure the norm.</li> <li>Divorce was easier in 1960s but single parents were frowned upon.</li> <li>Family was patriarchal.</li> </ol>	<b>Youth culture</b> <ol style="list-style-type: none"> <li>Properly recognised group.</li> <li>Television – Westerns (The Lone Ranger and Rawhide) Police drama - Z Cars fictional town called Newtown</li> </ol>	<b>Themes</b> <ol style="list-style-type: none"> <li>Class</li> <li>Nature vs. nurture</li> <li>Parents and children</li> <li>Growing up</li> <li>Fate and superstition</li> <li>Friendship</li> <li>Identity</li> <li>Gender</li> </ol>	<b>Motifs</b> <ol style="list-style-type: none"> <li>Guns</li> <li>Dancing</li> <li>Marilyn Monroe</li> </ol>
<b>Characters</b>		<b>Features of form</b>		
<ol style="list-style-type: none"> <li>Mrs Johnstone</li> <li>Mrs Lyons</li> <li>Mickey</li> <li>Edward</li> <li>Sammy</li> <li>Linda</li> </ol>	<ol style="list-style-type: none"> <li>A didactic play</li> <li>Tragedy</li> <li>Parallels and contrasts</li> <li>Narrator</li> <li>Stage directions</li> <li>Song</li> <li>Dialogue</li> <li>Montage</li> <li>Foreshadowing</li> <li>Symbols and motifs</li> <li>Accent and dialect versus Standard English</li> </ol>	<ol style="list-style-type: none"> <li>A drama which intends to teach, especially with regard to morals.</li> <li>An event causing great suffering, destruction and distress.</li> <li>Parallels – similarities. Contrasts – differences.</li> <li>A person who gives the spoken account of something. Omniscient to remind the audience about the ending of the play.</li> <li>An instruction in the text of the play indicating the movement, the position or tone of an actor, or the sound effects and lighting.</li> <li>A single work of music that is typically intended to be sung by the human voice. It is through the songs that the characters reveal their true thoughts and feelings.</li> <li>A conversation between two or more people.</li> <li>A series of short sequences are edited into a sequence to condense space.</li> <li>A warning or indication of a future event.</li> <li>A thing that represents or stands for something else. A motif is a dominant or recurring image of idea.</li> <li>Standard English is any form of the English Language that is accepted as a national norm. Accent is a distinctive way of pronouncing a language. Dialect is a particular form of language which is peculiar to a specific range or social group.</li> </ol>	<ol style="list-style-type: none"> <li>Class</li> <li>Nature vs. nurture</li> <li>Parents and children</li> <li>Growing up</li> <li>Fate and superstition</li> <li>Friendship</li> <li>Identity</li> <li>Gender</li> </ol>	<ol style="list-style-type: none"> <li>Guns</li> <li>Dancing</li> <li>Marilyn Monroe</li> </ol>

# Maths

## Mid-Year Calculator Assessment

Unit	Topic	Sparx topics -highlight as you complete these clips using the independent learning function
9.01	Decimal Manipulation	U417,U 478, M462, U735, U127,U 293,U 453, U868,U976
9.02	Estimation and Limits of Accuracy	U480,U298,U731,U965,U225,U657,U587, U108, U301
9.03	HCF & LCM of large numbers	U211,U751,U529,U236,U739,U250
9.04	Fraction Calculations	U736,U692,U793,U475,U224,U544,U538, U881,U916,U163
9.05	Algebraic Manipulation	M795, U613, M830
9.06	Index Laws	U105,U622,U103,U437,U685,U457,U824
9.07	Standard Form	M719, M678,U 264,U 290
9.08	Expanding & Factorising	U179,U365,U768,U178,U963

See the next page for how to use Sparx independently if you're not sure ...

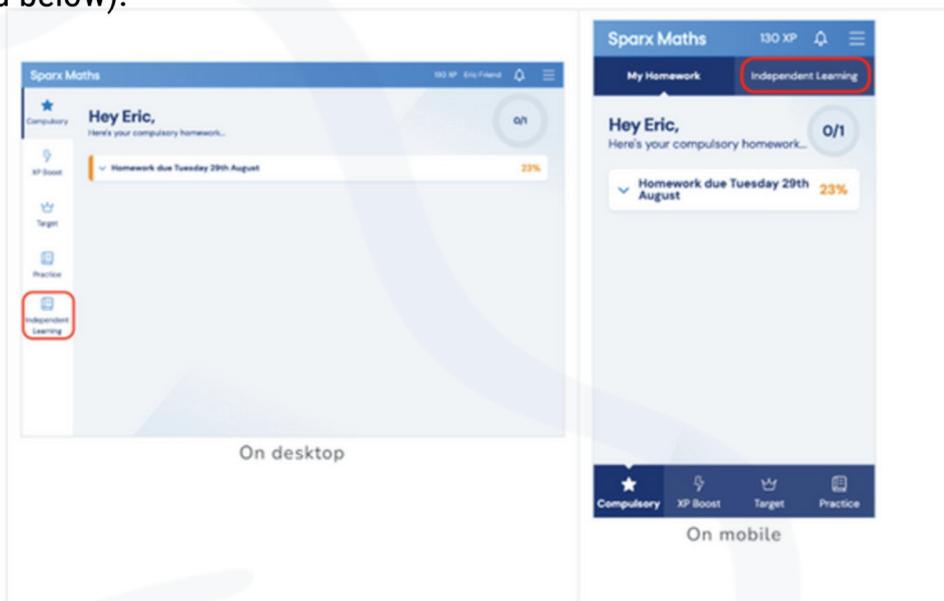


# Sparx

## Revising Independently with SPARX

### STEP ONE: Finding independent learning

When you log in you will see the independent learning feature in the top right hand corner (circled in red below).



You can choose to work on any topic by:

- Typing one of the following in the Search for topics field:
  - The name of a topic
  - A keyword
  - A code given to you in the list on page 5.
- Browse the content by clicking on one of the main Strands.

### STEP TWO: Choosing the right work

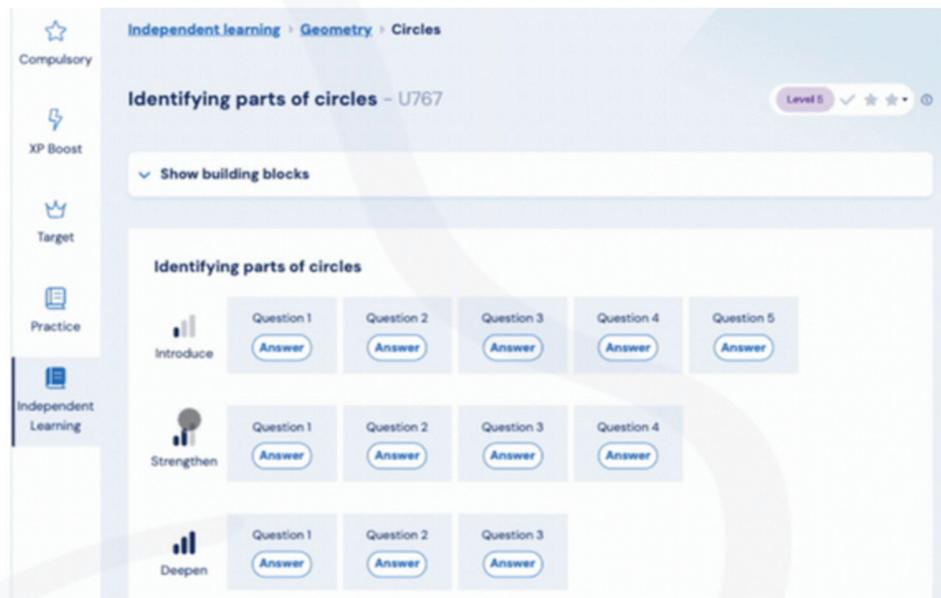
The difficulty level will be in line with that of your normal homework.

You can choose to complete questions that introduce the topic if you don't remember much about it, strengthen the topic if you need a recap or deepen the topic if you are looking to increase your knowledge.

# Sparx

## Revising Independently with SPARX

An example of this is shown on the right with the topic of circles.



You will see the difficulty level is set to 5 (in the top right corner) but you can change this if you are finding questions too hard or too difficult.

# Science

## Assessment Format:

1 x 1 hour assessment covering all topics below.  
Calculators will be necessary.

Topics that will be covered in the assessment.

## Forces in Actions

- Moments
- Work done
- Simple machines
- Hooke's law

## Reactivity

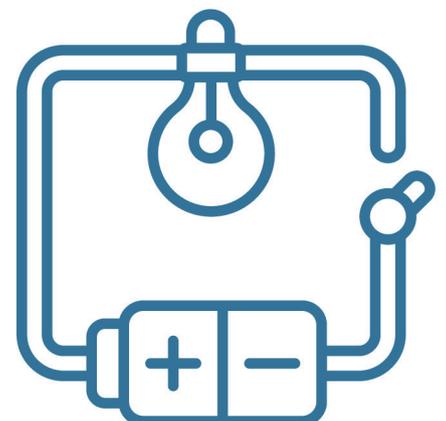
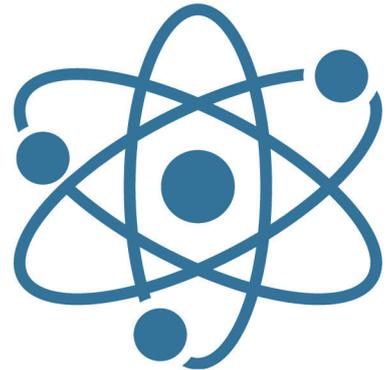
- Atomic Structure
- Bonding
- Atomic and formulae mass
- Metal oxides and acids
- Reactivity series
- Metal Extraction
- Properties and uses of metals
- Reactivity and voltage

## Ecology

- Food Webs
- Decay
- Classification
- Natural selection
- Evolution and extinction

## Electricity

- Series and parallel circuits
- Potential difference
- Ohms law
- Static electricity
- Magnets and electromagnets

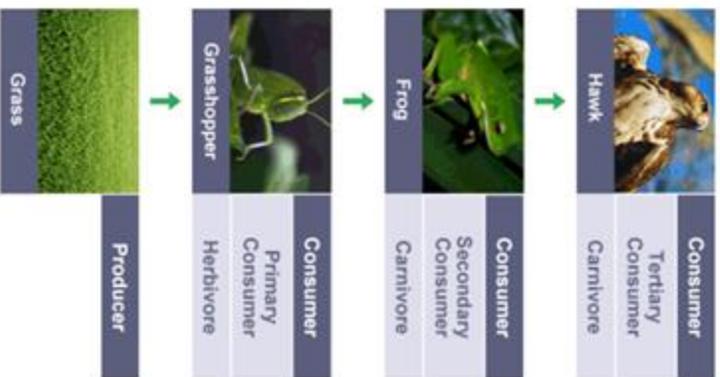


A **food chain** shows the different **species** of an organism in an **ecosystem**, and what eats what.

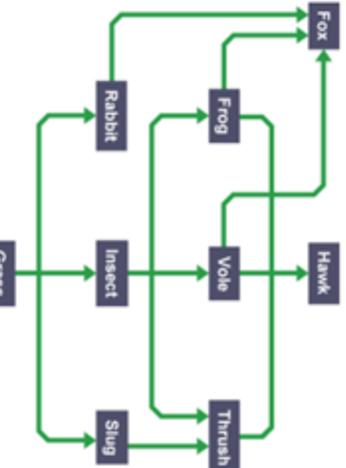
A food chain always starts with a **producer**.

A food chain ends with a **consumer**.

Here is an example of a simple food chain:



When all the food chains in an ecosystem are joined up together, they form a food web.



Food webs are just several food chains joined together. This food web is made of these food chains:

grass → insect → vole → hawk  
 grass → insect → frog → fox  
 grass → insect → vole → fox

### Natural selection

- Individuals in a species show a wide range of **variation**;
- Some of this variation is **inherited** by genes being passed on;
- Individuals who are best suited to the environment are **more likely to survive and reproduce**;
- The genes that allow these individuals to be successful are passed to their offspring;
- Over many generations these small differences add up to the new evolution of species;
- Given enough time, a population may change so much it may even become a new species, unable to reproduce successfully with individuals of the original species.

### Extinction

Changes in the environment may leave individuals less well adapted to compete for resources (eg food, water and mates). If an entire species is unable to compete successfully and reproduce it will lead to extinction.

Here are some of the changes in the environment that can cause a species to become extinct:

- a new disease;
- a new predator;
- a change in the physical environment (eg climate change);
- competition (from another species that is better adapted, including competition from humans).

### Key terms

Key terms	Definition
<b>Environment</b>	All the conditions surrounding a living organism
<b>Habitat</b>	The place where an organism lives
<b>Population</b>	All members of a single species living in a habitat
<b>Community</b>	All populations of different organisms living in a habitat
<b>Ecosystem</b>	A community and the habitat in which organisms live
<b>Producer</b>	Usually a plant, because plants make their own food
<b>Consumer</b>	An animal that eats a plant or an animal
<b>Photosynthesis</b>	A process that plants use to make food
<b>Herbivore</b>	A consumer that eats only plants
<b>Carnivore</b>	A consumer that eats only animals
<b>Omnivore</b>	A consumer that eats both plants and animals
<b>Predator</b>	An animal that hunts and eats other animals
<b>Prey</b>	An animal that is eaten by a predator
<b>Species</b>	Able to breed to produce (fertile) offspring that can also breed
<b>Variation</b>	Differences between organisms
<b>Extinction</b>	When there are no more individuals of a species left
<b>Biodiversity</b>	Having a wide range of different species in an ecosystem

## Ecological relationships and classification

### Toxic materials are poisonous:

Some quickly break down into harmless substances in the environment.

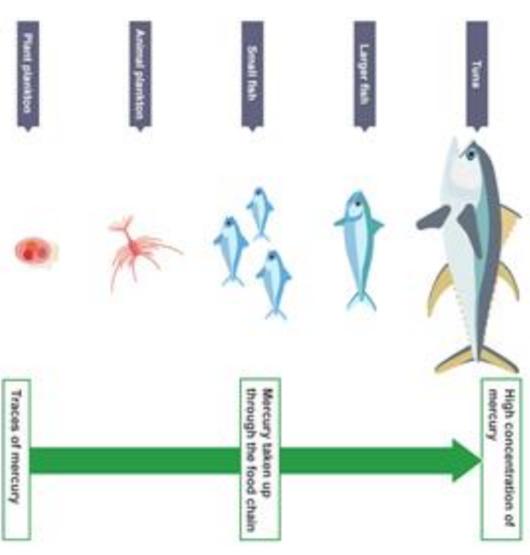
Others are persistent do not break down.

These substances **accumulate** in the food chain.

This means that the further up the chain you go, the more toxins there are.

This is because accumulating compounds cannot be excreted.

**Mercury** and **DDT** are two examples of toxins that accumulate in the food chain.



### Biodiversity

It is important to conserve the variety of living organisms on Earth because:

- moral and cultural reasons;
- In the future, plant species might be identified for medicines;
- keeps damage to food chains and food webs to a minimum;
- protects our future food supply.

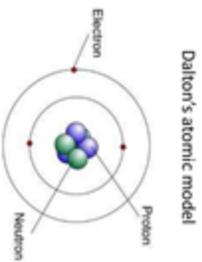
Seeds are carefully stored in **seed banks** so that new plants may be grown in the future.

Seed banks are an example of a **gene bank**. Gene banks are used to preserve genetic material for the future.

**Atoms** are tiny particles that everything is made of.

They are made of smaller particles called:

- protons;
- neutrons;
- electrons.



Metals have properties in common.

- They are:
- **shiny**, especially when they are freshly cut
  - **good conductors** of heat and electricity
  - **malleable** (they can be bent and shaped without breaking)

**Elements**  
There are over a hundred different elements.

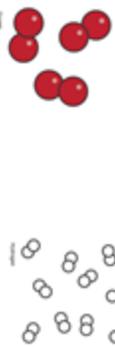
Atoms have the same number of protons as each other.

Atoms of differing elements have a different number of protons.

The atoms of some elements do not join together, but instead they stay as separate atoms, eg Helium.



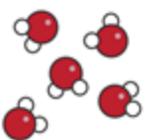
The atoms of other elements join together to make **molecules**, eg oxygen and hydrogen.



**Compounds**

A compound is contains atoms of **two or more different elements**, and these atoms are **chemically joined together**.

For example, water is a compound of hydrogen and oxygen.



Each of its molecules contains **two hydrogen atoms** and one oxygen atom.

The elements are arranged in a chart called the periodic table. A Russian scientist, Mendeleev, produced the first periodic table in the 19th century.

The modern periodic table is based closely on the ideas he used:

- the elements are arranged in order of increasing atomic number (number of protons);
- the **horizontal** rows are called **periods**;
- the **vertical** columns are called **groups**;
- elements in the same group are similar to each other.

We can use the periodic table to predict the properties of elements in the same group.

Group 7	Melting point	Density	Reactivity
Fluorine	Increases down the group ↓	Increases down the group ↓	Decreases down the group ↓
Chlorine			
Bromine			
Iodine			
Astatine			

Group 1	Melting point	Density	Reactivity
Lithium	Decreases down the group ↓	Increases down the group ↓	Increases down the group ↓
Sodium			
Potassium			
Rubidium			
Cesium			

Periods	1	2	3	4	5	6	7	0										
1	H	He																
2	Li	Be	B	C	N	O	F	Ne										
3	Na	Mg	Al	Si	P	S	Cl	Ar										
4	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
5	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
6	Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
7	Fr	Ra	Ac															

## Periodic Table

**Chemical formulae**

Remember that we use chemical symbols to stand for the elements. For example, **C** stands for carbon, **O** stands for oxygen, **S** stands for sulfur and **Na** stands for sodium.

For a molecule, we use the chemical symbols of the atoms it contains to write down its formula. For example, the formula for carbon monoxide is **CO**.

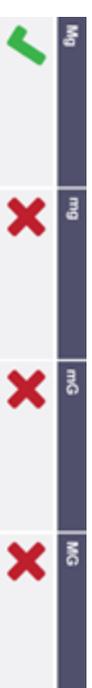
It tells you that each molecule of carbon monoxide is made of one carbon atom joined to one oxygen atom.

Be careful about when to use capital letters. For example, CO means a molecule of carbon monoxide but **Co** is the symbol for cobalt (an element).

Each element is given its own chemical symbol, like **H** for hydrogen or **O** for oxygen.

Chemical symbols are usually one or two letters long.

Every chemical symbol starts with a capital letter, with the second letter written in lower case. For example, Mg is the correct symbol for magnesium, but mg, MG and MGr are wrong.



**Numbers in formulae**

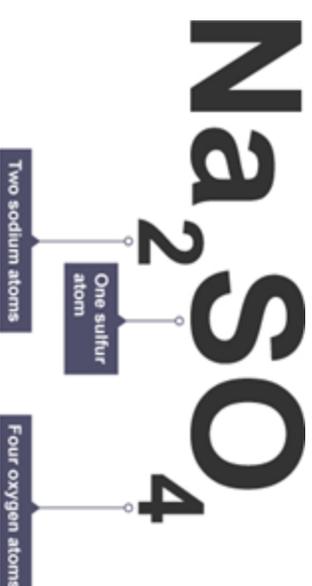
We use numbers to show when a molecule contains more than one atom of an element.

The numbers are written **below** the element's symbol. For example, CO<sub>2</sub> is the formula for carbon dioxide.

It tells you that each molecule has **one carbon atom** and **two oxygen atoms**.

The **small numbers** go at the **bottom**. For example:

- CO<sub>2</sub> is correct;
- CO<sub>2</sub> and CO2 are wrong.



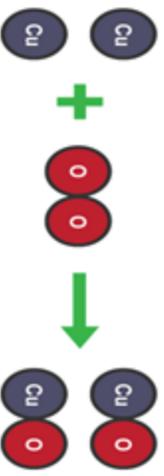
Some formulae are more complicated. For example, the formula for sodium sulfate is Na<sub>2</sub>SO<sub>4</sub>. It tells you that sodium sulfate contains two sodium atoms (Na x 2), one sulfur atom (S) and four oxygen atoms (O x 4).

### Word equations to symbol equations:

- replace names of each substance symbols or formula
- use numbers to balance the equation

Example:

copper + oxygen  $\rightarrow$  copper oxide



Two copper atoms (2Cu) react with one oxygen molecule (O<sub>2</sub>) to produce two units of copper oxide (2CuO)

Property	Metals	Non-metals
Appearance	Shiny	Dull
State at room temperature	Solid (except mercury, a liquid)	Half solids, half gases, and one (bromine) is a liquid
Density	High	Low
Strength	Strong	Weak
Malleable or brittle	Malleable	Brittle
Conduct heat?	Good	Poor
Conduct electricity?	Good	Poor (except graphite carbon)
Magnetic material	Only iron, cobalt & nickel	None
Sound when hit	Make a ringing sound (sonorous)	They make a dull sound

### Naming salts

Hydrochloric acid  $\rightarrow$  metal **chlorides**  
Sulfuric acid  $\rightarrow$  metal **sulfates**  
Nitric acid  $\rightarrow$  metal **nitrates**

### Bases v alkalis

A **base** is a substance that can react with acids and **neutralise** them.

Bases are usually:

- **metal oxides**, such as copper oxide
- **metal hydroxides**, such as sodium hydroxide, or
- **metal carbonates**, such as calcium carbonate

Many bases are insoluble in water.

If a base does dissolve in water it is called an **alkali**.

### Metal oxides v non-metal oxides

- Metals react with oxygen in the air to produce **metal oxides**:
  - **Solid at room temperature**
  - Metal oxides are **bases** (if they dissolve they form **alkalis**)
- Non-metals react with oxygen in the air to produce **non-metal oxides**:
  - Usually **gases at room temperature**;
  - Dissolve to form **acids**.

### Reactivity Series

The **reactivity series** is a list of elements in order of their reactivity:

Most reactive			Least reactive
Potassium			K
Sodium			Na
Calcium			Ca
Magnesium			Mg
Aluminium			Al
<b>Carbon</b>		<b>C</b>	
Zinc		Zn	
Iron		Fe	
Tin		Sn	
Lead		Pb	
<b>Hydrogen</b>		<b>H</b>	
Copper		Cu	
Silver		Ag	
Gold		Au	
Platinum		Pt	

### Reactivity

### Displacement Reactions:

Involve a metal and a compound of a different metal.

The more reactive metal **displaces** a less reactive metal from its compound. For example:

**magnesium + copper sulfate  $\rightarrow$  magnesium sulfate + copper**

If the more reactive metal is already in the metal compound, nothing happens. For example:

**magnesium sulfate + copper  $\rightarrow$  no reaction**

### Carbon and metal extraction

Some metals can be extracted from their metal oxides using carbon **if the metal is less reactive than carbon**.

In general:

**metal oxide + carbon  $\rightarrow$  metal + carbon dioxide**

This works for **zinc, iron, tin, lead** and **copper** because they all less reactive than carbon.

### Extracting copper from copper oxide

Copper is so unreactive, it does not react with cold or hot water, so it is used for water pipes

To extract copper:

- mix **copper oxide** powder with **carbon powder**;
- heat the mixture strongly in a **crucible**;
- keep the lid on the crucible, to stop carbon reacting with oxygen in the air;
- the **carbon dioxide** formed in the reaction escapes into the air;
- let the crucible cool down, you tip the mixture into cold water.
- brown copper sinks to the bottom, leaving unreacted powder suspended in the water.

These equations represent the reaction:

**copper oxide + carbon  $\rightarrow$  copper + carbon dioxide**  
 $2\text{CuO} + \text{C} \rightarrow 2\text{Cu} + \text{CO}_2$

### Acids and metals

Acids react with most metals to produce a salt and hydrogen  
This is the general word equation :

**metal + acid  $\rightarrow$  salt + hydrogen**

An example would be:

**magnesium + hydrochloric acid  $\rightarrow$  magnesium chloride + hydrogen**  
 $\text{Mg} + 2\text{HCl} \rightarrow \text{MgCl}_2 + \text{H}_2$

It doesn't matter which metal or which acid is used, if they react we get hydrogen gas and a salt.

### The lab test for hydrogen

Squeaky pop test – **lighted splint** goes 'pop' when put in a test tube of hydrogen.

## Hookes Law

Hookes Law says that the **extension of an elastic object is directly**

**proportional to the force applied.** In other words:

- the extension doubles, if the force is doubled;
- there is no extension, if no force is applied.

You can investigate Hooke's Law using a spring:

- hang the spring from a stand and clamp;
- measure its length with a ruler;
- hang a mass from the spring and measure the new length of the spring;
- Work out: **extension = new length – original length**;
- keep adding more masses, measuring the new length each time;
- Work out extension for each mass.

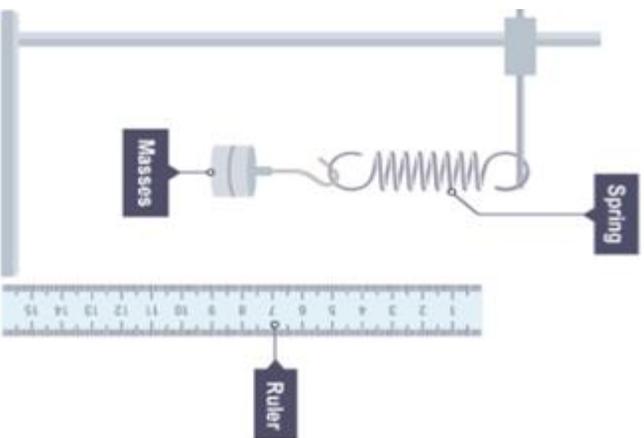
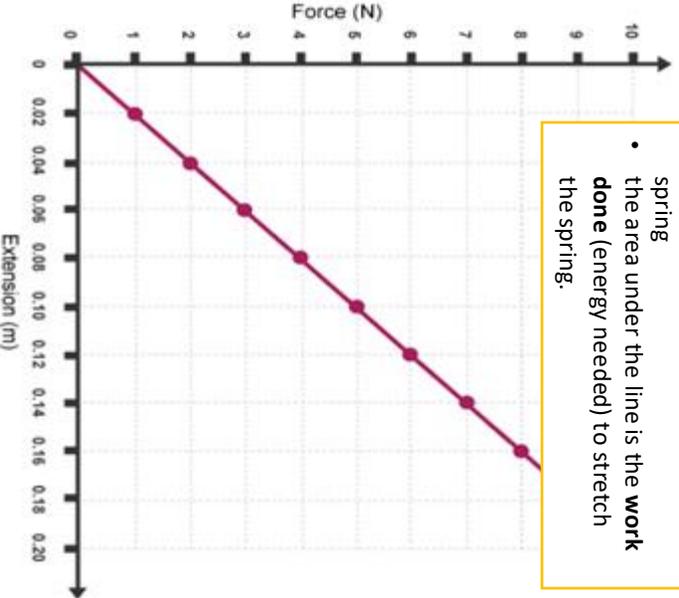
You can then plot a force-extension graph:

- plot force on the vertical (y) axis
- plot extension on the horizontal (x) axis

### Using Hooke's Law

In a force-extension graph:

- the steeper the line, the stiffer the spring
- the area under the line is the **work done** (energy needed) to stretch the spring.



## Moments

- A **moment** is a turning effect of a force.
- Forces can make objects turn if there is a **pivot**.
- When the turning forces are **balanced** - the moments are **equal and opposite**.

### Calculating moments

To calculate a moment, you need to know:

- the distance of the force from the pivot;
- the size of the force.

$$\text{moment} = \text{force} \times \text{distance}$$

(Nm)                      (N)                      (m)

### Force multipliers

- Increasing the distance will increase the moment for the same force;
- This is why a longer spanner will loosen a tight nut;
- And a crowbar or long lever can be used lift heavy objects.

## Forces in action

### Deformation

Elastic materials:

- change shape** when a force is exerted on them;
- return to their original shape/size** when the force is removed.

**Deformation** is a change in shape. There are two types of deformation:

- Stretching** is when the object/material is pulled;
  - Compression** is when the object/material is squashed.
- The greater the force exerted, the greater the amount of deformation.

If the force is large enough, the object/material may no longer return to its original size.

Until you reach this point, a special case called **Hooke's Law** applies.

## Simple machines

Example of simple machines are **see-saws**, **wheelbarrows** and **forceps**.

**Simple machines give a bigger force but with a smaller movement**

### See –saw

A force is exerted in one place, causing movement and a force at another place in the see-saw.

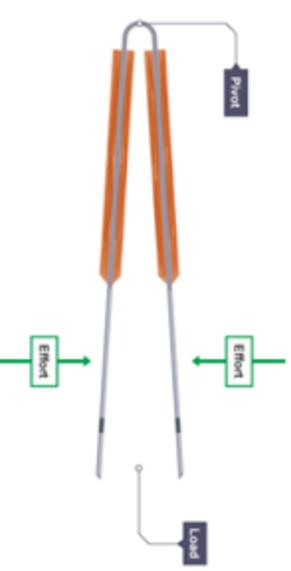
### Wheelbarrows

Wheelbarrows is a simple machine with the load near the pivot (the wheel) and the effort on the handles far from the pivot.



### Forceps

With forceps, fingers provide the effort force, and this is nearer to the pivot than the load (the object you are picking up):



- Some machines give a smaller force but with a bigger movement;

This is the opposite to the see-saw and wheelbarrow, but again if you multiply the force by the distance travelled, you get the same value for the effort and for the load.

### Electric charge

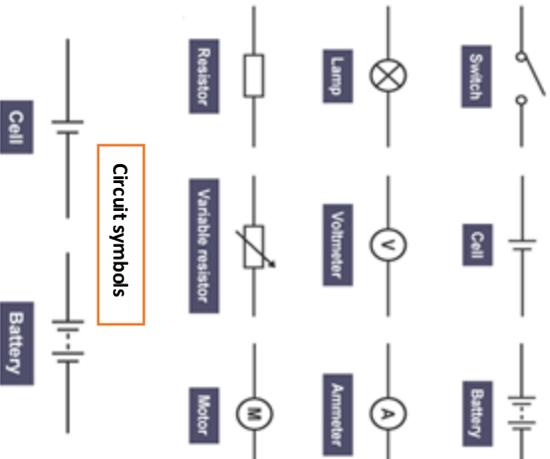
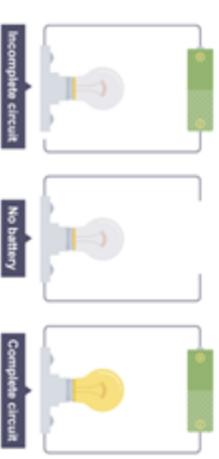
Some particles carry an electric charge. In electric wires these particles are **electrons**.

### Electric current

An electric current is a flow of charge, and in a wire this will be a flow of electrons.

We need two things for an electric current to flow:

- something to transfer energy to the electrons, such as a battery or power pack
- a complete circuit for the electrons to flow through



### Circuit symbols

- Conductors and insulators of electricity**
- Different materials have different resistances:
  - an electrical **conductor** has a **low resistance**;
  - an electrical **insulator** has a **high resistance**.

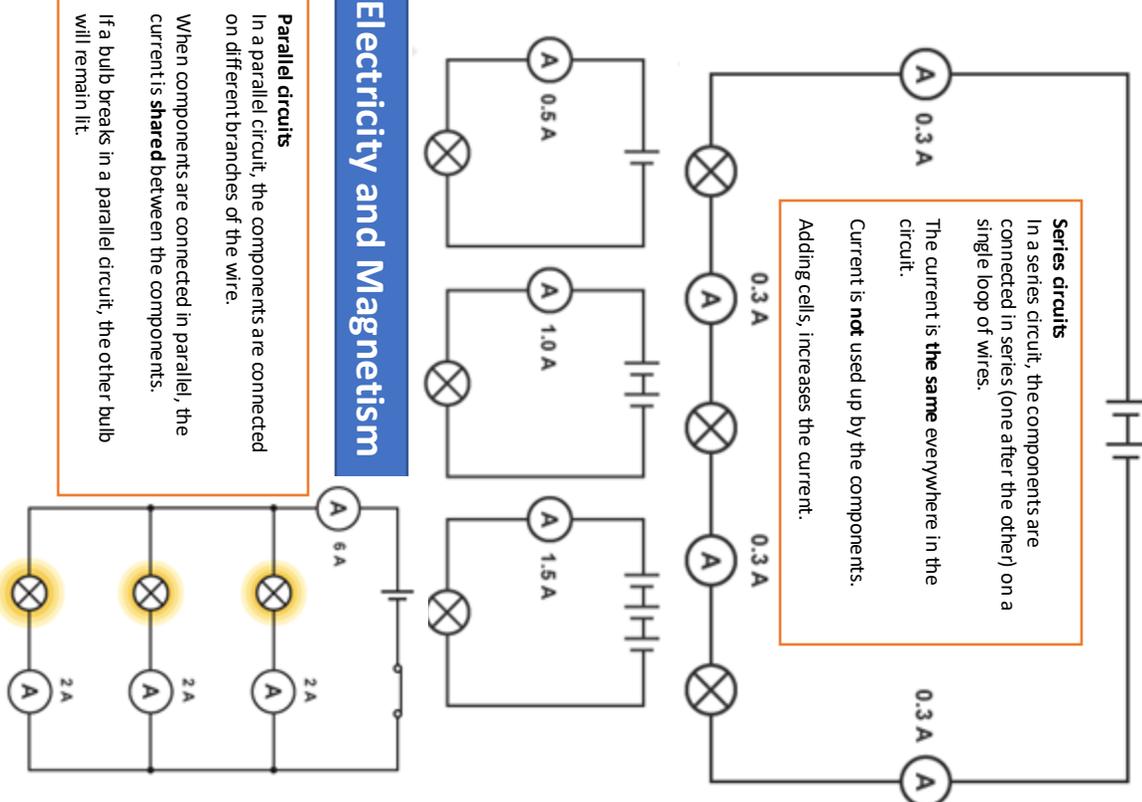
## Electricity and Magnetism

### Parallel circuits

In a parallel circuit, the components are connected on different branches of the wire.

When components are connected in parallel, the current is **shared** between the components.

If a bulb breaks in a parallel circuit, the other bulb will remain lit.



Conductors	Insulators
Metal elements	Most non-metal elements, e.g. sulfur, oxygen
Graphite (a form of carbon, a non-metal element)	Diamond (a form of carbon, a non-metal element)
Mixtures of metals, e.g. brass, solder	Plastic
Salt solution	Wood
Liquid calcium chloride	Rock

### Current

The more charge that flows, the bigger the current. Current is measured in **amperes (A)**. This can be shortened to **amps**.

### Measuring current

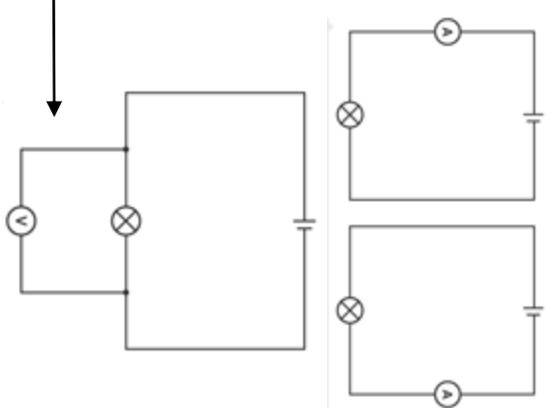
We measure current using an **ammeter**. It is connected in **series**.

### Potential difference

Potential difference is a measure of the difference in energy between two parts of a circuit. The bigger the difference in energy, the bigger the potential difference. Potential difference is measured in **volts (V)**. It is sometimes called **voltage**.

### Measuring potential difference

Potential difference is measured using a device called a voltmeter. It is connected in **parallel**.



### Potential difference (V)



	Current	Potential difference
Unit	ampere, A	volt, V
Measuring device	Ammeter in series	Voltmeter in parallel
Circuit symbol of measuring device		

### Resistance

Wires and the components in a circuit reduce the flow of charge. This is called **resistance**. The unit of resistance is the ohm ( $\Omega$ ).

### Adding components

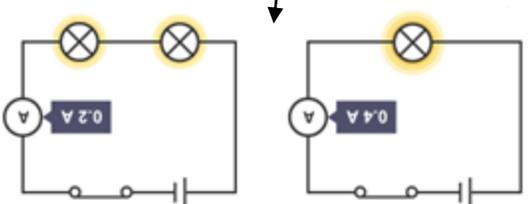
The resistance increases when you add more components in series.

### Calculating resistance

- To find the resistance of a component, you need to measure:
- the potential difference across it;
  - the current flowing through it.

The resistance is the ratio of potential difference to current. We use this equation to calculate resistance:

$$\text{resistance} = \text{potential difference} \div \text{current}$$



### Atoms and electrons

All substances are made of atoms.

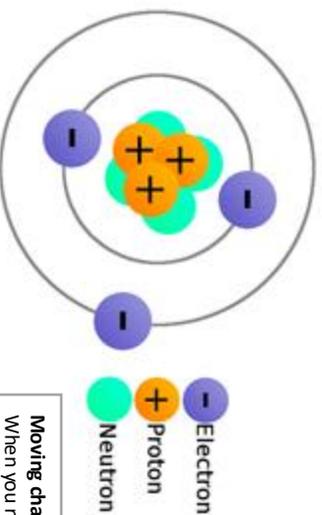
These are often called **particles**.

An atom has no overall electrical charge (**electrically neutral**);

Each atom contains even smaller particles called **electrons**.

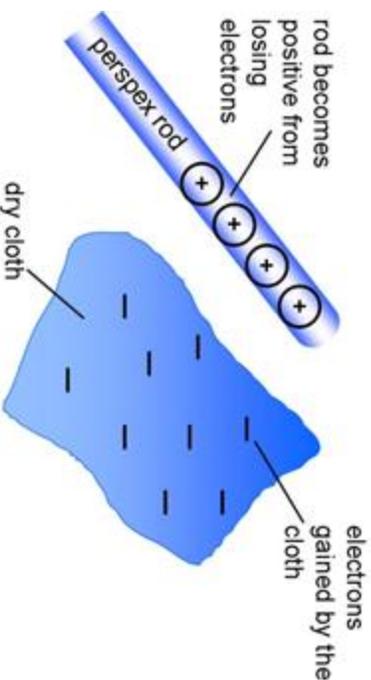
Each electron has a negative charge.

- atom **gains** an electron, it becomes **negatively charged**.
  - atom **loses** an electron, it becomes **positively charged**.
- Electrons can move from one substance to another when objects are rubbed together.

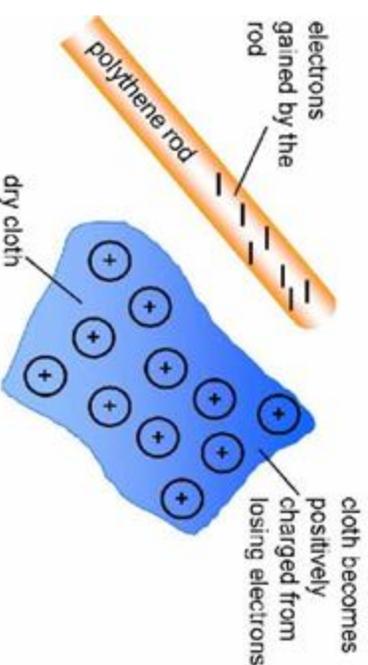


### Moving charges

When you rub two different materials against each other, they become electrically charged. This only works for electrically insulated objects and not with materials like metals, which conduct, and the duster becomes positively charged

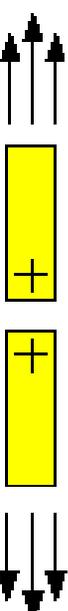
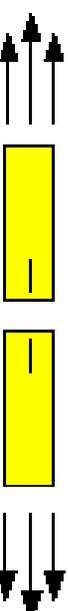


- For example, if you rub an perspex plastic rod with a duster:
- electrons move from the rod to the duster
  - the duster becomes negatively charged and the rod becomes positively charged



- The opposite thing happens with a polythene rod:
- electrons move from the duster to the rod
  - the rod becomes negatively charged and the duster becomes positively charged

### opposite charges attract



like charges repel

## Electricity and Magnetism

### Forces from static electricity

A charged object creates an **electric field** (You cannot see an electric field).

If another charged object is moved into the electric field, a force acts on it.

The force is a non-contact force because the charged objects do not have to touch for the force to be exerted.

### Repulsion and attraction

Two charged objects will:

- repel each other if they have like charges (they are both positive or both negative);
- attract each other if they have opposite charges (one is positive and the other is negative).

### Attract and repel

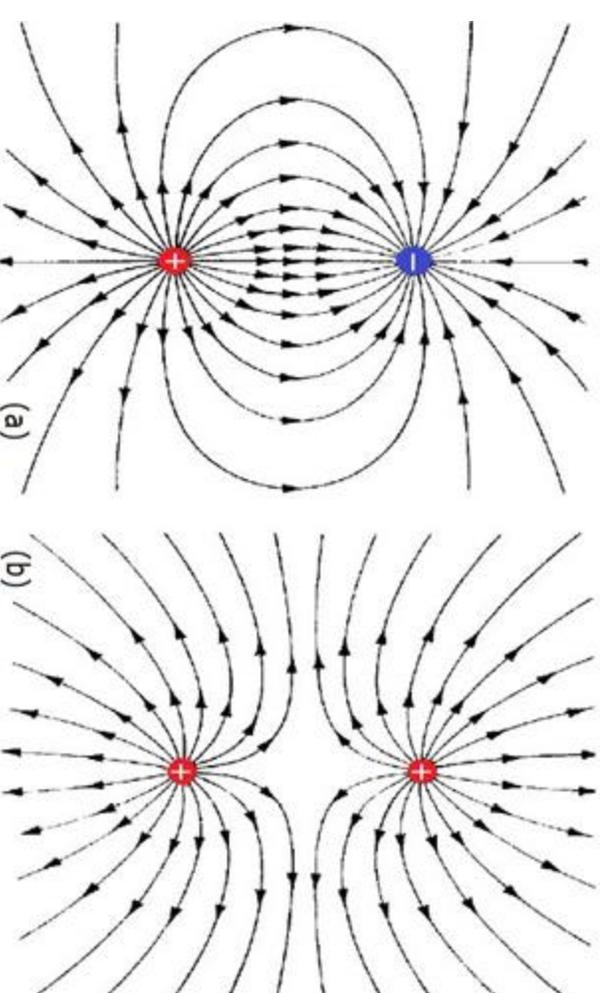
Opposite charges will attract, and like charges will repel.

### Electric fields

We represent electric fields using diagrams (just like with magnetic fields):

- each field line has an arrow from **positive to negative**;
- the field lines are more concentrated where the field is strongest.

Field lines also show what happens to the electric fields during attraction or repulsion.



# Geography

## Assessment Format:

1 x 1 hour assessment

Topics covered in the assessments:

## Unit 1: Climate Change

- Evidence of climate change
- Causes of climate change (Human and Natural)
- Effects of climate change (case study, Bangladesh).
- Adaption and migration

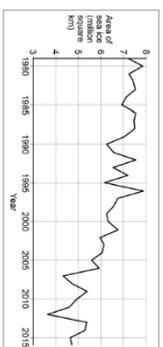
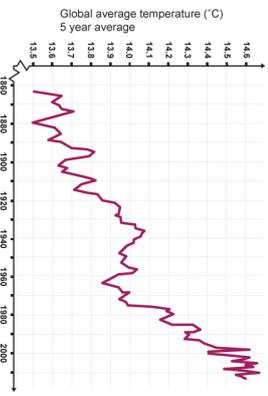
## Unit 2: Life in an emerging economy

- Emerging countries
- BRICs and MINTs
- Development indicators
- Urbanisation in emerging economies
- Opportunities and challenges of NEE cities
- Rural to urban migration
- Brazil - Rio opportunities and challenges
- South Korea
- Russia DME



KPI 9.1.1

**Evidence of climate change:**



SNAP, Figure 3, a graph showing the area of Arctic sea ice each September between 1979 and 2016.

Figure 3

What is the evidence for climate change?

1. The world's climate has always changed: During the Medieval Warm Period grapes were grown in London but during the time of the Stuarts, the River Thames would freeze.
2. **Since 1880** the Earth's climate has increased by approx. **0.8 degrees**.
3. However, the increase in temperature has **not been steady**. The first graph shows that this increase **fluctuates**.
4. 16 out of the 17 warmest years in the last 136 years have all occurred since 2001.
5. Also, since the 1980s the **Arctic sea ice has been in decline**, fluctuated, with the

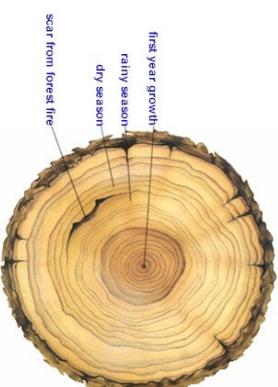
**Methods to find out what the climate was like in the past:**

**Ice cores**



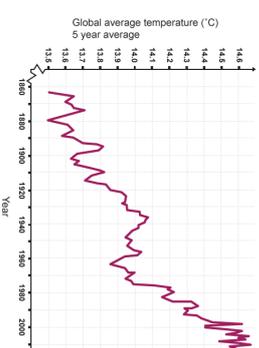
1. **Ice sheets** are huge blocks of ice made up of **layers**. A new layer forms each year.
2. **Gases trapped in the ice** give information about the **temperature** when they were trapped.
3. One ice core from Antarctica shows the temperature change over **400,000 years**.

**Tree Rings**



1. As a tree grows, a **new outer layer (or ring)** is formed each year.
2. These are thicker in warm, wet conditions.
3. Tree rings can go back **10,000 years**.

**Temperature records**

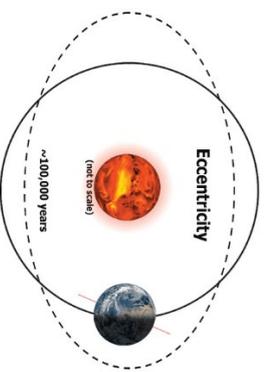


1. Since the 1850s, global temperature has been measured.
2. **Thermometers** are used to measure temperature and are very accurate.

KPI 9.2.1

**Physical cause of climate change**

**Orbital change**



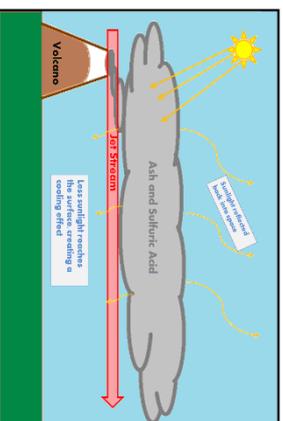
1. **Orbital change** is about how close the Earth is to the sun. Every 100,000 years the proximity of the **Earth's orbit** will move from **circular to elliptical (oval)**.
2. The further the Earth is from the sun, the colder the temperature. A more eccentric (**elliptical**) orbit makes the distance from the Earth to the sun fluctuate.

**Sunspots**



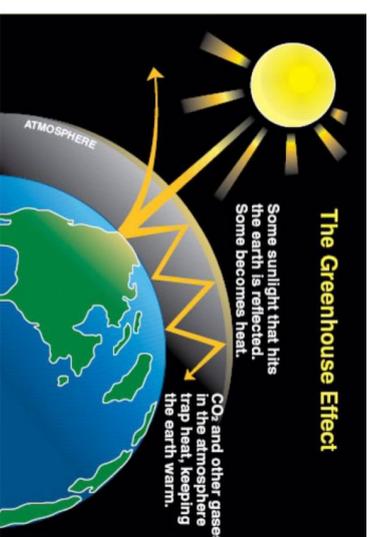
1. These are **dark spots** that appear on the surface of the sun.
2. The **more** the sunspots, the **greater** the **heat** produced.
3. They come and go in **11-year cycles**.
4. This is known as the **sunspot cycle**.

**Volcanic eruptions**

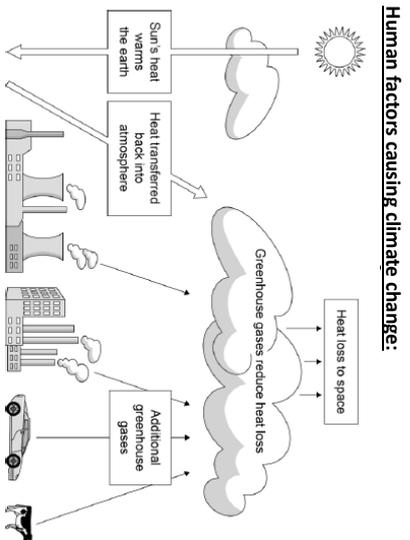


1. Lots of **material** is released into the **atmosphere** during a volcanic eruption.
2. This **reflects the sun rays back out** (so they do not reach the Earth).
3. This leads to **cooling** e.g. after the Mt Pinatubo eruption (1991), global temperature fell.

**Mannade greenhouse effect**

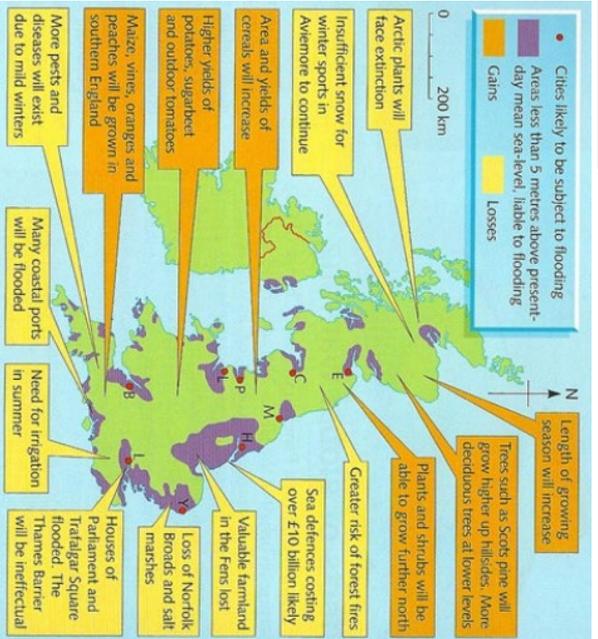


1. **Sun rays** travel through the **atmosphere** to Earth.
2. As they **reflect** off the **Earth**, some of the **outgoing rays escape** back out of the atmosphere.
3. **Some are trapped**.
4. This balance is needed to keep the Earth warm enough for life.
5. The atmosphere is made up of many gases, two important gases are carbon dioxide (**CO<sub>2</sub>**) and **methane**.
6. **Human activity** e.g. driving cars and using electricity often requires the burning of **fossil fuels** such as oil and coal, which give off **CO<sub>2</sub>**.
7. These **greenhouse gases** are released into the **atmosphere** and they trap more and more rays that would normally escape into space.
8. So, the **global temperature increases**.



- Human factors causing climate change:**
1. **Cars (and other transport)** burn fossil fuels increasing CO<sub>2</sub> into the atmosphere.
  2. **Coal and gas power plants** give off CO<sub>2</sub> whilst burning fossil fuels to make electricity.
  3. **Building factories** means more electricity is needed.
  4. **An increase in the standard of living** means more electricity used in homes so more CO<sub>2</sub> is released.
  5. **Increased farming** (pastoral) means more dung so more methane.
  6. **Deforestation** means less trees to absorb CO<sub>2</sub>
- Developed countries are the biggest contributors to the greenhouse effect. This is because they have more technology and money to do the things above.**

KPI 9.1.3



- Environmental impacts of climate change**
1. **Warmer climate** means glaciers and ice sheets melt (e.g. Greenland) so sea levels will rise.
  2. **Sea ice shrinking** means lost habitats e.g. polar bears risk extinction. e.g. Norfolk Broads.
  3. **Rising sea levels** means coastal areas flood which destroys habitats e.g. Norfolk Broads.
  4. **Sea temperatures rise** so coral reefs are bleached and habitats are lost e.g. the Great Barrier Reef.

- Social impacts of climate change**
1. **Temperature rise** so there are more droughts & deaths from dirty water in places like the Sahel.
  2. **Rising sea levels** means coastal areas are flooded, leading to migration. For example, Shanghai is at risk with 24.5 million people.
  3. **Lower yields of crops** (e.g. Maize) due to warmer temperatures means farmers go bankrupt.
  4. Droughts cause **crop failure**, which can cause famine and starvation.
  5. **Sea temperatures increase**, causing more tropical storms, causing death / homelessness.

- Mitigation vs Adaptation – dealing with climate change**
- Mitigation:**
- International agreements:**
- Countries agree to reduce their carbon emissions (carbon footprint) by setting emission targets.
1. Good – reduces CO<sub>2</sub>, so stops the negative impacts e.g. flooding
  2. **Bad – not all countries agree to this e.g. USA pulled out of the Paris Accord.**
- China has not engaged = CO<sub>2</sub> still increases as these are the biggest contributors.**
- Alternative energies:**
- Using wind farms, solar energy, nuclear and tidal.
1. Good – reduced CO<sub>2</sub> and associated effects, also they will not run out (infinite).
  2. **Bad – unreliable so will need to use fossil fuels when they are not working. Also, expensive initially, so higher bills.**
- Carbon Capture:**
- Some power plants are designed to capture the CO<sub>2</sub> they create when they burn fossil fuels. Once caught, it is stored underground.
1. Good – reduces CO<sub>2</sub>, so reduces consequences e.g. flooding.
  2. **Bad – expensive = higher bills. The ground could crack causing CO<sub>2</sub> to escape.**

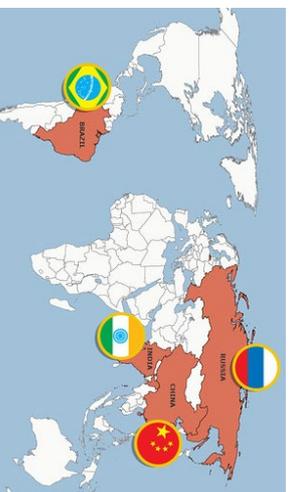
- Adaptation:**
- Coping with rising sea levels:**
- Sea levels are predicted to rise by 82cm by 2100. Physical barriers – flood embankments (levees) could be built e.g. The Thames Barrier.
1. Good – these will hold the water back.
  2. **Bad – very expensive, so developing countries will unlikely be able to prevent floods and the people will be forced to move.**
- Changing agricultural systems:**
- Crop patterns are changing. In Kenya drought resistant crops are being used to provide food even when rainfall is low.
1. Good – reduces the risk of starvation.
  2. **Bad – can be expensive, so the cost of food increases, resulting in the poor going without.**
- Managing water supply:**
- Areas will get drier, so adding water meters may reduce use. Also, using water storage facilities.
1. Good – people will have clean water during times of low rainfall.
  2. **Bad – water meters may not change usage in wealthy countries. Both have little impact if there is not enough rain, so the impacts of droughts e.g. drinking dirty water will remain.**

- 9.1.1 Can describe the evidence to suggest that the world's climate is changing.
- 9.1.2 Can explain the natural and human processes which cause climate change.
- 9.1.3 Can discuss the different impacts that climate change will have globally.
- 9.1.4 Assess the effectiveness of methods used in response to climate change.

## Life in an emerging country – subject summary

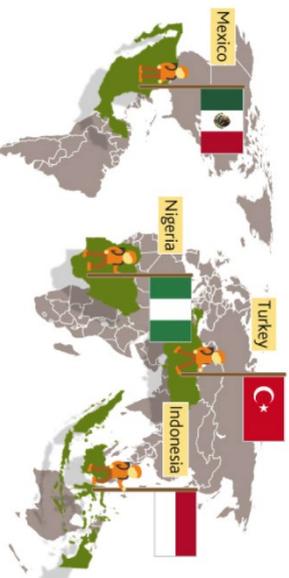
9.3.1 Describe the location of the newly emerging countries and the characteristics of them.

Who are the emerging countries?



**A map showing the BRIC countries (Brazil, Russia, India, China)**

1. The **BRIC** countries are the countries with the **fastest growing economies** world-wide.
2. They are located in South America (Brazil) and Asia (Russia, India, China).
3. They have a **large land mass**.
4. They tend to be rich in **natural resources**.
5. They have **large populations**, which are generally young.
6. They play a key role in **world trade**, with China being the world's biggest exporter.

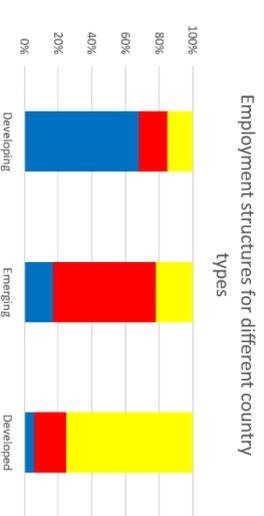


**A map showing the MINT countries (Mexico, Indonesia, Nigeria, Turkey)**

1. The **MINT** countries are another four recently emerging countries.
2. One is located in South America (Mexico), two in Asia (Indonesia and Turkey), and one on the east coast of Africa (Nigeria).
3. Similar to the BRIC countries, they have **large land masses** and a young population.
4. **Nigeria's** growth has been based on exporting **oil**.
5. Mexico is home to many **TNCs** (see below), such as Fiat, therefore **exporting secondary products world-wide**.

9.3.1 Describe the location of the newly emerging countries and the characteristics of them.

The key features of emerging countries:



	GDP	Life expectancy	Infant mortality	HDI
<b>Somalia</b>	\$550	50	117 per 1000	0.26 (v. low)
<b>Mexico</b>	\$13, 150	72	19 per 1000	0.81 (high)
<b>UK</b>	\$36, 250	77	6 per 1000	0.95 (v. high)

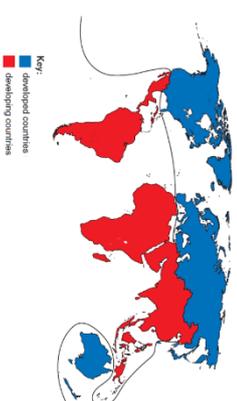
1. The graph shows the 'general' employment structures for a developing, emerging, and developed country.
2. **Emerging countries** are characterised by having a **large % of workers in secondary industries** (manufacturing).
3. Emerging countries have seen **mechanisation of primary activities** such as farming, in rural areas, so a reduction in jobs in the primary sector.
4. This has allowed people to move to cities, to work in the **manufacturing sector**, where wages are often higher.

**Development indicators in an emerging country:**

1. Emerging countries are categorised as having a **rapidly improving quality of life**.
2. In general, the **population is getting richer**, due to higher wages.
3. This means the **governments** of these countries have more money to **invest in infrastructure** such as schools and hospitals, which also improves quality of life.
4. From the table it is clear to see that **Mexico** (an emerging country), has **significantly improved development indicators**.
5. This has resulted in a HDI score for Mexico, which is much closer to the UK.

9.3.1 Describe the location of the newly emerging countries and the characteristics of them.

Is the Brandt line still relevant?



1. The **Brandt line** suggests that there are just two categories of countries, developed and developing.
2. This was created in the 1980s and was based purely on GDP.
3. The rise of the **BRIC and MINT countries** does **undermine** the line.
4. 7 of the countries are found south of the line.
5. Today many countries are seeing a rapid increase in their GDP per capita.

**Key Terms:**

1. **Imports** – Goods brought into a country.
2. **Exports** – Sending goods to another country for sale.
3. **Trade unions** – An organisation of workers who work to protect the rights of those employed.
4. **Tax Breaks** – This reduces the amount of tax a company must pay (normally for a fixed period), therefore increasing profit.
5. **Subsidies** – Money given by a government to help an industry keep down the cost of exports.
6. **Human development index (HDI)** – A development measure which combines GDP per capita, life expectancy and literacy rate.
7. **Urbanisation** – The growth in the number/ proportion of people living in towns and cities.

How China became an emerging country:

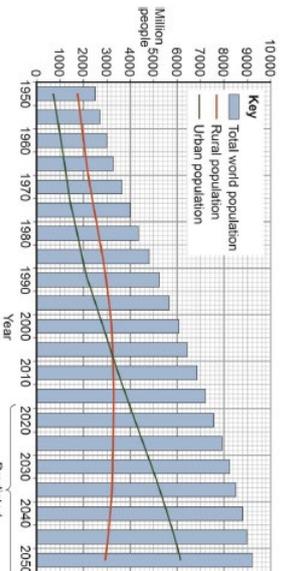


1. China had a very **low minimum wage** compared to developed countries, this encouraged companies to set-up, as products could be made cheaply, leading to **greater profits**.
2. **Trade unions were weak** in China, resulting in many companies attempting to pay below the minimum wage and making **workers work long hours**. This led to **greater production and profits**.
3. Companies such as **transnationals were given tax breaks**, this encouraged companies to set-up.
4. There were **fewer environmental laws** in China, this meant that **industries could operate more cheaply**, resulting in bigger profits.
5. The **government placed subsidies on exports**, \$1 billion was set aside each year to reduce the cost of the goods exported, resulting in **more being sold** and therefore increasing job opportunities.

*NB: The points are historic and have been generalised for revision purposes.*

9.3.2 Explain why rural to urban migration is a key feature of life in emerging countries.

**Urbanisation is a key feature of emerging countries:**



1. The world's population is becoming **more urbanised**.
2. The **fastest rates** of urbanisation are taking place in the **emerging countries**.
3. People are moving from the rural areas to the urban areas; the pace of this movement is rapid.

**Push and pull factors to urban areas are a key feature in emerging countries:**



- Possible push factors from rural areas:**
1. **Mechanisation** of primary industries (farming) means few jobs.
  2. **Potential drought**, lack of food and clean water.
  3. **Lack of schools**, meaning less chance of children getting an education.
  4. **Difficult to access medical care**, meaning illness and disease may go untreated.

**They are pulled to the city as there are many jobs in the manufacturing industries, with improved wages.**

As well as a reliable food and water source, access to medical care and education.

**KPIs:**

- 9.3.1 Describe the location of the newly emerging countries and the characteristics of them.
- 9.3.2 Explain why rural to urban migration is a key feature of life in emerging countries.
- 9.3.3 Assess the opportunities and challenges faced by people living in a city in an emerging country.
- 9.3.4 Evaluate the social, environmental, economic and political impacts of a TNC(s) in an emerging country.

9.3.3 Assess the opportunities and challenges faced by people living in a city in an emerging country.

**The opportunities and challenges of living in a city in a newly emerging country (Rio):**

1. Rio is a city in an emerging country (Brazil) which has seen rapid rates of urbanisation.
2. Some people live in **modern apartments** and housing, whilst others live in **favelas** (shanty settlement/ illegal) on the edges and hillsides of the city.



**What are shanty settlements (favelas) like?**



1. **Houses are densely packed** together.
2. They are **built illegally** and could be knocked down by the authorities.
3. They are usually built on land which developers do not want to use e.g. **hillsides**, near railway tracks, on marsh land, on the outskirts of cities etc.

**Opportunities of living in Rocinha (a favela in Rio):**

1. Located in Rio which has the **highest income per head** in the country, so jobs could lead to wages for food, medicines and sending children to school.
2. **88%** of housing is connected to the main **water supply**, so less diseases e.g. cholera.
3. **Housing has electricity**, which means an improved quality of life e.g. being able to heat and light the home.

**Challenges of living in Rocinha (a favela in Rio)**

1. **12%** of the population **do not have access to clean water**, so might be forced to drink dirty water with the risk of getting diseases.
2. **Unemployment** in favelas is **20%**, so many people do informal, cash in hand jobs. Pay can be low, so they might not be able to afford basic medicines and food.
3. Only **50% of waste is collected**, so waste builds up in the streets, sometimes leading to vermin and mosquitos, which can increase the risk of diseases, such as malaria.
4. **Crime** can be a problem in the area.

9.3.4 Evaluate the social, environmental, economic and political impacts of a TNC(s) in an emerging country.

**The role of TNCs in emerging countries**

A **transnational corporation** is a company which has its **headquarters** in one country (normally a **developed country**), and its **factories elsewhere** (normally an emerging or developing country).

**TNCs as a route out of poverty:**

1. South Korea is a good example of a country which historically used TNCs to help it develop.
2. During the 1960s they encouraged companies to set-up within the country.
3. They promoted their cheap labour force, and ensured workers worked long hours.
4. Companies such as Ford set-up in S. Korea.
5. **The S. Korean's used taxes to improve schools** and develop their own industries.
6. **Today S. Korea** is home to some of the **biggest companies in the world**, including Samsung, LG, and Hyundai.
7. The South Korean example demonstrates that TNCs can significantly help a country develop

**Foxconn (Apple in China) – opportunities and challenges**

Foxconn has factories in Shenzhen, China. Inside the factory electronic items are manufactured, including the **iPhone**, an Apple product from California.



**Opportunities:**

1. **Wages** in the factory are just above the minimum wage at **£152 per month**, which means people have money which they can spend on other things, which can lead to a positive multiplier effect.
2. In total **300,000 people are employed** at the Foxconn sites at Shenzhen, this means an increase in taxes for the government and therefore increased spending on schools and hospitals.
3. **Workers are learning new skills**, this means they may start developing their own companies. Many Chinese companies are now big global brands e.g. Huawei.

**Challenges (some are perceived and in the past):**

1. Workers work **extremely long hours** sometimes without breaks (up to 60 hrs per week), this means they may not see their family, reducing quality of life.
2. **Rules** inside the factories can be **strict**, in the past there have been reports of financial punishments.
3. Foxconn is said to **pay a relatively small amount of tax** to the Chinese government.
4. The **company is footloose**, meaning it can leave at any time, therefore workers worry that the company will close, and they will become unemployed.

# History

## Assessment Format:

1 hour assessment covering Unit 1 and 2 of Year 9 curriculum.

Topics covered in the assessment:

## Unit 1: World War One

- The main causes of World War One.
- The assassination of Franz Ferdinand.
- The Schlieffen Plan.
- Life in the trenches.
- Battle of the Somme.
- End of stalemate.



## Unit 2: Suffrage

- The role of the Suffragists in getting women the vote.
- The role of Suffragettes in getting women the vote.
- The role of World War One in getting women the vote.

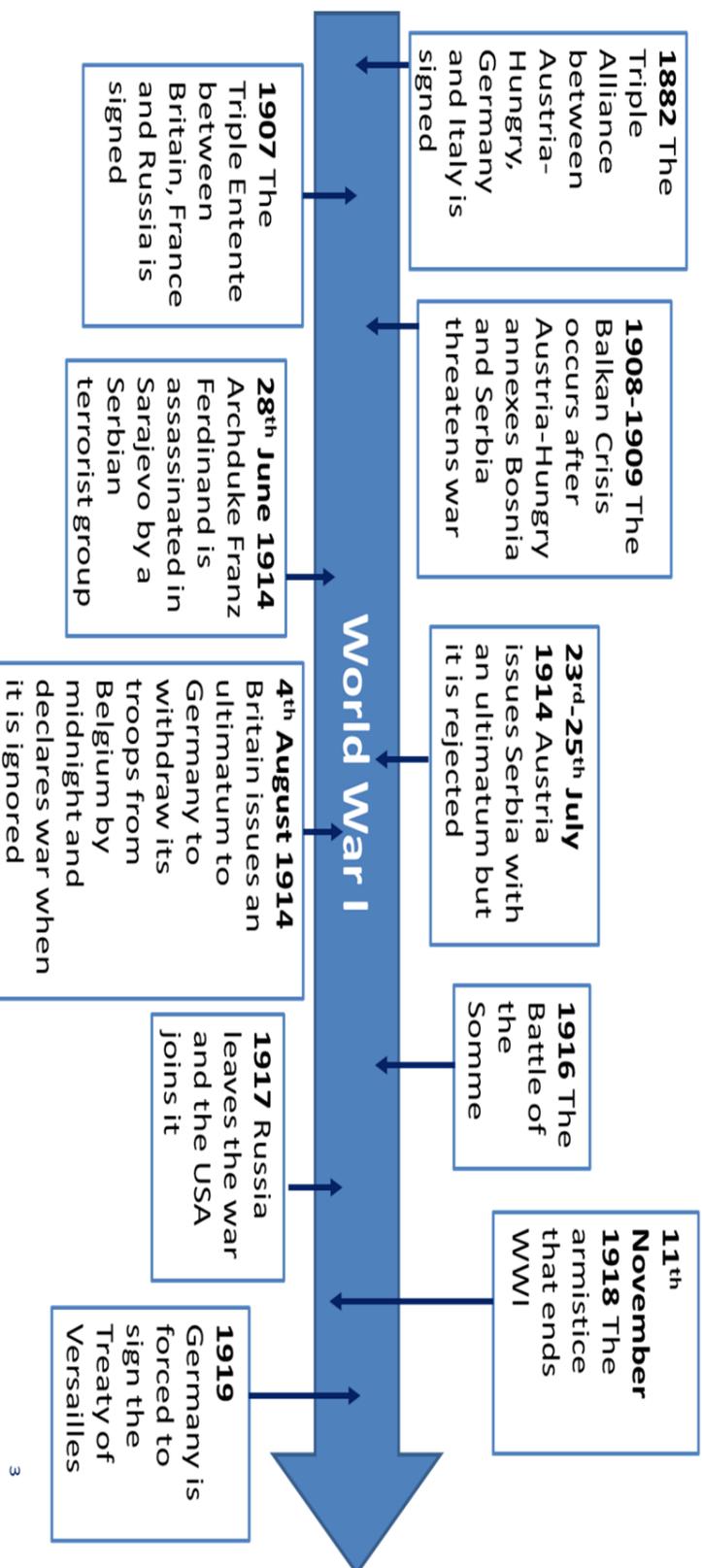
## Skills

- Historical knowledge
- Sources
- Interpretations
- Historical Writing



## Year 9, Topic Summary Sheet

### Unit 1: WWI



3

Keywords	
<b>Alliance</b> — An agreement between countries that benefits each of them.	<b>Imperialism</b> — Extending a nation’s power and influence by colonizing other countries.
<b>Annex</b> — To seize an area of land, normally by force, and make it part of your country.	<b>Militarism</b> — A belief that it is necessary to have strong armed forces and that this force should be used as a solution to any threat.
<b>Armistice</b> — A ceasefire between the Allies and the Germans. It signaled the end of war.	<b>Nationalism</b> — An intense form of patriotism where the value and importance of your country is exaggerated.
<b>Arms Race</b> — A competition between countries over the development and production of weapons.	<b>Naval blockade</b> — Allied efforts to restrict the supply of essential goods
<b>Artillery</b> —Heavy guns and mechanized cannons firing shells.	<b>Reparations</b> — Financial compensation for war damage paid by a defeated state.
<b>Balance of Power</b> —A belief in that the size and power of the alliances of the Great Powers would prevent either side starting	<b>Schlieffen Plan</b> — The German war plan to invade France quickly and encircle Paris.
<b>Brinkmanship</b> —To pursue a dangerous policy to the limits of safety especially in politics.	<b>Stalemate</b> —A situation where neither side fighting in a war can make progress.
<b>Conscription</b> — Forcing ordinary citizens to fight as soldiers in a war.	<b>Trench system</b> — Connection of long narrow ditches for soldiers to take shelter from enemy fire and a supply of ammunition and medical support.
<b>Encirclement</b> — When something is surrounded, such as Germany by the Triple Entente.	<b>Treaty</b> — A formal agreement between states. E.g. The Treaty of Versailles,
<b>Gas</b> —A poisonous agent used in warfare. It was used for one of the first times in WWI and had a damaging psychological impact.	<b>Trigger</b> — An event or action which has immediate significant consequences, e.g. the assassination at Sarajevo.
<b>Great Powers</b> —Countries that have international influence and military strength.	<b>Ultimatum</b> — A final demand, the rejection of which will result in a breakdown of relations. E.g. What Austria-Hungary presented to Serbia in July 1914.

### Key concept: Causation

<b>Long term</b>	Factor(s) that were around or happened significantly before hand. E.g. underlying tensions and rivalries between the Great Powers such as the desire to have a large empire and army/ navy.
<b>Short term</b>	Factor(s) that happen relatively close to the event you are studying that increases tensions and make war much more likely. E.g. The Balkan Wars.
<b>Spark or Trigger</b>	A significant factor or turning point, that has an immediate impact that sets a sequence of events in motion that won't turn back. E.g. The assassination.

### Long term causes: Who were the Great Powers in 1900 and what were their concerns?

<b>Great Britain</b> —They were seen as the strongest country in Europe, they were heavily reliant on trade with their overseas Empire that stretched from Australia, India, African nations to The Americas. They had the largest navy and felt vulnerable to other nations who sought to develop their navies. When Germany began to build their navy they saw this a direct challenge and began to consider an alliance with France. They had a small army.
<b>France</b> —They were a very strong imperial power that had a large army. They sought revenge with Germany after they lost the Franco-Prussian war and had been humiliated. Bismarck’s policy was to isolate France and not allow her any European allies. Britain were not interested in becoming allied with the French as they has no interest in Europe at this point, and previously had a strong rivalry with France.
<b>Germany</b> — They were a newly unified country in 1870, it had previously been lots of states, but it was unified by Otto von Bismarck who was the new diplomatic Chancellor. The King of Prussia became the Kaiser (king) of Germany. Kaiser Wilhelm II began to demand more status in the 1900s and desired more land, Germany’s ‘place in the sun’. They had won a war against France in 1870 and made the French pay them money for compensation and demanded the border territories of Alsace and Lorraine. Therefore, the French and Germany were bitter enemies in 1900 and Germany feared revenge, something Bismarck worked hard to avoid.
<b>Austria-Hungary (Habsburg)</b> — Their empire extended across central Europe and into South Eastern Europe, known as the Balkans. Their empire was weakening as nationalist threats broke out, encouraged by the demise of the Ottoman Empire (Turkey). They saw their biggest threat as Russia, who were looking to expand in the region, to get a warm water port in Europe.
<b>Russia</b> —They were the largest country by far and had huge numbers of people in their nation, however it was seen as ‘backward’ and feudal by the other European nations. They had no overseas empire, but had expanded into Asia. Their military potential was vast but limited due to its lack of industrialisation of weapon supplies. They exited WWI in 1917 due to a communist revolution, which replaced their monarchy.
<b>Italy</b> — Like Germany, they had also been unified from small states in 1871 to form the new nation, Italy. It was relatively weak compared to the other nations, but had ambitions of an empire and to have a place with the other European powers.

### How do I use my knowledge organiser?

- Have you learnt the key dates of this unit?
- Can you put the dates into chronological order?
- Have you mastered the keywords?
- Can you spell them?
- Can you define them?
- Have you understood the key concept?

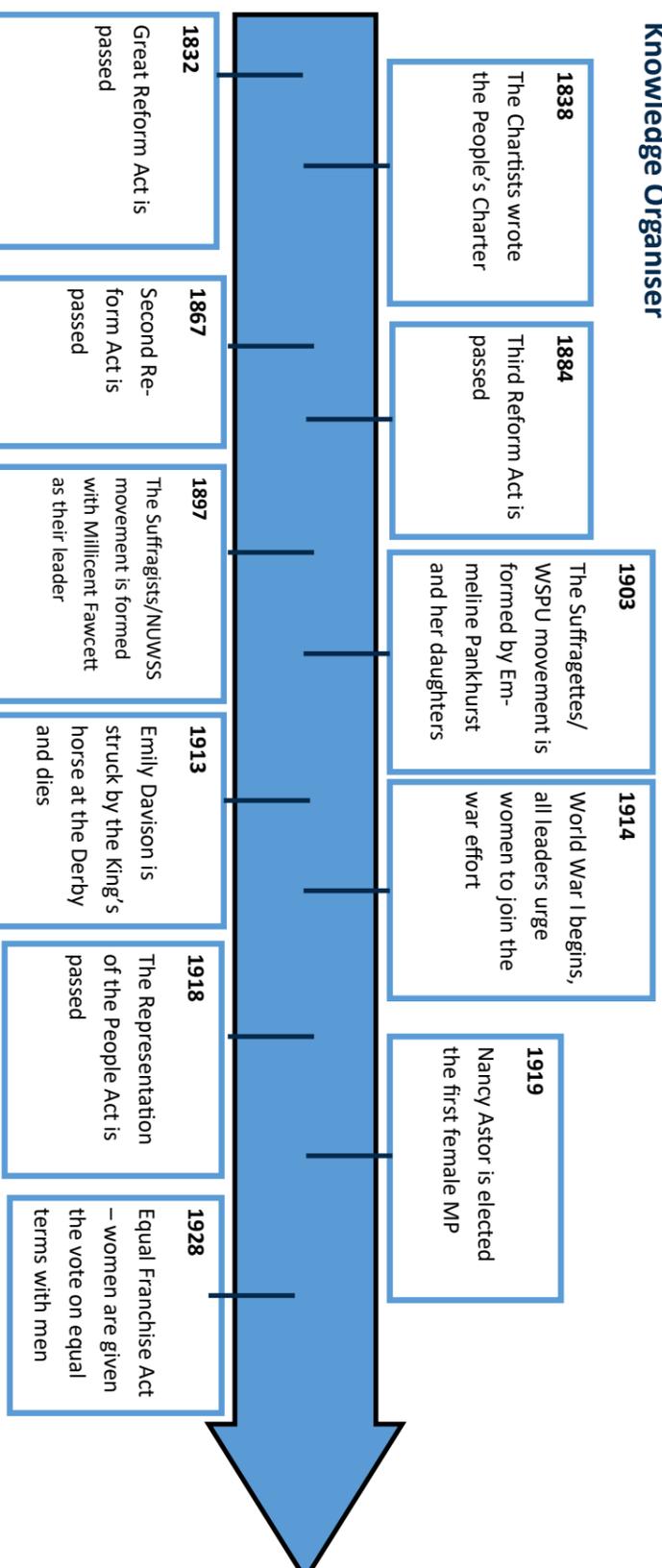
Fluency Sheet					
1	What lands had been taken from France by Germany in the war between them in 1871?	Alsace and Lorraine	21	Who assassinated the Austro-Hungarian Arch Duke Franz Ferdinand?	Gavrilo Princip
2	Which Great Power did not have an overseas empire but had expanded in Asia?	Russia	22	Where was Arch Duke Franz Ferdinand assassinated?	Sarajevo, Bosnia
3	Which Great Power had the largest and most powerful navy in 1900?	Great Britain	23	Which Serbian nationalist group did he belong to?	Black Hand
4	What did Russia want to gain in south east Europe?	Russia wanted to expand into Europe and gain a warm water port	24	What was the area between the two front line trenches of the opposing side known as?	No Man's Land
5	When was the Entente Cordiale signed?	1904	25	What was the purpose of the dug-out?	To sleep in, rest from artillery bombardments, they were dug deep into the land. The German dugouts were known to be deeper because they were defending land
6	Which countries signed the Entente Cordiale?	Britain and France	26	What was Trench Foot?	A disease men caught from standing in wet trenches in their boots – their feet became infected and the skin burst
7	Which countries signed the Triple Alliance, when and with what ambition?	Germany, Italy and Austria-Hungary, 1882 - Bismarck wanted to isolate France	27	How did soldiers in the trenches spend most of their time?	They spent it repairing the trenches
8	Which country joined the Entente Cordiale to make the Triple Entente and when?	Russia, in 1907	28	When was the Battle of the Somme?	July to November 1916
9	Which Great Power believed they were encircled and therefore felt threatened?	Germany	29	What is a Pals' battalion? Give an example of one.	Men who had enlisted together, usually from the same town or village, fought together.. E.g. Accrington Pals.
10	What was the battleship called that Britain developed in 1906 that Germany copied that triggered an arms race?	HMS Dreadnought	30	Who was the British General in charge of the military plans of the Somme?	General Haig
11	What was Germany's plan for war?	The Schlieffen Plan	31	What was the Ludendorff offensive?	The last German spring offensive in 1918 by the Germans on the French and British front lines
12	What was the BEF?	The British Expeditionary Force – 150,000 highly trained and well-equipped men.	32	What examples of new technologies in warfare were developed further throughout WWI?	Tanks, gas, aerial assault, machine guns, moving artillery cannons
13	Who had the largest land army in 1914?	Germany, 1.5 million men. However, Russia could quickly overtake this when they mobilised fully.	33	Which Great Power left the war in 1917 and why did they leave?	Russia left the war in 1917 after a revolution put a Communist government in charge, which made peace with Germany
14	In what years did the Balkan Wars occur?	1912-13	34	When did WWI end with the armistice?	November 11th 1918 — remembrance day
15	Why was Austria-Hungary concerned about Serbian strength in the region?	Austria was concerned that the Serbs in its empire might also demand independence especially in the newly annexed Bosnia.	35	What were the politicians known as who signed the Treaty of Versailles?	The Big 3 (Lloyd George - Britain; Clemenceau - France, and Wilson - USA.)
16	Who did Serbia have an alliance with?	Russia	36	When was the Treaty of Versailles signed?	June 28th 1919
17	What was the aim of the Black Hand?	To unite all Serbs under the leadership of Serbia no matter where they lived in the Balkans	37	What did the French leader, Clemenceau, want to do to Germany?	Punish Germany and treat them harshly, "squeeze them till the pip squeaks"
18	What was the 'blank cheque'?	Germany's total support of Austria-Hungary over its handling of the assassination and dealing with Serbia.	38	How much in reparations did Germany have to pay?	£6600 million
19	Whose neutrality did Britain promise to defend in 1914?	Belgium	39	Which land did Germany lose after the Treaty of Versailles?	Alsace and Lorraine, Posen, West Prussia, Danzig port, all overseas colonies
20	What did Austria-Hungary give Serbia after the assassination?	An ultimatum	40	Which organisation was set up to try and prevent further world wars?	The League of Nations

## Fluency Sheet– Forgotten armies of WW1

<b>1</b>	What made WW1 a true world war compared to previous conflicts?	Indigenous people across the world fought alongside each other
<b>2</b>	Across which five continents did battles take place?	Europe, Asia, Africa, North America, South America
<b>3</b>	Which empire brought in the Middle East to the war?	The Ottoman Empire
<b>4</b>	What were Germany's colonial aims of WW1?	To increase the size of their empire
<b>5</b>	What did nationalists like Gandhi suggest for why Indian troops were keen to fight in WW1?	To gain more autonomy after the war
<b>6</b>	How did British propagandists display Britain to the empire?	The paternal figure of the empire
<b>7</b>	Why did Germany attack Britain's colonies?	To spread the British army across the world
<b>8</b>	How many non-white, non-European soldiers fought for Britain, France and their allies?	4 million
<b>9</b>	What were millions of men of both sides press-ganged to carry in Africa?	Equipment, food, ammunition
<b>10</b>	What weapon did Ganga Singh carry?	A rifle
<b>11</b>	Which country had the largest volunteer army in the world?	India
<b>12</b>	In which battle was chlorine gas first used?	Second Battle of Ypres
<b>13</b>	What did the Chinese Labourers quickly become specialists in digging?	Trenches
<b>14</b>	Which native Canadian tribe was the soldier Mike Mountain Horse from?	Kanai Blood Tribe

## Unit 2: The Suffragettes

### Knowledge Organiser



Keywords	
<b>Act</b> a written law passed by Parliament	<b>Propaganda</b> information used to promote a political point that can be misleading or untrue
<b>Ballot</b> a system of voting on a particular issue	<b>Reform</b> make changes in order to improve something
<b>Charter</b> a written statement of the rights of a specified group of people	<b>Representation</b> Speaking or acting on behalf of someone
<b>Democracy</b> system of government by the whole population typically through elected representatives.	<b>Rotten boroughs</b> a borough that was able to elect an MP despite having very few voters, the choice of MP typically being in the hands of one person or
<b>Enfranchisement</b> To be given the right to vote	<b>Strike</b> an organised refusal to do something expected or required typically to gain a concession
<b>Manifesto</b> A public set of political aims written down	<b>Suffrage</b> the right to vote
<b>Parliament</b> a group of people who make the laws for their country	<b>Tactics</b> An action or strategy carefully planned to achieve a specific end
<b>Petition</b> a formal written request, typically one signed by many people, appealing to authority in respect of a particular cause	

Key concept: Causation	
<b>Long term</b>	Factor(s) that were around or happened significantly before hand. E.g. Success of protests for male suffrage, demands of the Chartists
<b>Short term</b>	Factor(s) that happen relatively close to the event you are studying. E.g. Militant actions of the Suffragettes
<b>Spark or Trigger</b>	A significant factor or turning point, that has an immediate impact that sets a sequence of events in motion that won't turn back. E.g WW1 and changing role of

Key people	
<b>Nancy Astor</b>	The first women elected as a Member of Parliament (MP)
<b>Emily Davison</b>	Joined the WSPU in 1906. Was struck by the King's horse at the Epsom Derby and killed in 1913.
<b>Benjamin Disraeli</b>	A Conservative Prime Minister (1868, 1874-80) who introduced the Second Reform Act
<b>Millicent Fawcett</b>	Founded the Suffragists/NUWSS in 1897
<b>William Gladstone</b>	A Liberal politician who served in Parliament for over 60 years and four times as Prime Minister. He passed the Third Reform Act, extending the vote to all male homeowners.
<b>Earl Grey</b>	A Whig Prime Minister who proposed the Great Reform Act in 1831 and resigned when the House of Lords rejected it.
<b>Annie Kenney</b>	A working-class socialist feminist who was active in the WSPU as a militant member and was arrested.
<b>William Lovett</b>	The leader of the Chartist movement and wrote the People's Charter in 1838
<b>Christabel Pankhurst</b>	Speaker for the WSPU in 1905. She trained as a lawyer but could not practice as a woman. She fled the country in 1912 for fear of rearrest, and unsuccessfully ran for parliament in 1918.
<b>Emmeline Pankhurst</b>	Founded the WSPU in October 1903 and encouraged militant action as a form of protest. Was arrested many times, she went on hunger strike and was force-fed. Mother of Christabel.

How do I use my knowledge organiser?	
Have you learnt the key dates of this unit?	
Can you put the dates into chronological order?	
Have you mastered the keywords?	
Can you spell them?	
Can you define them?	
Have you understood the key concept?	
Can you explain what an event/individual/place in history reveals about a bigger picture or bigger idea?	



# Spanish

## Assessment Format:

You will sit this assessment in class.

Topics covered in the Assessment:

## Unit 1: Family and Relationships

- Do you get on well with your family?
- What is a good friend?
- What would an ideal partner be like?
- What plans do you have for the future?
- What do you do with your family and friends?
- What did you do last weekend?
- Sports and Hobbies
- What did you do when you were younger?

## Unit 2: Festivals and Celebrations

- Spanish festivals
- Spanish cuisine and how it compares with English cuisine
- What festival did you celebrate recently?
- What festival would you like to celebrate in the future?
- What festival did you go to before and what would you like to do in the future (comparisons)



## Unit 9 - Relationships

### 9.1.1 Describe tu familia - Describe your family

MI padre / mi padrastro	My dad/stepdad
MI madre/mi madrastra	My mum/stepmum
MI hermano/o mayor	My older sister/brother
MI hermana/o menor	My younger sister/brother
MI media/o hermano/o	My half sister/brother
Mis padres	My parents
Mis abuelos	My grandparents
Tiene(n) el pelo ...	S/he has (they have) ... hair
Tiene(n) ... años	S/he is (they are) ... years old
Es ...	S/he is ...
Son...	They are...

### 9.1.2 ¿Te llevas bien con tu familia? - Do you get on well with your family?

Me llevo bien con...	I get on well with...
No me llevo bien con.../Me llevo mal con...	I don't get on well with...
Salimos	We go out
Discutimos	We argue
Compartimos	We share
Nos peleamos	We argue/fight
Tenemos mucho en común	We have lots in common
No tenemos nada en común	We have nothing in common
Me fastidia	S/he annoys me
Me hace reír	S/he makes me laugh
Juntos	Together

### 9.2.2 ¿Qué hace tu hermano/a? - What does your brother/sister do at the weekend?

Juega	S/he plays
Hace	Literally: I do/make (many expressions need hacer)
Hace deporte/Hace sus deberes	S/he does sport/S/he does his/her homework
Va	S/he goes
Sale	S/he goes out
Se queda en su habitación	S/he stays in his/her room
Se entrena	S/he trains
A... le gusta (+ Infinitive)...	S/he likes (to...)
Es aficionado/a de ...	S/he is a fan of...
Juegan ...	They play...
Hacen...	They do...
Somos muy diferentes	We are very different
Tenemos gustos similares	We have similar likes/interests
Su/sus (agrees with the object)	Her/his (su = his or her singular, sus = his or her plural)

### 9.2.1 ¿Qué haces y cuándo? - What do you do and when?

Juego	I play
Juego al baloncesto/ Juego en el parque	I play basketball/I play in the park
Hago	Literally: I do/ make (many expressions need hacer)
Hago natación/Hago escalador/Hago ejercicio	I swim - I go swimming/I climb/I exercise
Voy	I go
Voy al centro/Voy a una fiesta/Voy de paseo	I go to town/I go to a party/I go for a walk
Salgo	I go out
Me quedo en mi habitación	I stay in my room
Toco + instrumento	I play an instrument
Toco la guitarra/Toco la batería	I play the guitar/I play the drums

## Unit 9 - Relationships

### 9.3.1 ¿Cómo sería tu pareja ideal? - What would your ideal partner be like?

¿Te gustaría casarte o tener una familia?	Would you like to get married or have a family?
Mi novio/o ideal	My ideal boyfriend/girlfriend
(No) sería...	S/he would (not) be...
Tendría...	S/he would have...
Le gustaría	S/he would like...
Me gustaría	I would like
Casarse	To get married
Separarse	To separate
Divorciarse	To divorce
Enamorarse	To fall in love
Estar comprometido/a	To get engaged
Vivir juntos	To live together
El matrimonio	Marriage
La boda	Wedding
Soltero/a	Single
La libertad	Freedom

### 9.4.1 ¿Qué hiciste el fin de semana pasado? -

What did you do last weekend?

Tuve que (+ infinitive)	I had to...
Quería (+ infinitive)	I wanted to...
Era/fue...	It was...
Me divertí mucho	I enjoyed myself
Hacía/hizo calor/frío	It was hot/cold
Llovía/llovía	It rained

### 9.4.2 ¿Qué hacías cuando eras pequeño/a? -

What did you used to do when you were little?

Cuando era pequeño/a	When I was little
Lo que más me gustaba era	The thing I liked the most was...
Me gustaba (+infinitive)	I liked to ... // used to like to ...
Me encantaba (+infinitive)	I loved to...// used to love to...
No soportaba (+ infinitive)	I could not stand...

### 9.3.2 En tu opinión, ¿Qué es un buen amigo? -

In your opinion, what is a good friend?

(see Exercise book for adjectives)

Un buen amigo/una buena amiga es...	A good friend is...
Me hace reír	Makes me laugh
Me hace feliz	Makes me happy
Me ayuda con mis problemas	Helps me with problems
Me acepta	Accepts me
Me entiende	Understands me
Comparte todo	Shares everything
La amistad	Friendship
Comprensiva/o	Understanding

### 9.3.3 ¿Cuáles son tus planes para el fin de semana? -

What are your plans for the weekend?

Voy a (+ infinitive)	I am going to (+verb/activity)
Voy a salir de fiesta	I am going to go partying
Va a (+ infinitive)	S/he is going
Vamos a (+ infinitive)	We are going
Van a (+ infinitive)	They are going
Espero (+ infinitive)	I hope
Va a ser	It's going to be
Será	It will be
Como siempre	As usual

## Unit 10 - Festivals And Celebrations

### 10.1.1 La comida - Food

El desayuno	Breakfast
Desayunar	To eat /have breakfast
El almuerzo/la comida	Lunch
La merienda merendar	Afternoon snack
La cena	Dinner/tea
Cenar	To eat /have dinner
Como/Tomo	I eat/I take
Tomo cereales con leche	I take cereals with milk
Una dieta equilibrada	A balanced diet
Comer sano	To eat healthily
La comida grasosa/ grasa	Fatty food
Una comida	A meal
Comida para llevar	Takeaway food
La carne	Meat
Una comida vegetariana/vegana	A vegetarian/vegan meal
Las verduras	Vegetables
El arroz	Rice
La pasta (en salsa de tomate)	Pasta (in a tomato sauce)
El pescado (el atún/el salmón)	Fish (tuna/salmon)
Alrededor del mediodía/ de las seis	At about midday/At about 18:00
Mi plato preferido	My favourite dish
Al volver a casa	When returning home...
Me levanto y luego...	I get up and then...
Juntos en familia	Together as a family

### 10.1.2 La variedad de la cocina hispánica

La cocina tradicional	Traditional food/dishes
Una especialidad	A speciality
En América Central	In Central America
En Sudamérica	In South America
El plato nacional	The national dish
Similar a	Similar to
Picante	Spicy
El ajo	Garlic
El maíz	Corn
Los mariscos	Shellfish
Relleno/a de...	Filled with...
En comparación con...	Compared with...

### 10.2.1 ¿Qué celebraciones se celebran en España/en países de habla hispana? - Which festivals/celebrations are celebrated in Spain/Spanish speaking countries?

Celebramos...	We/One celebrates...
La Nochevieja	New Year's Eve
El Año Nuevo	New Year's Day
La Navidad	Christmas
La Pascua/la Semana Santa	Easter
El día de la madre	Mothers' Day
El Día de los Muertos	Day of the dead (celebrated in Mexico)
Los Sanfermines	Festival with the running of the bulls
Las Fallas de Valencia	Traditional celebration in Valencia every year
La Feria de Abril de Sevilla	April festival of Seville
Un desfile/una procesión	A parade
Los fuegos artificiales	Fireworks
Los regalos	Presents
La tarta de cumpleaños	Birthday cake

## Unit 10 - Festivals And Celebrations

### 10.2.2 Háblame sobre una fiesta que celebraste -

Tell me about a past festival/celebration

El año pasado	Last year
Hice dos meses/un año	Two months/ a year ago
Celebré.../Celebramos...	I celebrated/ we celebrated
Hice/hicimos una tarta de cumpleaños	I made a cake/He/she made a cake
... me compré...	... (s/he) bought me a...
Bailé	I danced
Invité a mis amigos a mi casa	I invited my friends to my house
Organicé una fiesta	I organised a party
Participé	I participated in...
Llevé un disfraz	I wore fancy dress
Fui	I went...
Fue + adjective	It was + adjective
Toda la noche/ todo el día	All night/ day
Me divertí mucho	I enjoyed myself
Lo pasé/pasamos genial/ fenomenal/bomba	I/we had a great time

### 10.2.3 ¿Qué festival/qué fiesta te gustaría visitar y por qué? -

What festival would you like to visit?

(No) me gustaría (+ infinitive)	I would (not) like
Me encantaría (+ infinitive)	I would love
Parece + adjective	It seems + adjective
Parece emocionante	It seems exciting
Me interesa la cultura	I'm interested in culture
Me interesan las tradiciones	I'm interested in traditions
(No) soy religioso/a	I am (not) religious

### 10.3 ¿Cómo se compara con las tradiciones de su país? -

How does it compare?

En comparación con...	In comparison to...
Que	Than
Que en España/México	Than in Spain/Mexico
Than in Spain/México	It seems exciting
Es más...	It's more...
Es menos...	It's less...
Mientras que	Whereas
Ponemos/ ponen	We put/they put
Tenemos/ tienen	We have/they have
Comemos/Comen	We eat/they eat
Hacemos/ hacen	We do/they do
Celebramos/celebran	We celebrate/they celebrate

### 10.4 ¿Qué hay en la foto? -

What is there in the photo?

En la foto hay	In the photo there is/are
Puedo ver	I can see
Una familia/algunas personas/ jóvenes/ niños	A family/ some people/young people/ children
Un hombre/ una mujer/ un chico/ una chica	A man/ a woman/ a boy/ a girl
Al aire libre/dentro	Outside/indoors
Los turistas	Tourists
Parece... (feliz/triste)	S/he seems... (happy/sad)
Parecen (felices/tristes)	They seem... (happy/sad)
Los edificios (modernos/viejos)	Some (modern/old) buildings
Un lago/ una montaña/ un jardín	A lake/ a mountain/ a garden
Hace sol	It's sunny
Hace buen/mal tiempo	It's nice/bad weather
Habla/discute/juego/trabajo/ comida/come	S/he is speaking/ is arguing/is playing/is working/is walking/ is eating
Hablan/discuten/ juegan/ trabajan/ comen/ comen	They are speaking/arguing/ playing/working/walking/ eating
Lleva (una camiseta/un jersey/ un vestido/vaqueros/ zapatillas/gafas)	S/he is wearing (a T-shirt/a jumper/a dress/jeans/trainers/ glasses)
A la izquierda/a la derecha	On the left/on the right
En primer plano	In the foreground
Al fondo	In the background