



Knowledge Organisers

Year 8

Autumn Half Term 1

‘Practice of what is taught’

Name:

Tutor:

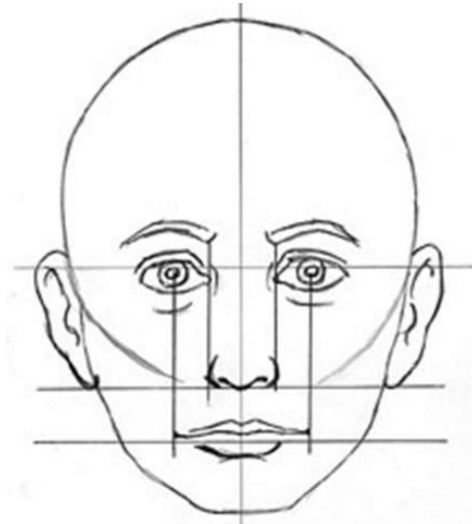
House:

Art

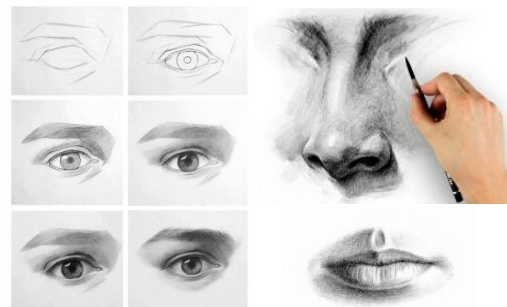
Year 8 - Portraits

Key knowledge & skills

Drawing a realistic self portrait , building on what you know about drawing from observation. **Recording shapes** with accuracy. Drawing lightly so you can **adjust and refine**. **Measuring** as you draw to achieve accurate proportion. **Noticing** details, including using **mark-making** to show different surface textures. Using a range of **light, medium and dark tones** to show how light shines on the face and where light cannot reach.

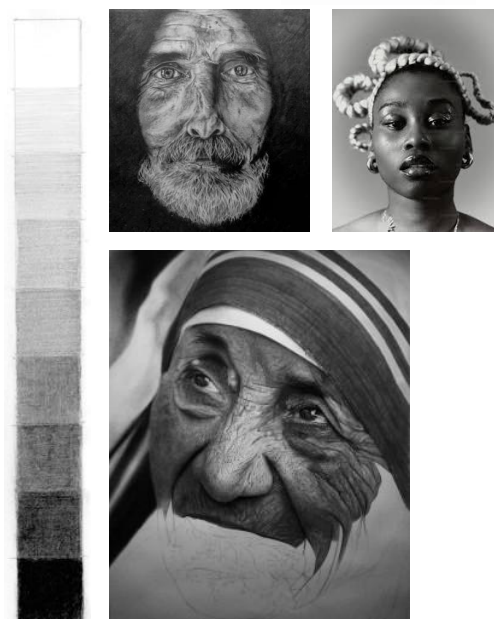


Develop your skills in **drawing features**. Learn **how to draw eyes, noses and mouths with accuracy** and how to position them into a drawing of the whole face. You will learn how to use **tone** to help shape these features and **mark making** to show **textures**.



Understanding portraiture Art. In this project, you will learn about the role and purpose of portrait art. You will find out Portrait Art by studying a range of artists.

Your final outcome will be an **accurate A3 portrait**.



Key Artists



Kehinde Wiley

An American artist who often mimics the 'Old Masters' in his paintings. He blurs the boundaries between **traditional** and **contemporary** portraits. He was **commissioned** by Barack Obama to paint his presidential portrait. He uses foliage and flowers that are connected to the former president's life.



Ron Mueck

An Australian born artist who creates highly realistic looking **sculptures**. He plays around with **scale**, often creating **figures and faces** that are extremely oversized.



Kelvin Okafar

A British **photorealist** artist who works in pencil. He studied in Middlesex and during Covid he set up online drawing classes to share his drawing methods with others.



Frida Kahlo

A Mexican artist who was injured badly at a young age and used art as a therapy to help her recovery. She painted many realistic **self-portraits** which were filled with elements of **symbolism**.

Key Terms

PORTRAIT: A painting, drawing, photograph, or engraving of a person, especially one depicting only the face or head and shoulders.



REALISM: Realism is art that is designed to faithfully copy the real world - with accurate recording of shape proportion and detail.



Computing Knowledge Organiser Year 8



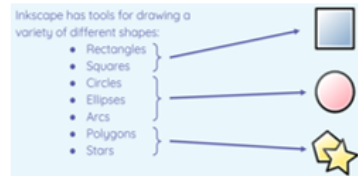
The Castle School
ACHIEVE | BELONG | PARTICIPATE

Topic: Media – Vector Graphics



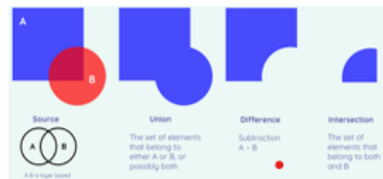
Rationale: To identify that a vector drawing comprises separate objects and be able to create vector graphics

Drawing Tools



Combining Objects

Combine Objects in Inkscape using Source, Union, Difference and Intersection



Paths

In Inkscape you can draw your own lines and shapes.

The lines can be:

- Straight
- Curved
- Freehand



Key Words

Digital Graphics	A graphic is an image or visual representation of an object. Therefore, computer graphics are simply images displayed on a computer screen.
Vector Image	Mathematically based images. Made up of lines, shapes etc (objects). Easily scalable (as they are not pixel based).
Bitmap Image	Pixel based images. This type of image is resolution based. Stretching them, stretches the pixels and loses quality.
Inkscape	Inkscape is professional quality vector graphics software

Common Uses

Common uses for vector graphics

Logos
Illustrations
Icons

Can you research any others?



Inkscape

Inkscape is a professional quality vector graphics software.

Vector graphics software is a type of application used to create and edit images using mathematical formulas and geometric shapes, rather than individual pixels.

Difference between Bitmap and Vector Images



Vector graphics are images such as illustrations, icons, and logos. They do not use many colours because they have large areas of solid colour.

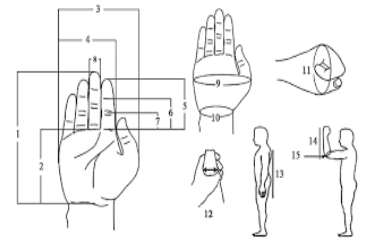
Bitmap images (raster graphics) are usually real photographs that contain a great deal of detail. They use lots of colours because each tiny pixel is a slightly different shade to allow the colours to blend.



DT

Week 2: Ergonomics -What is ergonomics and anthropometrics and how does it affect our lives?

Designers need to think about **anthropometrics** and **ergonomics** when they make products. This helps them create things that are safe, comfortable, and easy to use.



What is Ergonomics?

Ergonomics is about making sure things are comfortable and easy to use. Designers use body size information (anthropometrics) to help with this. If a product isn't designed well, it might hurt to use it or be hard to use. Good ergonomic design makes things better for your body.

Here's what good ergonomics looks like at a desk:

- The desk is the right height for typing and using a mouse.
- The screen is at eye level, so your neck doesn't get sore.
- The chair can be moved up or down to fit your height.
- Armrests and backrests help you sit properly.



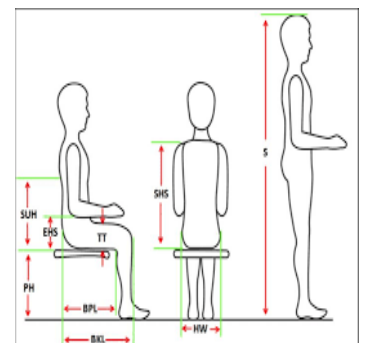
What is Anthropometrics?

Anthropometrics is the study of body sizes. It helps designers know how big or small different parts of the body are—like hands, arms, or heads.

For example, if someone is making a safety helmet, they need to know how big people's heads are. Since everyone's head is a little different, the helmet should be adjustable, so it fits most people.

Designing for Most People

It's hard to make one product that fits everyone. So, designers try to make things that work for most people. They use something called **percentiles** to help.



Here's what percentiles mean:

- **5th percentile:** smaller than most people
- **50th percentile:** average size
- **95th percentile:** bigger than most people

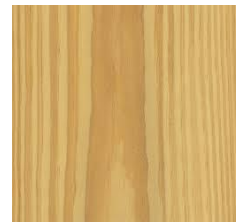
Designers usually make products that fit people between the 5th and 95th percentiles. That way, most people can use them comfortably.

Watch (2min 16 seconds) [Why Ergonomics? | Importance & Benefits of Ergonomic Workplace \[LUMI\] - YouTube](#)

Week 4: "Exploring Woods: Types, Examples & Uses"

Softwood

- Comes from **coniferous trees** (trees with needles)
- Grows quickly, making it more affordable
- **Example:** *Pine* – used for furniture, flooring, and construction
- Often lighter in colour and easier to cut



Hardwood

- Comes from **deciduous trees** (trees that lose their leaves)
- Stronger and lasts longer but is more expensive
- **Example:** *Oak* – used for high-quality furniture and flooring
- Often darker in colour with a denser grain



Manufactured Boards

- Made by gluing wood pieces together
- More stable, affordable, and versatile
- **Example:** *MDF (Medium-Density Fiberboard)* – used in furniture.



Why understanding different woods matter when making products

- Strength vs. flexibility and its suitability for different products
- Cost and availability of timber before purchasing
- Which wood be best for different jobs

Fun Fact & Conclusion

- Did you know the oldest tree in the world is over 4,800 years old? Woods are everywhere in our lives!

Why understanding different woods matter when making products

- Strength vs. flexibility and its suitability for different products
- Cost and availability of timber before purchasing
- Which wood be best for different jobs

Types		Uses
Softwood	Pine, Cedar	Furniture, construction
Hardwood	Oak, Mahogany	Flooring, luxury furniture
Manufactured Boards	MDF, Plywood	Cabinets, paneling

English – Sparx Reader

For your Sparx Reader homework, you should spend 30 minutes carefully reading your Sparx reader book, paying close attention to what you are reading. If you can achieve 300 points in 30 minutes, that's excellent. If you have spent 30 minutes but not yet reached 300 points, your teacher will see that you have spent enough time reading and will give you a house-point for completing homework.

If you can, try to read in a quiet, distraction-free spot so that you can concentrate on what you are reading and answer the questions accurately.

Your homework is the same every week, so it is your responsibility to complete your 30 minutes, or 300 points, of reading. Please see your teacher **before** the day the homework is due if you have any problems.

Reading Articles

You will have a reading article each week linking to the whole school theme:

Week 1: Values

Week 2: Friendship and Family

Week 3: Ambition

Week 4: Black History Month

Week 5: Equality

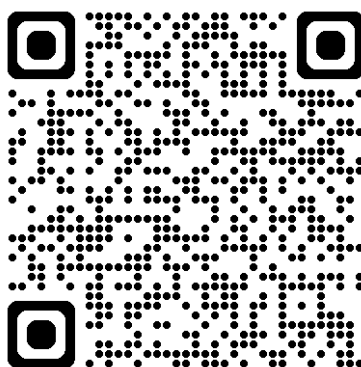
Week 6: Celebration

Read the article and highlight three words of which you were not sure. Then write the definition and draw an image which will help you remember.

As you read the articles, you will identify that the articles are not in UK English. However, the articles offer some great messages.

Use this QR code to access the reading articles read by a teacher or link:

<https://www.castleschool.co.uk/parents/homework.htm>



Food

Chemical Hazards

Obviously, the chemical agents with which we clean the kitchen are not for human consumption. Whilst you should spray the surface of a chopping board, you don't want anti-bacterial in your finished cooked dishes. In addition, poisons and pest control materials can be highly dangerous sources of chemical contamination. You should have a clear system of cleaning which ensures no cleaning fluids, sprays or similar potential contaminants come into contact with food.



Physical Hazards



Physical hazards are things like plasters, jewellery and pest droppings. When you think how far a shattered tumbler will spread glass, it becomes clear how easy it is for physical contamination to get into food. Broken objects should be cleaned immediately and properly. Some contaminants can even be a choking hazard, so keep your eyes peeled.



Allergen Hazards

Allergic reactions can kill. Allergens are one of the most dangerous types of food hazard. The victims' airways or tongue can swell, their blood pressure can plummet, and they can struggle to breathe. Many pre-made ingredients contain allergens and therefore cross-contamination is easy. Education about them is an absolute necessity.

Microbiological Hazards

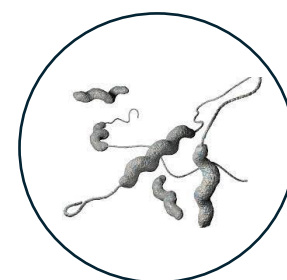
This is one of the most common types of food hazard and what we mostly associate with food poisoning. It concerns the introduction of bacteria and similar nasties into food

can cause a range of illnesses. For example, washing chicken is an extremely common microbiological hazard. Campylobacter and salmonella can spread when you splash chicken water around the sink and adjacent areas. Handling chicken and other poultry properly is vital to preventing this.



Clearing Up Procedure in School



1. Use hot water and washing up liquid
2. Place dirty dishes next to the sink but not on the draining board
3. Use a dishcloth
4. Wash up the cleanest items first and overturn onto draining board to drain
5. Clean worktops with a dishcloth
6. Wash out your bins and dry them
7. Dry up dishes with a tea-towel and leave out for teacher to check
8. Place sharp knives in the block
9. Collect your name tag and organise your container
10. Pack equipment away
11. Check your sink is clean and the plug hole is empty
12. Place dirty cloths in the wash basket and oven gloves away
13. Switch oven off at the dials and the main switch. Wait quietly for the teacher to dismiss








Week 2 – Introducing Asia	Week 4 – Asia's population	Week 6 – Squatter settlements and trade
<p>A continent is a huge area of land, like Asia or Africa, and it's usually separated from other continents by oceans. Inside each continent, there are countries, which are areas with their own governments, like Nepal. Within countries, there are smaller areas called regions, and in different regions, you can find different biomes. A biome is a large area that has its own kind of weather, plants, and animals. One example is the mountain biome, which starts high up—around 3,000 meters—and goes up to where the snow begins.</p> <p>The climate of a biome is what the weather is usually like over a long time, usually 30 years. In Nepal, which is in Asia, the mountain biome is being affected by deforestation, which means cutting down lots of trees. This is causing problems like soil erosion, where the soil gets washed or blown away because there are no tree roots to hold it in place. This can harm the land and the people who live there.</p>	<p>Asia is the biggest continent in the world, and more than 60% of all the people on Earth live there—that's about 4.4 billion people! Most of them live in just two countries: China and India. In every country, there are people who work and people who don't. The people who don't work, like children and older people, are called the dependent population because they rely on others to take care of them.</p> <p>Some countries, like Japan, have more and more older people and fewer babies being born. This is called an ageing population, and it means there are fewer young people to help support the older ones. Japan's population is also getting smaller, which can make it hard to keep the country running smoothly. On the other hand, Afghanistan has lots of young people and its population is growing very fast. This can lead to overpopulation, which happens when there aren't enough jobs, food, or homes for everyone. In some places, the opposite happens—there aren't enough people to use all the resources and technology. That's called underpopulation. Each of these situations brings different challenges for countries to solve.</p>	<p>A megacity is a city with more than ten million people, like Mumbai in India. Inside Mumbai is Dharavi, the largest squatter settlement in India. Squatter settlements—also called slums, favelas, or shanty towns—are areas where people live in poor-quality homes without proper water, toilets, or electricity. Dharavi is very crowded, with about one million people living in just one square mile. Even though life is hard, there's a strong sense of community. The government wants to move people out to build new developments, but many residents don't want to leave, which causes conflict.</p> <p>India is also connected to other countries through interdependence, meaning it works with and relies on others, especially through trade. Trade is when countries buy and sell goods and services. Exports are things a country sells to others, and imports are things it buys from other countries. If a country spends more on imports than it earns from exports, it has a trade deficit. If it earns more from exports, it has a trade surplus. Since 2006, India's economy has grown quickly. Its imports—like oil from the Middle East and goods from China—and its exports—mainly to other Asian countries—have both tripled.</p>

History

Component	Core knowledge (that you NEED to know)	Key vocab (that you NEED to know and use)
<p>Week 1: Why was the Roman Catholic Church challenged in the Early 1500s?</p> 	<p>In England in the 1500s most people were Roman Catholic Christians. If you did not follow the Catholic faith, you were considered a recusant by the Church and the monarch. Religion was used by the Church and monarch as a way to control people. If people were good, they thought they would go to heaven after death. If they had sinned, they were told to expect to go to hell. The Church was a positive influence for many people as they found community and support, such as shelter, medical and food. Martin Luther was a German monk and teacher who lived from 1483 to 1546. He is best known for starting the Reformation by challenging the Catholic Church's practices, especially the sale of indulgences, with his 95 Theses in 1517. Luther's actions led to the creation of Protestant churches, and he also translated the Bible into German, making it accessible to more people. His ideas about faith and direct relationship with God changed the course of Christian history.</p> <p>This movement indirectly influenced Henry VIII, who, driven by personal and political motives, broke away from the Catholic Church and established the Church of England. Luther's actions set the stage for broader religious transformations that reshaped Europe.</p>	<p>Recusant: Someone who did not follow the religion of the country.</p> <p>Doom paintings: Paintings found on the walls of Catholic churches. They would show good people going to heaven and sinners going to hell.</p> <p>Reformation – The process of making change in an organisation. 'The Reformation' is the name given to describe How Henry VIII changed the church from Catholic to Protestantism.</p>
<p>Week 3: Why did his marriage to Catherine of Aragon become a challenge for Henry VIII?</p> 	<p>'The King's Great Matter' is a way that Henry VIII's advisors referred to his efforts to get a divorce/annulment from Catherine of Aragon. It was a very difficult situation because both Henry and Catherine believed that they had evidence to show that the other was wrong in their views. Catherine also refused to leave. She was a strict Catholic so believed marriage should last until death. However, four key areas, explain why Henry decided to overcome this challenge through a divorce.</p> <ol style="list-style-type: none"> 1. Lack of Male Heir: His marriage to Catherine had failed to produce a male heir to the throne, which was crucial for the stability of the Tudor dynasty. 2. Infatuation with Anne Boleyn: Henry became infatuated with Anne Boleyn, one of Catherine's ladies-in-waiting. Anne's influence encouraged him to seek a divorce and pursue a relationship with her. 3. Issue with Catherine of Aragon – Catherine had many miscarriages and by 1527 was around 40. She would not be able to bear a male heir. 4. Religious concerns – Henry VIII was concerned that he had married his dead brother's wife and this was sinful/against gods will. 	<p>Divorce: Ending a marriage</p> <p>Illegitimate: born outside marriage (a child could not legally become a monarch if this was so)</p> <p>Annulment: Declaration to say a marriage was never legal in the first place.</p> <p>Pope: The Head of the Catholic Church</p> <p>Heir: The next person to rule a country.</p>







<p>Week 5: How was the Catholic Church a challenge to Henry VIII's Power?</p> <div data-bbox="179 255 358 877">    </div>	<p>The Pope is considered the spiritual leader of Catholics worldwide. He interprets religious doctrine, provides guidance, and ensures unity within the Church. He refused to give Henry VIII an annulment as he was worried about upsetting the King of Spain and the other Catholic leaders. Henry didn't like the fact that the Pope had more power than him over people in England and told them what to do. After all, Henry was king of England and not the Pope! Why should the Pope who lived in Rome in Italy have more power than Henry.</p> <ul style="list-style-type: none"> • The Pope faced challenges: He was about to step down as pope and lacked time. He was a prisoner of the Holy Roman Emperor, Charles V. A previous pope had clashed with Henry, making Clement hesitant to assist him. Essentially, this led to Henry VIII making himself Supreme Head of the new 'Church of England'. • He rid himself of his old Catholic Archbishop, Wolsey, and appointed a new Protestant archbishop, Cranmer. He annulled his own marriage to Katherine and married Anne Boleyn <p>By making himself Head of the new Church in England, people wouldn't pay their taxes to the Pope, instead they would pay their taxes to Henry. Henry would become rich. Henry could sell the land and buildings (monasteries) that the Roman Catholic Church owned in England and make a lot of money for himself.</p> <p>Monasteries were Catholic places of worship and were often very big, rich places. Monks would live in monasteries and devote their lives to serving God. Monks had to give up their families and possessions when they went to live in monasteries so were individually very poor. However, they had food, healthcare, education and accommodation in the monasteries, so they were good places to live. They were highly decorated, impressive buildings with lots of expensive items and relics. The Catholic Church owned a quarter of all the land in England at that time. The Catholic Church took 10% of people's income at this time (tithe). Henry VIII wanted this wealth for himself as he had spent much of his wealth on costly wars.</p>	<p>Divorce: Ending a marriage</p> <p>Annulment: Declaration to say a marriage was never legal in the first place.</p> <p>Pope: The Head of the Catholic Church</p> <p>Heir: The next person to rule a country.</p> <p>Reformation – The process of making change in an organisation. 'The Reformation' is the name given to describe How Henry VIII changed the church from Catholic to Protestantism.</p> <p>Economic: Relating to money.</p> <p>Monastery: A place where monks live.</p> <p>Tithe: A tax of 10% of income or production that the public pay the Church.</p> <p>Dissolution: Destruction – getting rid of the monasteries.</p>
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Languages - French

Tu es allé(e) où en vacances? Avec qui? (verbs that use 'être' / perfect tense)
Where did you go on holidays? With who?

* You use the verb 'to be' to form the perfect tense with these past participles. E.g. 'je suis arrivé' = 'I am arrived' word for word, but means 'I arrived' in real English.

Time phrase	Être verb	Past participle	Country	With	Who with?	
L'année dernière Last year	Je suis I	allé (e) went	au Maroc to Morocco au Portugal to Portugal au Canada to Canada	avec with	mon père my dad	
		arrivé (e) arrived			mon copain (male) friend	
	Nous sommes we	allé(e)s went			en France to France en Espagne to Spain en Italie to Italy en Grèce to Greece aux États-Unis to America	ma mère my mum
		arrivé(e)s arrived				ma copine (female) friend ma famille my family mes parents my parents mes copains my friends
L'été dernier Last summer						

When	Verb	Details	With	Who?
Normalement normally D'habitude usually Pendant les vacances during the holidays	je vais I go / I am going nous allons we go / we are going 	au bord de la mer to the seaside à la campagne to the countryside à la montagne in the mountains à Paris to Paris	avec	mon père my dad  mon copain (male) friend
	je voyage I travel nous voyageons we travel 	en train by train en car by coach en voiture by car en avion by plane en bus by bus à vélo by bike à pied on foot		ma mère my mum  ma copine (female) friend ma famille my family  mes parents my parents  mes copains my friends

Tu es allé(e) où en vacances? Avec qui? (verbs that use 'être' / perfect tense)
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Time phrase	Être verb	Past participle	Country	With	Who with?
L'année dernière Last year L'été dernier Last summer	Je suis I	allé (e) went	au Maroc to Morocco	avec with	mon père my dad
		arrivé (e) arrived	au Portugal to Portugal au Canada to Canada		mon copain (male) friend
	Nous sommes we	allé(e)s went	en France to France en Espagne to Spain en Italie to Italy en Grèce to Greece		ma mère my mum ma copine (female) friend ma famille my family
		arrivé(e)s arrived	aux États-Unis to America		mes parents my parents mes copains my friends

Tu as voyagé comment? Comment était le voyage? (regular -er verb / perfect tense)
How did you travel? How was the journey?

Time phrase	Avoir verb	Past participle	Transport	Conjunction + verb	Adjective
L'année dernière Last year L'été dernier Last summer	j'ai I	voyagé travelled	en voiture by car	et c'était... and it was...	rapide quick
			en train by train		lent slow
	nous avons We	voyagé travelled	en avion by plane	et ce n'était pas ... and it wasn't...	cher expensive
			en car by coach en bus by bus		confortable comfortable ennuyeux boring

Tu as passé de bonnes vacances? (regular –er verbs / perfect tense)
Did you have a good holiday?

Time phrase	Avoir verb	Past participle	Activity	Conjunction / verb	Adjective
Pendant les vacances <i>During the holidays</i> D'abord <i>First of all</i> Ensuite <i>Next</i> Après <i>After</i> Finalement <i>Finally</i>	j'ai <i>I</i>	joué <i>played</i>	au tennis <i>tennis</i>	et c'était <i>and it was</i>	génial <i>great</i>
		mangé <i>ate</i>	des glaces <i>some ice-creams</i>		
		retrouvé <i>met</i>	mes / nos amis <i>my / our friends</i>		
	nous avons <i>we</i>	écouté <i>listened</i>	de la musique <i>to some music</i>		amusant <i>fun</i>
		acheté <i>bought</i>	des baskets <i>some trainers</i>		
		regardé <i>watched</i>	des clips vidéo <i>some video clips</i>		
		nagé <i>swam</i>	dans la mer <i>in the sea</i>		sympa <i>nice</i>
		traîné <i>hung around</i>	à la maison <i>at home</i>		
					ennuyeux <i>boring</i>
					nul <i>rubbish</i>

Qu'est-ce que tu as fait pendant les vacances? (irregular verbs / perfect tense)
What did you do on holiday?

Time phrase	Avoir verb	Past participle	Details	Conjunction + verb	Adjective
Pendant les vacances <i>During the holidays</i> D'abord <i>First of all</i> Ensuite <i>Next</i> Après <i>After</i> Finalement <i>Finally</i>	j'ai <i>I</i>	vu <i>saw</i>	un spectacle <i>a show</i> des monuments historiques <i>some historic monuments</i>	et c'était <i>and it was</i>	génial <i>great</i>
		bu <i>drank</i>	un coca <i>a cola</i>		
	nous avons <i>we</i>	lu <i>read</i>	un roman <i>a novel / book</i>		amusant <i>fun</i>
		fait <i>did/made</i>	une balade en bateau <i>a trip by boat</i>		
		pris <i>took</i>	beaucoup de photos <i>lots of photos</i>		
			des selfies <i>some selfies</i>		
					marrant <i>Funny</i>
					sympa <i>Nice</i>
					ennuyeux <i>boring</i>
					nul <i>rubbish</i>

German

Was ist dein Lieblingsfach?					
opinion	noun	negative or intensifier	connective	adjective	verb
Ich mag <i>I like</i>	Deutsch <i>German</i> Englisch <i>English</i> Erdkunde <i>geography</i>	sehr <i>very much</i>	,weil es <i>because it</i> ,obwohl es <i>although it</i>	einfach <i>easy</i> faszinierend <i>fascinating</i> gut <i>good</i> interessant <i>interesting</i> kreativ <i>creative</i> lustig <i>funny</i> nützlich <i>useful</i> spannend <i>exciting</i> supercool <i>cool</i> toll <i>great</i> wichtig <i>important</i>	ist. <i>is.</i>
Ich liebe <i>I love</i>	Französisch <i>French</i> Geschichte <i>history</i> Informatik <i>IT</i>				
Ich hasse <i>I hate</i>	Kochen <i>food</i> Kunst <i>art</i> Mathe <i>maths</i>				
Ich mag auch <i>I also like</i>	Musik <i>music</i> Naturwissenschaften <i>science</i> Religion <i>RE</i>	nicht <i>not</i> gar nicht <i>not at all</i> überhaupt nicht <i>absolutely not at all</i>	,weil ich es <i>because I it.....</i>	doof <i>stupid</i> furchtbar <i>terrible</i> langweilig <i>boring</i> nervig <i>annoying</i> nutzlos <i>useless</i> schrecklich <i>awful</i> schwierig <i>difficult</i> stinklangweilig <i>really boring</i>	finde. <i>find</i> <i>(I think it's...)</i>
Ich mag <i>I like</i>	Spanisch <i>Spanish</i> Sport <i>PE</i> Theater <i>drama</i> Werken <i>DT</i>				

Was hast du am Montag?			
Time phrase	More specific time phrase	Verb + subject	Object (school subject)
Am Montag <i>On Monday</i> Am Dienstag <i>On Tuesday</i> Am Mittwoch <i>On Wednesday</i> Am Donnerstag <i>On Thursday</i> Am Freitag <i>On Friday</i> Am Samstag <i>On Saturday</i> Am Sonntag <i>On Sunday</i>	in der ersten Stunde <i>in the 1st period</i> in der zweiten Stunde <i>in the 2nd period</i> in der dritten Stunde <i>in the 3rd period</i> in der vierten Stunde <i>in the 4th period</i> in der fünften Stunde <i>in the 5th period</i> in der sechsten Stunde <i>in the 6th period</i> in der letzten Stunde <i>in the last period</i>	habe ich <i>I have</i> haben wir <i>we have</i>	Deutsch <i>German</i> Englisch <i>English</i> Erdkunde <i>geography</i> Französisch <i>French</i> Geschichte <i>history</i> Informatik <i>IT</i> Kochen <i>food</i> Kunst <i>art</i> Mathe <i>maths</i> Musik <i>music</i> Naturwissenschaften <i>science</i> Religion <i>RE</i> Spanisch <i>Spanish</i> Sport <i>PE</i> Theater <i>drama</i> Werken <i>DT</i> keine Schule <i>no school</i>
Heute <i>Today</i> Morgen <i>Tomorrow</i>	vor der Pause <i>before break</i> nach der Pause <i>after break</i> vor der Mittagspause <i>before lunch</i> nach der Mittagspause <i>after lunch</i>		

Wann <i>When</i>	hast du <i>have you</i>	(Mathe)?	Um <i>At</i>	acht (8)	Uhr	fünfzehn
Um wieviel Uhr <i>At what time</i>	haben wir <i>have we</i>			zwölf (12)		dreißig
				fünfzehn (15)		fünfundvierzig

Was isst du in der Schule?

Subject-Verb	Time phrase	Noun – food/drink	Connective (Kicker)	Intensifier	Adjective	Verb
Ich esse I eat	jeden Tag every day	Chips crisps	weil es because it	ziemlich quite	lecker tasty	ist is
		einen Apfel an apple				
Er isst He eats	jede Woche every week	einen Kuchen a cake	obwohl es although it	sehr very	köstlich delicious	
Sie isst She eats	oft often	Kekse biscuits		ein bisschen a bit	gesund healthy	
		Schokolade chocolate				
Ich trinke I drink	manchmal sometimes	Bonbons sweets		echt / ganz really	ungesund unhealthy	
Er trinkt He drinks	ab und zu now and then	eine Banane a banana		extrem extremely	langweilig boring	
		eine Orange an orange				
Sie trinkt She drinks	immer always	ein Brötchen a bread roll		total completely	ekelhaft disgusting	
		Cola cola				
	selten rarely	Orangensaft orange juice				
	nie never	Wasser water				

Wie sind die Lehrerinnen und Lehrer?

Pronoun/noun	verb	intensifier	adjective
Ich /	bin am	zu too	alt old
Du you	bist are		fair Lorraine
Der Lehrer The teacher (male)	ist is	sehr very	freundlich friendly
Die Lehrerin The teacher (female)		ziemlich quite	gemein mean
Der Direktor The headteacher (male)			jung young
Die Direktorin The headteacher (female)			komisch weird
Er He		ein bisschen a bit	kräftig strong
Sie She	launisch moody		
Wir We	sind are	nicht not	lustig funny
Sie They			nervig annoying
Die Lehrer The teachers (male)			pünktlich punctual
Die Lehrerinnen The teachers (female)			schlau clever
			streng strict
			unfreundlich unfriendly
			unpünktlich unpunctual

Opinion phrase	verb	noun	adjective
Meiner Meinung nach In my opinion	ist	der Deutschlehrer	freundlich fair
Ich denke, dass I think that		die Mathelehrerin	streng
		die Sportlehrerin	ist

Mandarin

wǒ xǐ huān chī mǐ fàn yīn wéi hěn hǎo chī
我喜欢吃米饭，因为很好吃。 I like eating rice, because it's very tasty.

Subject	Verb 1	Verb 2	Object	because	adjective
我 I 爸爸 Dad 妈妈 Mum 哥哥 older brother 弟弟 younger brother 姐姐 older sister 妹妹 younger sister	喜欢 like	吃 eat	面包, bread 鸡蛋, egg 面条, noodle 米饭, cooked rice 比萨饼, pizza 水果, fruit	因为 because	很好吃。 very tasty 很香。 very fragrant 很甜。 very sweet
		喝 drink	水, water 茶, tea 果汁, fruit juice		很好喝。 very tasty 很香。 very fragrant 很甜。 very sweet

wǒ bù xǐ huān chī mǐ fàn yīn wéi bù hǎo chī
我不喜欢吃米饭，因为不好吃。 I don't like eating rice, because it's not tasty.

Subject	Negative	Verb 1	Verb 2	Object	because	adjective
我 I 爸爸 Dad 妈妈 Mum 哥哥 older brother 弟弟 younger brother 姐姐 older sister 妹妹 younger sister	不	喜欢 like	吃 eat	面包, bread 鸡蛋, egg 面条, noodle 米饭, cooked rice 比萨饼, pizza 水果, fruit	因为 because	不好吃。 not tasty 不香。 not fragrant 不甜。 not sweet
			喝 drink	水, water 茶, tea 果汁, fruit juice		不好喝。 not tasty 不香。 not fragrant 不甜。 not sweet

wǒ jiā xīng qī yī chī mǐ fàn
我家星期一吃米饭。 My family on Monday eat rice.

who	family	Days of the week	eat	food	drink	drinks
wǒ 我 xiǎo yuè 小月 Jamel péng yǒu 朋友	jiā 家 family	xīng qī yī 星期一 Monday xīng qī èr 星期二 Tuesday xīng qī sān 星期三 Wednesday xīng qī sì 星期四 Thursday xīng qī wú 星期五 Friday xīng qī liù 星期六 Saturday xīng qī rì 星期日 Sunday xīng qī tiān 星期天 Sunday	chī 吃 eat	chǎo miàn 炒面, fried noodles chǎo fàn 炒饭, fried rice dàn chǎo fàn 蛋炒饭, egg fried rice jiǎo zi 饺子, dumplings bāo zi 包子, steamed stuffed bun	hē 喝 drink	shuǐ 水。 water chá 茶。 tea zhōng guó chá 中国茶。 Chinese tea yīng guó chá 英国茶 English tea guǒ zhī 果汁。 fruit juice kā fēi 咖啡。 coffee

wǒ men zǎo fàn chī miàn bāo , hē niú nǎi
我们早饭吃面包，喝牛奶。 We breakfast eat bread, drink milk.

who	mealtimes	eat	food	drink	drinks
wǒ men 我们 bà ba 爸爸 Dad mā ma 妈妈 Mum gē ge 哥哥 older brother dì di 弟弟 younger brother jiě jie 姐姐 older sister mèi mei 妹妹 younger sister	zǎo fàn 早饭 breakfast wǔ fàn 午饭 lunch wǎn fàn 晚饭 dinner	chī 吃 eat	niú ròu 牛肉, beef zhū ròu 猪肉, pork yáng ròu 羊肉, lamb jī ròu 鸡肉, chicken yú 鱼, fish chǎo miàn 炒面, fried noodles dàn chǎo fàn 蛋炒饭, egg fried rice	hē 喝 drink	shuǐ 水。 water niú nǎi 牛奶 milk zhōng guó chá 中国茶。 Chinese tea yīng guó chá 英国茶 English tea guǒ zhī 果汁。 fruit juice kā fēi 咖啡。 coffee

Spanish

¿De dónde eres? (Where are you from?) Present tense conjugation of ser						
VERB - ser	PREP'	NOUN	CONNECTIVE	NOUN - location	PREP'	NOUN - country
(Yo) soy <i>I am</i>	de <i>from / of</i>	Taunton	que está en <i>which is in</i>	el centro <i>the centre</i>	de <i>from / of</i>	Alemania <i>Germany</i>
(Tú) eres <i>You (singular) are</i>		Bristol		el este <i>the east</i>		Escocia <i>Scotland</i>
(Él/ Ella) es <i>He/she is</i>		Madrid		el norte <i>the north</i>		España <i>Spain</i>
(Nosotros) somos <i>We are</i>		Roma		el oeste <i>the west</i>		Francia <i>France</i>
(Vosotros) sois <i>You (plural) are</i>		Cardiff		el sur <i>the south</i>		Gales <i>Wales</i>
(Ellos) son <i>They are</i>		un pueblo <i>a village / a town</i>		el noreste <i>the north east</i>		Grecia <i>Greece</i>
		una ciudad <i>a city</i>		el noroeste <i>the north west</i>		Inglaterra <i>England</i>
				el sureste <i>the south east</i>		Italia <i>Italy</i>
				el suroeste <i>the south west</i>		Polonia <i>Poland</i>
						Portugal <i>Portugal</i>
						Ucrania <i>Ukraine</i>

¿De dónde son tus cosas favoritas? (Where are your favourite things from?) Using 'es' and 'son' correctly			
noun	verb	from	country
Mi amigo / Mi amiga <i>My friend</i>	es <i>is</i>	de <i>from</i>	Alemania <i>Germany</i>
Mi coche <i>My car</i>			Escocia <i>Scotland</i>
Mi comida favorita <i>My favourite food</i>			España <i>Spain</i>
Mi fruta favorita <i>My favourite fruit</i>			Francia <i>France</i>
Mi jugador de fútbol favorito <i>My favourite football player</i>			Gales <i>Wales</i>
Mi móvil <i>My phone</i>			Grecia <i>Greece</i>
Mi ordenador <i>My computer</i>			Inglaterra <i>England</i>
Mi osito <i>My teddy</i>			Italia <i>Italy</i>
Mi televisión <i>My TV</i>			Polonia <i>Poland</i>
Mis abuelos <i>My grandparents</i>	son <i>are</i>		Portugal
Mis vaqueros <i>My jeans</i>			Ucrania <i>Ukraine</i>
Mis zapatos <i>My shoes</i>			

¿Dónde vives? (where do you live?) Present tense						
VERB - vivir	PREP	NOUN	INTENSIFIER	ADJECTIVE	PREP	NOUN - country
(Yo) vivo <i>I live</i>	en in	un barrio <i>an area, neighbourhood</i>	un poco <i>a bit</i>	acogedor <i>cosy</i> antiguo <i>old</i> bonito <i>beautiful</i> cómodo <i>comfortable</i> grande <i>big</i> moderno <i>modern</i> feo <i>ugly</i> nuevo <i>new</i> pequeño <i>small</i> raro <i>weird</i>	en in/on	Escocia <i>Scotland</i>
(Tú) vives <i>You (singular) live</i>		un bloque de pisos <i>a block of flats</i>	bastante <i>quite</i>			España <i>Spain</i>
(Él / Ella) vive <i>He / she lives</i>		un castillo <i>a castle</i>	muy <i>very</i>			Gales <i>Wales</i>
(Nosotros) vivimos <i>We live</i>		un edificio <i>a building</i>	extremadamente <i>extremely</i>			Grecia <i>Greece</i>
(Vosotros) vivís <i>You (plural) live</i>		un piso <i>a flat</i>	demasiado <i>too</i>			Inglaterra <i>England</i>
(Ellos) viven <i>They live</i>		una casa <i>a house</i> una granja <i>a farm</i>		acogedor <i>cosy</i> antiguo <i>old</i> bonito <i>beautiful</i> cómodo <i>comfortable</i> grande <i>big</i> moderno <i>modern</i> feo <i>ugly</i> nuevo <i>new</i> pequeña <i>small</i> rara <i>weird</i>		Italia <i>Italy</i> Polonia <i>Poland</i> en el centro de la ciudad <i>in the city centre</i> la costa <i>the coast</i> las afueras <i>the outskirts</i>

¿Cómo es tu casa? (What does your house look like?)	¿Dónde está tu casa? (Where is your house?).	Use of ser/estar
VERB – ser, estar	ADJECTIVE	
Mi casa es <i>My house is</i> (used for description)	antigua <i>old</i> bonita <i>beautiful</i> cómoda <i>comfortable</i> fea <i>ugly</i> moderna <i>modern</i> nueva <i>new</i> pequeña <i>small</i> rara <i>weird</i> acogedor <i>cosy</i> grande <i>big</i>	
Mi casa está <i>My house is</i> (used for location) (Yo) estoy <i>I am</i> (used for location) (Tú) estás <i>You are</i> (used for location)	en el campo <i>in the countryside</i> en el centro de la ciudad <i>in the city centre</i> en un pueblo <i>in a village</i> en la costa <i>on the coast</i> en la montaña <i>in the mountains</i> en la ciudad <i>in the city</i> en las afueras <i>on the outskirts</i> en Inglaterra <i>in England</i> en España <i>in Spain</i>	

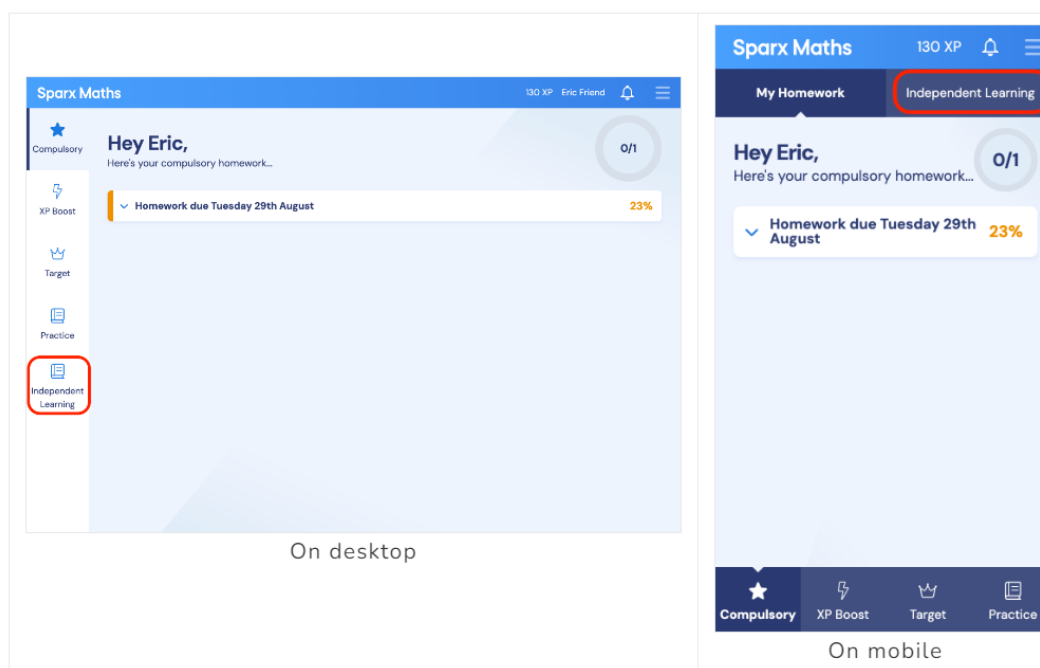
¿Qué habitaciones hay en tu casa? What rooms are there in your house? Definite and indefinite articles / singular and plural nouns			
En mi casa hay <i>In my house there are</i>	siete habitaciones 7 rooms diez habitaciones 10 rooms tres dormitorios 3 bedrooms		
Mi casa tiene <i>My house has</i>	un aseo a toilet un comedor a dining room un cuarto de baño a bathroom un despacho a study un garaje a garage un jardín a garden un pasillo a hall un salón a living room	antiguo old bonito beautiful cómodo comfortable feo ugly moderno modern nuevo new pequeño small raro weird	acogedor cosy grande big
Tenemos <i>We have</i>			
Afuera hay <i>Outside there is</i>			
Abajo hay <i>Downstairs there is</i>	una cocina a kitchen una terraza a terrace	antigua old bonita beautiful cómoda comfortable fea ugly moderna modern nueva new pequeña small rara weird	acogedor cosy grande big
Arriba hay <i>Upstairs there is</i>			
Mi habitación favorita es <i>My favourite room is</i>	el salón the living room mi dormitorio my room la cocina the kitchen		

Maths

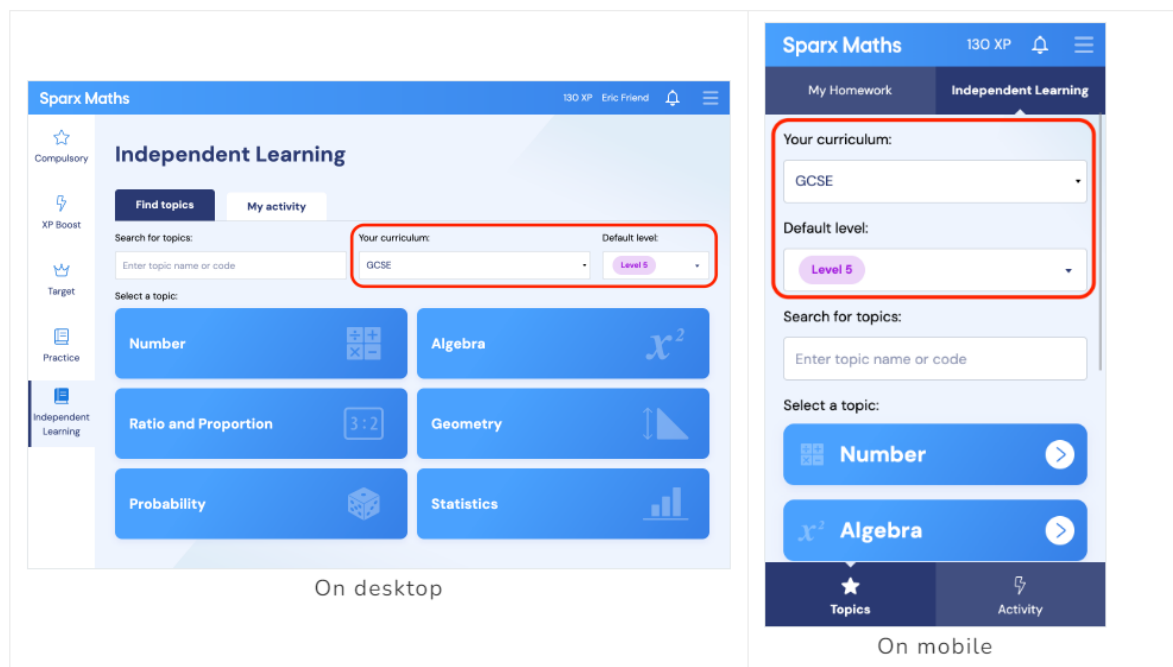
On a Monday, your Maths task will be set by your teacher. You should log on to Sparx Maths to complete this task. Your practice book has an area for your workings which you need to use as during the homework, Sparx Maths undertakes a bookwork check.

On a Thursday you practice independently on an area where you have a gap in your knowledge.

When logged in to Sparx students will always be able to see the Independent Learning option on the main menu:



Students have the option to choose both the **curriculum** they want to work on and the **default level** for the questions they will see, but when they first log in the curriculum will be the same as the **Base curriculum** that is set on their class' SoL, and the level will be set to the level they are being set for their homework (whether this was chosen by the algorithm or the teacher.)



- Typing one of the following in the **Search for topics field**:
 - The name of a topic
 - A keyword
 - A code given to them by their teacher. (Find out more about Topic Codes in our article on the [Independent Learning Page](#))
- Browsing the content by clicking on one of the main Strands:



Choosing what level to work at within a topic

When in a topic, students will see three sets of questions at the level set on their Independent Learning homepage (see image above) which they can choose from:

- **Introduce:** basics skills for this topic at this level
- **Strengthen:** questions to consolidate understanding
- **Deepen:** more problem-solving type questions to challenge

If students find questions too easy or too tricky, they can change the level of each individual topic*. This won't affect the overall level of questions in all other topic areas so they can tailor what they see to their strengths and weaknesses.

*Some topics won't have higher or lower levels depending on the subject chosen.

How students view their own progress

1. By a count next to each topic, and **Ticks** and **Stars** within each set of questions:



- Students will get a **tick** if they complete one of the tasks in the topic. This means all the basics are covered.
- Students will get a **star** for each subsequent task they complete.

WEST AFRICAN DJEMBE DRUMMING

BUILDING ON WHAT YOU ALREADY KNOW:

- **Dynamics** - volume
- **Tempo** - speed
- **Pulse** - a steady beat (think of the pulse in your body)
- **Structure**- the different sections in a piece of music (AB, ABA, verse/chorus)
- **Improvisation** - making up the music as you are going along while still following the pulse and style
- **Call and Response** - a phrase is sung or played and is answered by another group (Oggie, Oggie, Oggie)

TASKS:

Discover four of the traditional instruments from Africa, and historic methods of communication/performing (gumboot dancing)

To read drum rhythm tables to perform accurate poly-rhythms

Create a piece of music with a call and response, improvisation and syncopation

FINAL PROJECTS:

Perform as a group your African Music composition. It should have a steady pulse and clear structure with, different drum strokes (sonority), dynamics and textures.



NEW ESSENTIAL KNOWLEDGE:

- **Bass** - the drum is hit in the centre with flat fingers and palm. This creates the lowest pitch sound.
- **Tone** - the drum is hit near the edge, using the edge of your palm and most of the underside of your fingers. Your fingers should be together. This creates a middle pitch sound.
- **Slap** - the drum is hit close to the edge, using only your fingertips and the edge of your palm. Your fingers are spread out a little bit. It creates the highest pitch sound.
- **Texture** - the different layers happening within a piece.
 - Monophonic** - a single unaccompanied line of music, one layer.
 - Homophonic** - multiple layers of music but everything moves in chunks, the same rhythm.
 - Polyphonic** - multiple layers of music doing different things.
- **Rhythm** - how long notes last and how they are grouped together in a pattern
- **Polyrhythm** - multiple rhythms happening at the same time
- **Syncopation** - when a note is moved slightly earlier so that it is before the beat
- **Djembe**
- **Kora**
- **Talking drum**
- **Balafon**



VARIATIONS

BUILDING ON WHAT YOU ALREADY KNOW:

- **Dynamics** - volume
- **Tempo** - speed
- **Pitch** - how high or low the note is
- **Instrumentation** - what instruments are used
- **Structure** - the different sections in a piece of music (AB, ABA, verse/chorus)
- **Keyboard Skills**
- **Production Skills (GarageBand)**

TASKS:

Define variations and particularly musical variations

Analyse how music has been varied using DR SMITH for key-words on a variety of different pieces of music

Perform the ground bass from Canon in D and a piece of historic music as written as fluently as possible.

FINAL PROJECTS:

Experiment with DR SMITH to **create** and **perform** your own variations based upon a simple melody.

Experiment with DR SMITH to **create** and **produce** your own variation on GarageBand.



NEW ESSENTIAL KNOWLEDGE:

- **Variation** - where the main theme/melody has been altered to make a still recognisable but different melody (like a remix)
- **Round/Canon** - the same melody is used but each musician starts at different times
- **Articulation** - the way you play certain notes
 - *staccato*—detached and spikey)
 - *legato*—playing smoothly, will often have *slurs*
- **Texture** - the different layers happening within a piece.
 - *Monophonic* - a single unaccompanied line of music, one layer.
 - *Homophonic* - multiple layers of music but everything moves in chunks, the same rhythm.
 - *Polyphonic* - multiple layers of music doing different things.
- **Rhythm** - how long notes last and how they are grouped together in a pattern
- **Melody** - the tune or most important layer in a piece of music. In vocal music the lyrics are the melody.
- **Tonality** - what key the piece of music is in.
 - *Major* gives a happy feel
 - *Minor* makes the music seem sadder.
- **Harmony** - the chords that get played with the melody are the harmony, they are major or minor chords
- **Ground Bass**—a repeated bass line



Addiction – is not just drugs.
You can be addicted to
almost anything.

To f t _n S c i a l i s

Why might
people take
drugs/drink
alcohol?

Ex r i m e t i g T o e c p _



The law

- Class A – up to 7 years in prison and/or an unlimited fine.
- Class B – up to 5 years in prison and/or an unlimited fine. (Cannabis)
- Class C – up to 2 years in prison and/or an unlimited fine.



consensus determined regardless minorities difficult committed past UN promote frank months value human lesbian gay countries transgender issue governments persons agreed fundamental times build American world

rights

Gay Lesbian Transgender Bisexual orientation sexual tolerance human

Follow the QR code
to watch more on
Remembrance →



<https://www.bbc.co.uk/newsround/15492752>



Every year the country comes
together for Remembrance Sunday.
A period of silence is held at 11am to
remember the people who have died
in wars around the world

Relationships

What are the most important
things a relationship needs?

- 1)
- 2)
- 3)
- 4)

Sexting

Follow the QR code
To watch what can
Happen if you send
Or receive sexts

<https://www.youtube.com/watch?v=MoRtLk1xihY>



Religion and World Views

Week 1 - Understanding Humanism and Related Beliefs

Humanism—a worldview that focuses on human values, reason, and the natural world. Humanists believe the universe is a natural phenomenon, not guided by supernatural forces. They see science as the best way to understand how the world works.

Humanists are often atheists (who don't believe in God) or agnostics (who believe we can't know if God exists). They see no convincing evidence for an afterlife or a higher, external meaning to life. Instead, they believe we can create our own meaning and help others do the same.

Humanists believe morality is a human creation. They use reason, empathy, compassion, and respect to decide how to act. They are also secularists, supporting freedom of religion and belief, and believing that no religion should have special privilege in society.

Humanists value humanity and celebrate human achievements. They believe in living well, helping others, and making the world a better place through kindness and understanding.

Key Terms

- **Humanist:** Believes in a natural world and values science and reason.
- **Atheist:** Does not believe in God.
- **Agnostic:** Believes we can't know if God exists.
- **Secularist:** Supports a non-religious society.

Week 3 - Racism and Anti-Racism

Racism is when someone is treated unfairly or unkindly because of their race or ethnicity. It can include prejudice, discrimination, or even antagonism—hostile behaviour—toward people who belong to a particular racial or ethnic group. Racism often affects people from minority or marginalised communities, and it can happen in many forms, from name-calling to unfair treatment in jobs, schools, or public places.

Being an anti-racist means standing up against racism. It's not enough to just say, "I'm not racist." Anti-racists act. They speak out when they see racism, support those who are affected, and help others understand why racism is wrong. Anti-racists are like beacons of light—they inspire others to do the same.

To be anti-racist, you can start by learning more. Read books, listen to different voices, and ask questions. Use your voice to make it clear where you stand. Every small action helps build a fairer, kinder world.

Key Terms

- **Racism:** Treating someone unfairly because of their race or ethnicity.

- **Anti-Racist:** A person who actively works to challenge and stop racism.

Week 5 - Understanding Sexism

Sexism is the belief or attitude that one gender is less important, less capable, or less valuable than another. It often leads to unfair treatment based on whether someone is male, female, or identifies differently. Sexism can affect anyone, but it most often targets women and girls.

Sexism can show up in many ways. It might be someone saying that only boys are good at sports or that girls shouldn't lead. It can also happen in workplaces, schools, or the media—where people are treated differently or given fewer opportunities because of their gender.

Being aware of sexism helps us challenge it. Everyone deserves to be treated with respect and fairness, no matter their gender. We can all help by speaking up when we see unfair treatment, supporting each other, and promoting equality.

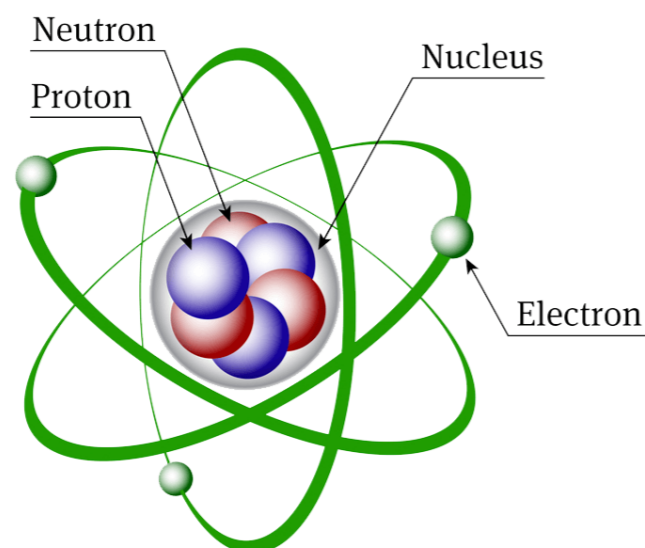
When we treat people equally and value everyone's abilities, we create a more just and respectful world.

Key Term

- **Sexism:** The belief or attitude that one gender is inferior, less competent, or less valuable than another.

Science – Chemistry

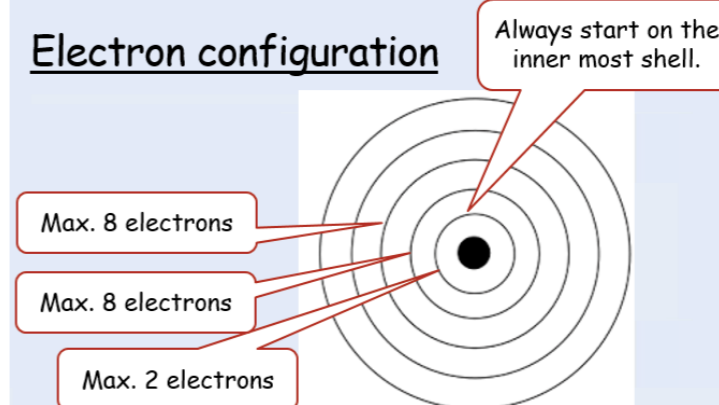
Week 1 - What is the structure of an atom?



The innermost shell is filled first and can hold a maximum of two electrons.
The second and third shells hold a maximum of eight electrons.

Particle	Location	Relative Mass	Charge
Proton	Nucleus	1	+1 (positive)
Neutron	Nucleus	1	0 (neutral)
Electron	Shell	1/1835 (negligible)	-1 (negative)

Electron configuration

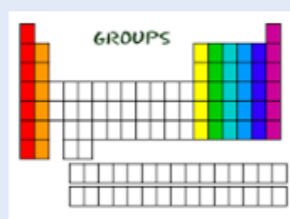


Week 2 - What does the periodic table show?

Elements are organised on the periodic table.

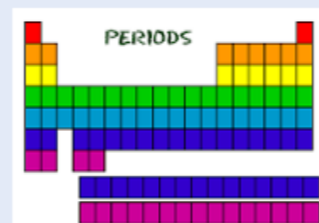
- The periodic table is split into metals and non-metals
- The vertical columns are called groups.
- The horizontal rows are called periods.
- The group number is the same as the number of electrons on the outer shell of an atom.
- The period number is the same as the number of shells.

Groups and Periods

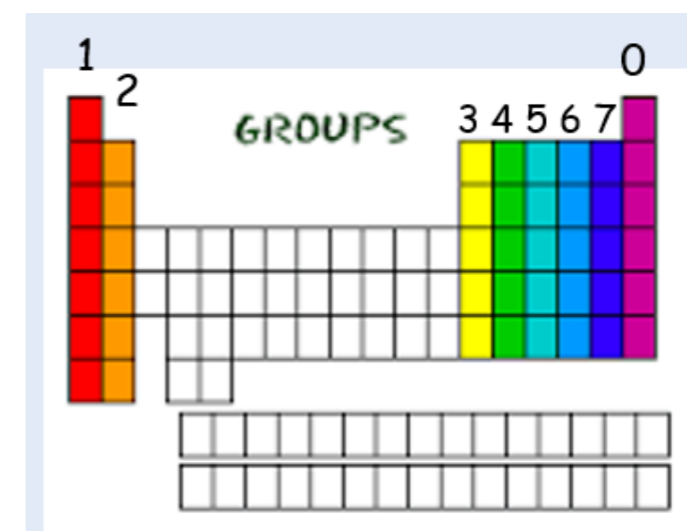
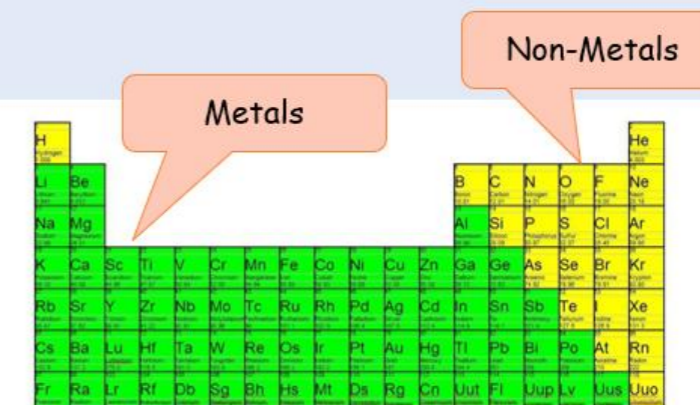


The columns on the periodic table are called groups. Elements in the same group have similar properties.

The rows on the periodic table are called periods.



Metals and Non-Metals



The periodic table can be used to calculate the number of protons, neutrons and electrons of an element's atom:

Atomic number = number of protons

Atoms have the same number of electrons as protons

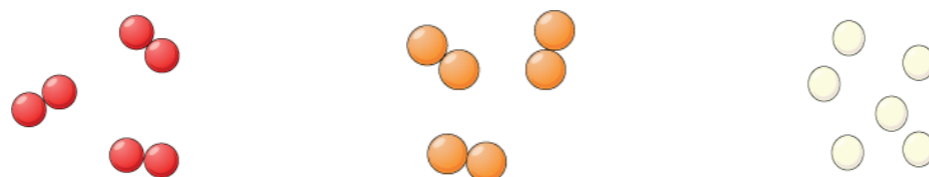
Relative Atomic Mass = number of protons + neutrons

Number of Neutrons = Mass number - Atomic number

18
Ar
Argon
39.948
[Ne]3s²3p⁶

Week 3 - What is a compound?

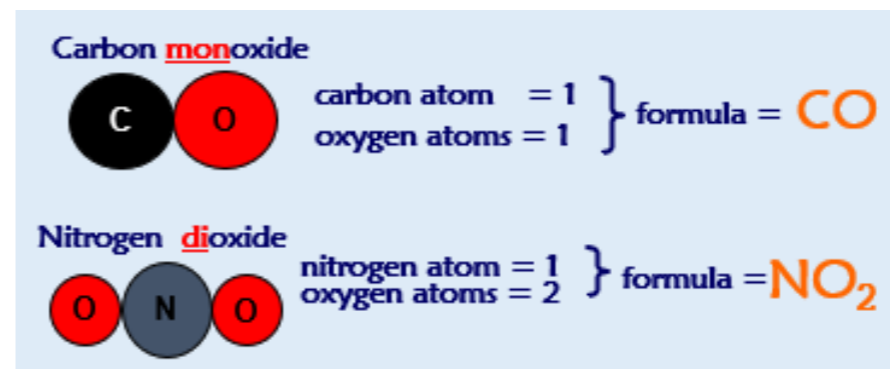
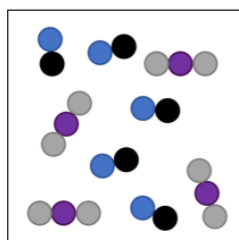
An **element** is a substance made up of just one type of atom.



A **compound** is a substance made up two or more different types of atom chemically bonded together.

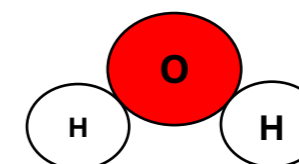
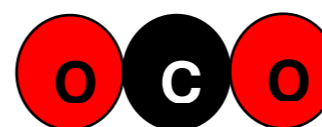


A **mixture** contains two or more substances not chemically bonded together.



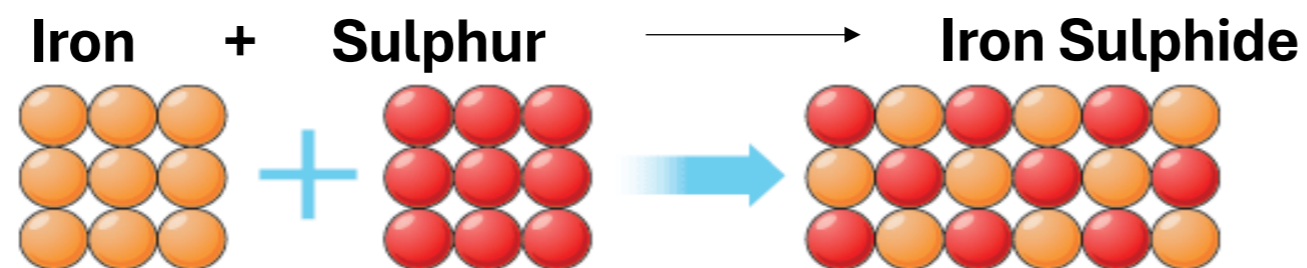
When non-metal atoms bond together, they form **molecules**. For example, water or carbon dioxide

The formulae of compounds shows the number of each type of atom.

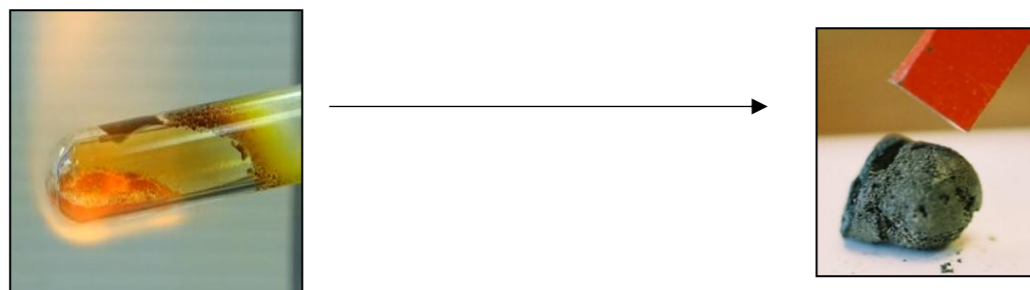


Week 4 - How can we represent a reaction?

Elements can be joined together in a chemical reaction.
Iron and sulphur can be reacted to form iron sulphide



Properties of iron sulphide are different to the two elements – this reaction is irreversible.

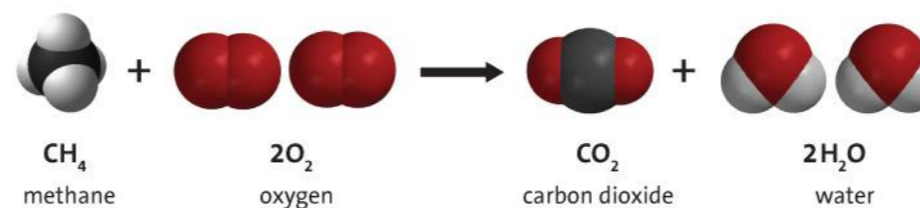


A mixture is 2 or more substance not chemically combined and so can be easily separated. This is different to compounds which are elements bonded together.

Writing chemical reaction:

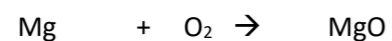
reactants → products
(starting substances) → (end substances)

e.g. methane + oxygen → carbon dioxide + water



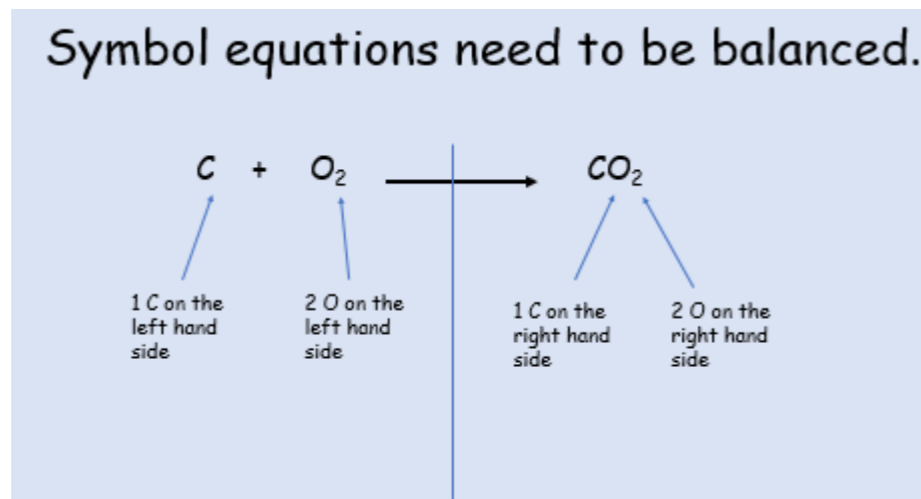
Symbol equations can also be used to represent a reaction:

E.g. Magnesium + Oxygen → Magnesium oxide



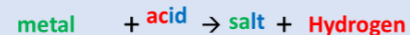
Symbol equations need to be balanced (they need the same number of atoms of each element on either side of the equation).

e.g.



Week 5 - How do acids react with metals and their compounds?

First reaction: Metal and acid



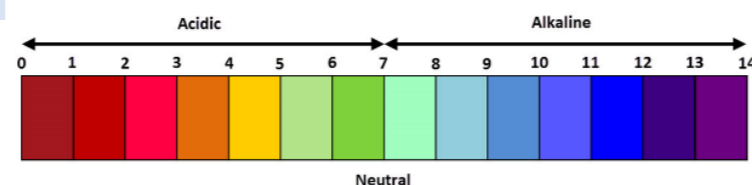
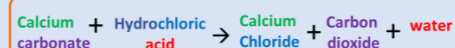
For example the reaction between hydrochloric acid and magnesium.



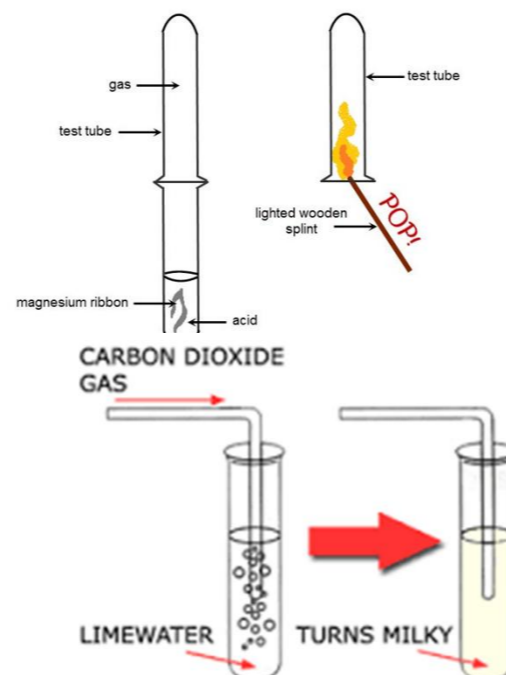
Third reaction: Carbonate and acid



For example the reaction between hydrochloric acid and calcium carbonate (marble).



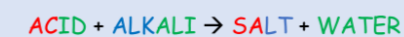
Adding an acid and an alkali together to make water is an example of a neutralisation reaction.



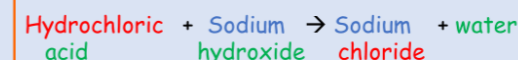
To test for hydrogen gas we do the squeaky pop test

To test for carbon dioxide – bubble gas through limewater. Limewater turns milky

Fourth reaction: Alkali and acid



For example the reaction between hydrochloric acid and sodium hydroxide.



Week 6 - Which is the most reactive metal?

Reactivity - how likely an element is to undergo a chemical reaction. The reactivity series:

Metals at the top are the most reactive.

A displacement reaction is when more reactive metals replace less reactive metals in a compound during chemical reactions.
E.g. Iron chloride + potassium → potassium chloride + iron

potassium	most reactive	K
sodium		Na
calcium		Ca
magnesium		Mg
aluminium		Al
carbon		C
zinc		Zn
iron		Fe
tin		Sn
lead		Pb
hydrogen		H
copper		Cu
silver		Ag
gold		Au
platinum	least reactive	Pt