Year 8 Knowledge Organiser

Autumn Term 2021/22

Name:

Form:

West Norfolk Academies Trust

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Instructions for using your Knowledge Organiser

Every school day, you should study 1 to 2 subjects from your knowledge organiser for homework lasting at least 1 hour in total.

On pages 6 and 7 there is space for you to record the subjects you have studied to make sure you are giving equal time to all of them. Your parent should sign off your homework each evening on these pages.

Your parent should also sign your reading log on pages 8 and 9.

You can use the note pages in this booklet to help with your studies.

You need to bring your Knowledge Organiser to school every day. It will be checked regularly during form time.

You will be regularly tested on knowledge contained in this booklet in your lessons and through quizzes on Show My Homework.

Self- testing

You can use your Knowledge Organiser in a number of different ways but you should not just copy from the organiser. Use the following tips and guidance to help you get the most out of learning and revising your subject knowledge.

These are some possible tasks you could try:

- Ask someone to write questions for you
- Write your own challenging questions, leave them overnight and try answering them the next day
- Create mind maps
- Create flash cards
- Put the key words into new sentences
- Look, write, cover and check
- Write a mnemonic
- Use the 'clock' template to divide the information into smaller sections
- Give yourself a spelling test
- Give yourself a definition test
- Draw images and annotate/label them with extra information
- Do further research on the topic
- Create fact files
- Create flowcharts
- Draw diagrams

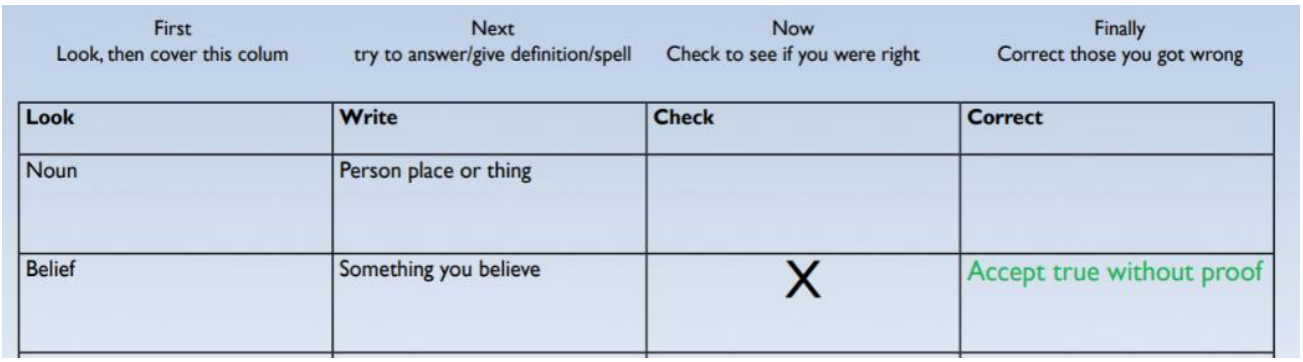
How to self- test with the knowledge organiser

The Knowledge Organisers are designed to help you learn a wide range of knowledge, which will, in turn, mean you are more prepared for your lessons and make even better progress.

To get the most out of your Knowledge Organiser you should be learning sections and then self-testing.

Look, Cover, Write, Check, Correct

This should be familiar to you from primary school.



First Look, then cover this colum	Next try to answer/give definition/spell	Now Check to see if you were right	Finally Correct those you got wrong
Look	**Write**	**Check**	**Correct**
Noun	Person place or thing		
Belief	Something you believe	X	Accept true without proof

Questions/Answers, Answers/Questions

Ask a parent, carer, study partner to write you questions (or answers) and then you write the answer (or possible question that would respond to that answer).
You can also write your own questions but if you do this leave it until the next day before you answer them to see what you can remember after a break.

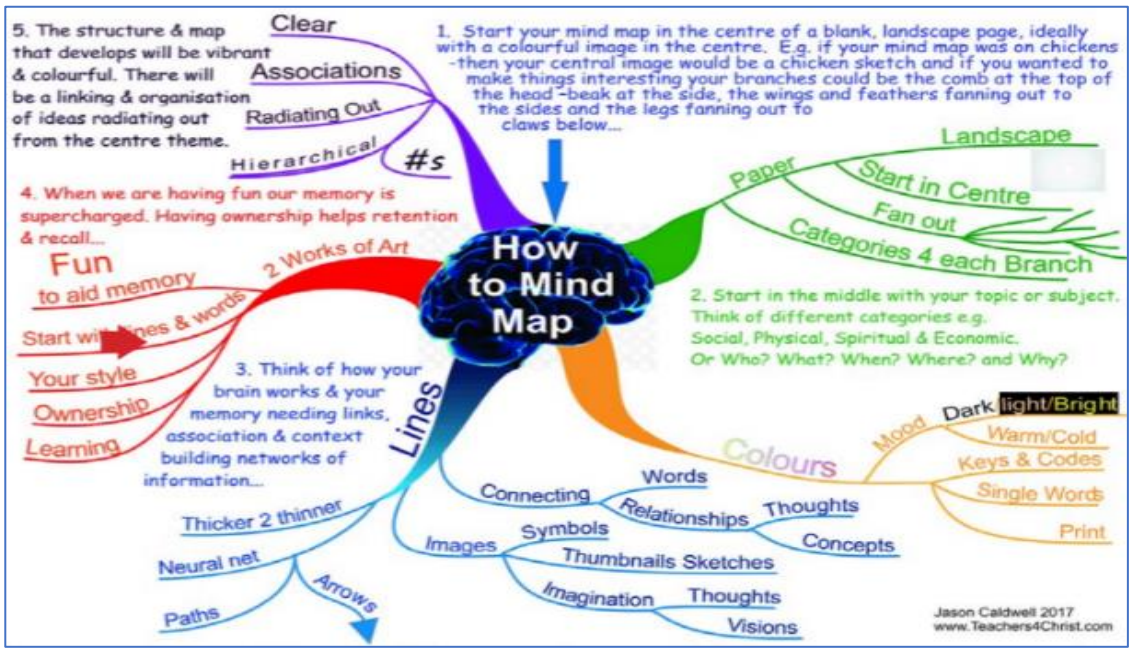
Always remember to check and correct

Flashcards

These are a very good and simple self-testing tool.
To make your own, take some card and cut into rectangles roughly 10cm x 6cm.
Write the key word on one side and the definition on the other.
Then go through your cards looking at one side and seeing if you can remember the keyword/definition on the other side.

Mind Maps

Mind mapping is a process that involves a distinct combination of imagery, colour and visual-spatial arrangement. The technique maps out your thoughts using keywords that trigger associations in the brain to spark further ideas.

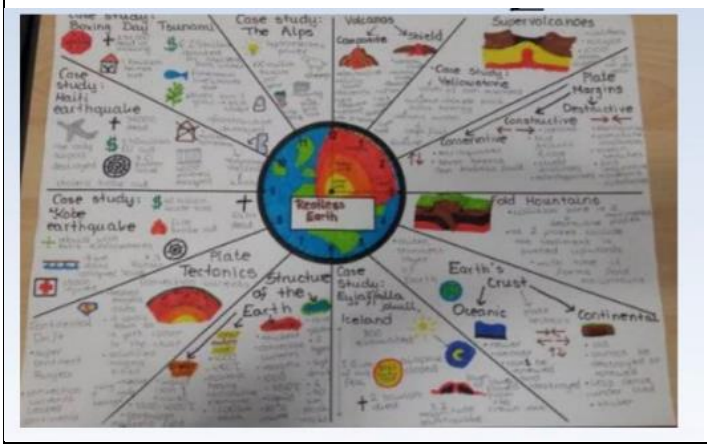


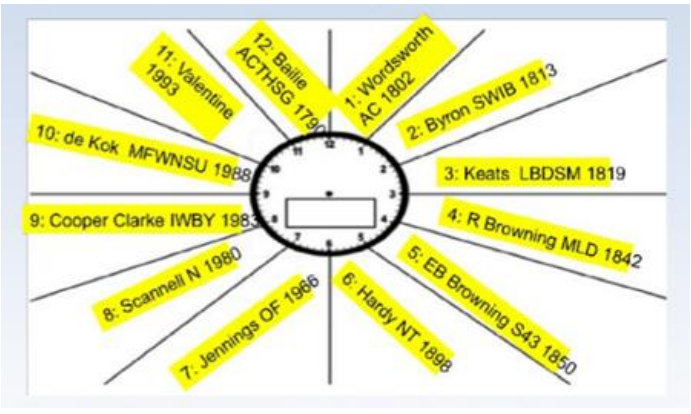
Once you have made your map, cover it and test yourself on different strands, eg. How much of the Lines strand can you recall.

Clock Learning

For this technique, draw a basic clock.
Take a subject or topic and break it down into 12 sub-categories.
Make notes in each segment of the clock. Revise each part for 5 minutes.
Now the clock over and try and write out as much information as you can from one of the segments.

Clocks can also be used to help to visualise a timeline





Homework log and parental check

Week 1	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 2	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 3	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 4	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 5	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 6	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 7	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			

Homework log and parental check

Week 8	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 9	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 10	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 11	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 12	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 13	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 14	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			

Reading log

Use this reading log to record the books you read along with how long you have spent reading and the Accelerated Reader quizzes you have completed.

Week	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Book(s) read (title and author)	Total time spent reading	Parent/Guardian /Staff signature
1										
2										
3										
4										
5										
6										
7										

Reading log

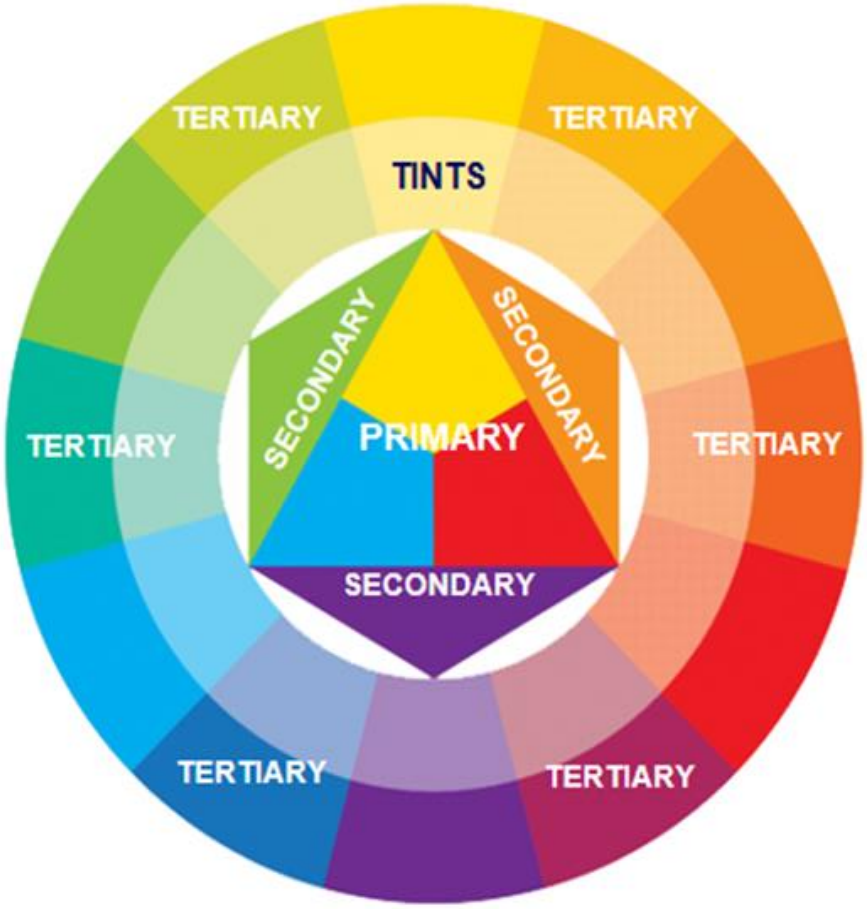
Use this reading log to record the books you read along with how long you have spent reading and the Accelerated Reader quizzes you have completed.

Week	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Book(s) read (title and author)	Total time spent reading	Parent/Guardian /Staff signature
8										
9										
10										
11										
12										
13										
14										

Art – Colour Theory:

In the visual arts, **colour theory** is a practical guide to colour mixing and the visual effects of specific colour combinations. There are also categories of colours based on the colour wheel for example: primary colour, secondary colour and tertiary colour.

THE COLOUR WHEEL:



HARMONIOUS:

Colours that are next to each other on the colour wheel.

COMPLEMENTARY:

Colours that are opposite each other on the colour wheel.

TRIADIC:

Three colours spaced equally apart on the colour wheel.

WARM COLOURS:

COOL COLOURS:

HOW BLACK AND WHITE CHANGES COLOUR:

Art Specific Language and Terms	
Tonal Gradation	A visual technique of gradually transitioning from one colour/hue to another, or from one shade to another, or one texture to another.
Colour Blending	The change from one colour to another gradually. The colour change should appear smooth and is achieved when colours are mixed and layered without an obvious line or step between each colour.

Art – Observational Drawing – Colour Pencil:

Art Specific Language and Terms			
Tone	The lightness or darkness of something.	**Colour Blending**	The change from one colour to another gradually. The colour change should appear smooth and is achieved when colours are mixed and overlaped without an obvious line or step between each colour.
Tonal Gradation	A visual technique of gradually transitioning from one colour/hue to another, or from one shade to another, or one texture to another.		
Depth	Refers to making objects appear closer or further away and making a two-dimensional image seem three-dimensional.	**Secondary Source imagery**	Using the work or imagery of others to help inspire and influence your own ideas and work.
Proportion	The size relationship between different elements e.g height compared to width.	**Scaling up**	A precise way to transfer and enlarge a small image.
Burnishing	Layering and blending until no paper grain shows through the coloured pencil layers.	**Accuracy**	The extent to which one piece of work looks like another.

A **tortillon** is a cylindrical drawing tool, tapered at the end and usually made of rolled paper, used by artists to smudge or blend.

Essential tips for colour pencil work:

- Layering complementary colours darkens both colours and reduces their intensity.
- Pressing harder intensifies a hue but does not darken it.
- You can darken a colour by layering its next darkest neighbour over it, for example, purple over red. Use dark brown or dark blue before black, and avoid leaving black as the top layer of any colour.
- To lighten a colour, layer over it with a lighter hue of the same colour before resorting to white.
- To intensify a colour, blend it using a tortillon or stump.
- Burnishing any colour with white will make it lighter, shinier, cooler and hazier.

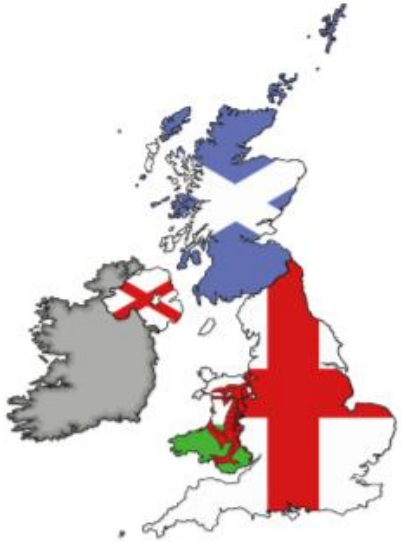
Y8 CITIZENSHIP KNOWLEDEGE ORGANISER Autumn Term

Key words	
Diversity	Showing a great deal of variety within a community or area.
Multicultural	A mixture of different races, cultures and ethnic diversity within a region/city/town.
Stereotyping	Labelling all people who belong to a certain group as the same – having a genralised view about the group based on one common feature.
Prejudice	Having negative thoughts about a person or group of people, that are not based on your own experience or on facts.
Discrimination	Treating a person unfairly based on their race, religion, sex, gender or age.
Immigration	The action of moving to live in another country permanently.
Migration	To move from one country or region and settle in another.
Values	ideas that are important; standards of behaviour that are accepted by a society.

British Values

Freedom
We are free to act and do as we please, as long as we don't break the law or hurt others

Tolerance
People show understanding of others with differing views and opinions, and learn to accept and live together peacefully.



Democracy
Everyone being treated fairly and equally, with an equal chance to speak freely

Rule of law
Everyone is equal in the eyes of the law, and should be treated fairly no matter who they are

Making connections

How can you link different topics together?

Prejudice + discrimination + stereotyping
British values + tolerance
Multicultural + diversity + British Values
Migration + diversity
Freedom + multicultural + British Values

Command Words	
Argue	Present a reasoned case
Debate	Present different perspectives on an issue
Outline	Set out main characteristics
Summerise	Present key points without detail

For & against immigration in the UK

Contribute to UK society by paying taxes

Immigrants will do work that UK citizens wont

Immigration encourages multiculturalism and diversity in our culture

Can take jobs from UK citizens

There can be language and cultural barriers

Overpopulation can cause a strain on public services

Brush up on your skills

Informing opinions
Giving other people information in order to try and change their opinions and views.

Critical enquiry
Looking into a topic in detail. Questioning different opinions and seeking to discover a range of other views.

Multicultural Britain

Y8 CITIZENSHIP KNOWLEDEGE ORGANISER Autumn Term

Budget
A plan showing income (money coming in) and expenditure (money spent) which allows you work out how much you are able to spend.

Tax
Money paid to the government by individuals and companies. This is spent on public services like the NHS and schools.

Debt
something that is owed or that one is bound to pay to or perform for another:

The Economy
An economy is a system of making and trading things of value. It is usually divided into goods (physical things) and services (things done by people).

The Annual Budget
The governments plans for spending and managing taxes and public funds for the year.

The Chancellor of the Exchequer

The Chancellor of the Exchequer (called The Chancellor for short) is the government's chief finance minister and one of the most senior members of the Cabinet. They are responsible for setting levels of tax that people must pay and decides how much we will spend on public services across the UK. They announce these changes each year in the annual Budget statement.

Public Services

These are services provided to the public and paid for by taxes collected by the government. The taxes are taken from people's wages and used by the government to provide many essential services.

Public services are available to everyone, usually for free. Every person in the UK is entitled to a free education and free healthcare via the NHS.

How are people paid for jobs?

If you get paid a **salary**, this is when you are told the amount of money you will earn in one year. You will normally receive the same amount of pay every month in your bank account. Some people get paid an **hourly rate**, when you earn a set amount for every hour that you work. The more hours you work, the more pay you'll receive. You can get paid **piece work** – this is when you're paid a set amount for every item you make. The more items you produce, the more you'll be paid. Sometimes people get **commission** – this is mostly for sales jobs, when you receive a share of all the sales you make. Often you will get commission as an extra on top of your salary.

Command Words	
Argue	Present a reasoned case
Apply	Put your ideas into effect in a relevant way
Compare	Identify similarities and/or differences
Consider	Review and respond to given information
Debate	Present different perspectives on an issue
Outline	Set out main characteristics
Suggest	Present a possible case/ solution
Summerise	Present key points without detail

Making connections

How can you link different topics together?

Government + budget + taxes
Taxes + public services
Public services + budget
Debt + budget
Taxes + The Annual Budget + economy
The Chancellor + cabinet + public services

Money & Finance

What is a budget? A plan for what you will spend – with a timescale.

Why budget? Puts you in control, understand your spending better, it allows us to save for the future, provides financial security and you can buy more of the things you like.

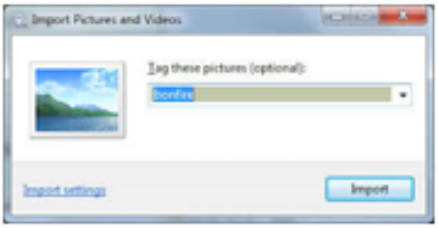
Computing – 8.1 HTML Knowledge Organiser

World Wide Web	**Collection of webpages connected together by hyperlinks, using the Internet (usually shortened to WWW).**
Internet	A global network of computers all connected together.
Webpage	A hypertext document connected to the World Wide Web.
Website	A collection of webpages with information on a particular subject.
Web browser	The software which displays a webpage or website on a computer. **Common browsers** include: Internet Explorer, Firefox, Safari, Opera and Chrome.
Uniform Resource Locator (URL)	An address that identifies a particular file or webpage on the Internet
HTML	Hyper Text Markup Language - describes and defines the content of a webpage.
Multimedia	Content that uses a combination of different types of media - eg, text, audio, images.
Hyperlink	A link from a hypertext document to another location, activated by clicking on a highlighted word or image.
Hotspot	An area on a computer screen which can be clicked to activate a function, usually an image or piece of text acting as a hyperlink.
Navigation	The elements of a website that allows the user to move around the website. This is usually in the form of a menu or hyperlinked text or buttons.
JPG	The main file type used for images on the World Wide Web - uses lossy compression.

HTML Tag Definition – what does it do?	
<html> Root of a HTML document	<**img**> Image
<**body**> Contents of the page	<**a**> Anchor (used in hyperlinks with **href**)
<**head**> Information about a page <**p**> Paragraph	<**ol**>, <**ul**> Ordered/unordered list <**li**> List item
<**title**> Tab title / defines title	<**table**> Creates and defines table
<**h1**>, <**h2**>, <**h3**> Headings	<**b**>, <**i**>, <**u**> Bold. Italic and Underline

Computing – 8.4 Animation and Video Editing Keywords

Video editing	Arrangement of images, videos, sounds and text made into a professional video.
File type	The way a file is stored on a computer. It allows the file to run in certain programs.
Import	To open a file in a program. It could be different file formats.
Export	Saving files in a format that can be used by other programs.
Crop	Removing unwanted parts of photographs, videos and sound.
Transition	An effect used to move from one clip to the next during a movie or sound. You can control the speed and effect added, like fade in or out.
Overlay	Running alongside another component. For example, sound can be overlaid on a photo.
E-safety	E-safety is safe and responsible use of technology on the computer and the internet.
Animation	Computer animation is creating moving images.
Frame Rate	Changing the speed of the frame to be quicker or slower.
Gallery	Pre-set images that can be used from a list.
Arrange	Placing an object in a certain position, eg. bring to front, send back.
Rotate	Changing the orientation of an object by turning it.
Colour wheel/Swatch	Picking a colour for an object when it is selected.
Colour Fill	Selecting an object to add a colour to. The colour wheel is used to select a colour.



Drama - Devising and Characterisation

Key to Devising

Brainstorm	Brainstorm your ideas with your group, mind maps are a good place to start if you are struggling.
Try Everything	Do not throw out ideas until they have been tried.
Listen	You must actively listen to everyone and their ideas. Work as a group, not as individuals.
Structure	The structure of your play can be changed. Just because you create a scene in a certain way, does not mean you cannot make alterations or improvements to it.
Experiment	Experimenting with ideas, techniques, structure and characters will create a better performance.
Pick your stage	Pick the style of stage you are going to preform on and keep the position of the audience in mind all the time.
Reflect	After every session/ scene reflect on what you have done and where you need to go.

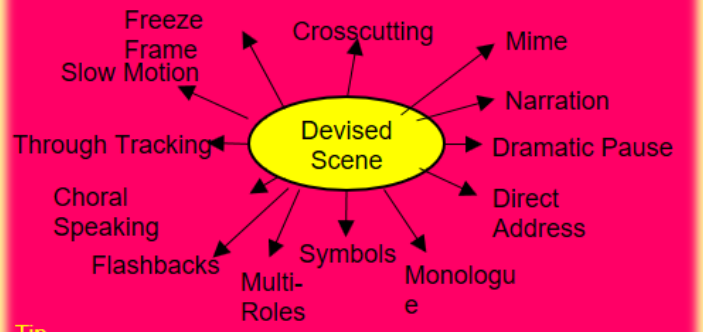
7 States of Tension

1. *Exhaustion*
2. *Laid back/ Zombie*
3. *Neutral*
4. *Alert*
5. *Suspense/curious*
6. *Passionate/melodramatic*
7. *Tragic*

- How can you link Lecoq's ideas of tension into your character?
- What state of tension is the character?
- Does this change? When does this change?

How do I use dramatic devises…

You can use a dramatic devise to add interest in your work, create a particular impression or effect on the audience.



Tip…
You don't have to use all of these in one scene….
Mix them up to create more effect and make it more interesting.

There are two types of characterisation

- ***Direct characterisation***– this tells the audience the personality of the character
- ***Indirect characterisation-*** shows the audience things that can reveal the personality of a character through the following 5 aspects…
  1. Speech - what they say and how they say it.
  2. Thoughts - these can be revealed to the audience
  3. Effects on others - how characters react to one another, what they do, how they use proxemics
  4. Action - why they do what they do and how they do it.
  5. Looks - how they look, their costume, makeup and hair style.

Key to Characterisation

Voice	You need to make sure you speak clearly, you place emphasis in the right place, use pauses, think about the pace you are speaking at and that you can be heard?
Movement	How you move can define a character. Think about why and how you move on the stage.
Body Language and Facial Expressions	These need to be clear and strong. Is your body language and facial expressions telling the correct story? Do they match?
Proxemics	Are you standing the right distance away from another character?

3 Things to Remember

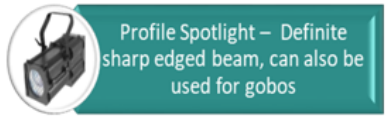
1. Remember rehearsal and to develop are key to both devising and characterisation
2. At all times you must think about the message of your performance
3. Remember to make your play age appropriate!!

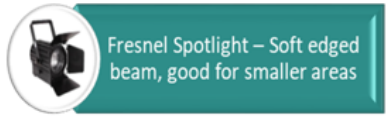
Design

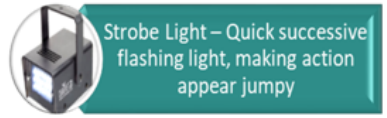
You MUST make sure that the design elements you choose fit your chosen practitioner or genre....

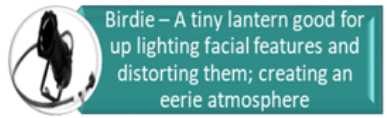
Sound And Music In Performance	
Enhancing a performance	Sound and music can add atmosphere, emphasise action happening on stage, help set the scene, indicate a change of time or location or focus attention onto a character.
What is diegetic sound?	This is sound heard by the characters on stage and exists within the world of the play. For example, birds singing, children playing, road noise. The characters may not react to these but they are there creating an atmosphere.
What is non diegetic sound?	These are sounds which exist outside the world of the play and the characters don't appear to hear these. For example, using a heart beat or dramatic music to create tension.

Par Can – Light for large areas as it literally floods the stage


Profile Spotlight – Definite sharp edged beam, can also be used for gobos


Fresnel Spotlight – Soft edged beam, good for smaller areas

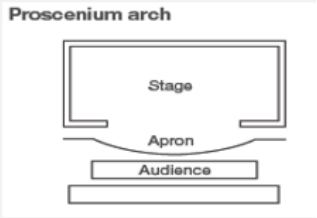

Strobe Light – Quick successive flashing light, making action appear jumpy


Birdie – A tiny lantern good for up lighting facial features and distorting them; creating an eerie atmosphere

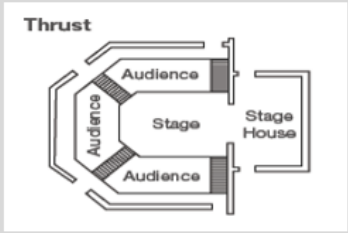
Moving Head Light – A light which moves across the stage, changes colour and can project images using gobos

Key Lighting Vocabulary	
Gobo	A gobo is a metal stencil which is placed over a light to project an image onto the stage or cyclorama (back wall of the stage). For example they can project things like words or windows, or the image of sunlight or rain.
Gel	To change the colour of light projected on stage a gel is placed in front of the light which creates a coloured filter. They come in a great many colours and shades. Colour is explicitly important and needs real consideration; for example, an evening woodland scene might use blues and greens where as a daytime woodland scene would predominantly use greens and yellow.
Intensity - when referring to stage lighting	Intensity of lighting is a direct reference to how bright or dim the light is, which can directly impact on the mood / atmosphere on stage.

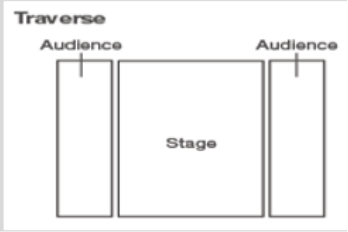
When using a proscenium arch stage, the audience sits on one side only. This is called a proscenium stage (you might know this as end-on staging). The audience faces one side of the stage directly, and may sit at a lower height or in tiered seating. The frame around the stage is called the proscenium arch.



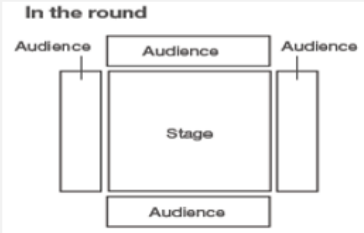
In theatre, a thrust stage (also known as a platform stage or open stage) is one that extends into the audience on three sides and is connected to the backstage area.

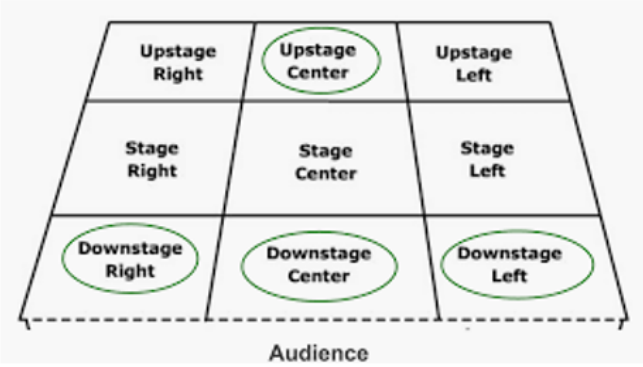


A traverse stage is a form of theatrical stage in which the audience is predominantly on two sides of the stage, facing towards each other. ... In some traverse stages, one end of the stage space may also end in audience, making it similar to a thrust or three-quarter round stage.



Theatre-in-the-round also called arena stage, central stage, or island stage, form of theatrical staging in which the acting area, which may be raised or at floor level, is completely surrounded by the audience.





Year 8, Autumn Term: Perspective

Core Text: *Journey's End* by R. C. Sherriff

Perspective is shaped by context. The way we understand the world might be similar or completely different to other people's understanding of it. Writers can use their text as a vehicle through which to express their perspective on an issue or a subject.

Vocabulary

- 1st/3rd perspective
- realism
- verisimilitude
- censorship
- disillusionment
- agenda
- stanza
- enjambment
- anaphora
- figurative language
- stage directions
- dialogue
- preposition
- sentence fragment
- subordinate clause

Key points about perspective

- Perspective is personal, subjective, and shaped by context.
- A change in context can change a writer's perspective.
- The writer's perspective is linked closely to the themes in the text.

Perspective in poetry

- Poetry—as a form—played a significant role in the war effort.
- A poet's choice of methods shapes perspective.
- Pope's perspective on war reflected a pro-war agenda.
- Owen's perspective is shaped by personal and authentic war experience.
- Kipling's perspective on war changed with time to reflect a new reality.

Perspective in *Journey's End*

- Sherriff was a serving soldier in World War I.
- You need to understand realism as a movement and its role in literature.
- Make notes on Sherriff's perspective on war through *Journey's End*.
- Think about how perspective can be conveyed through characterisation and language choices.
- Understand dramatic conventions (stage directions, dramatic irony, foreshadowing, contrast/juxtaposition, silence, exits and entrances).

A definition of realism

Broadly defined as "the representation of reality", realism in the arts is the attempt to represent subject matter truthfully, without artificiality and avoiding artistic conventions, as well as implausible, exotic and supernatural elements.

Reading Assessment:

Explore how Sherriff uses realism to express his perspective on war.

Locate these features in the example below:

- context
- embedded quotations
- reference to stage directions
- comment on language
- impact of the writer's choices
- reference to realism
- reference to writer's perspective

Throughout the play *Journey's End*, Sherriff uses realism to highlight and expose the devastating impact of war. Sherriff draws on his personal experience of the war, having served as an officer during World War I.

Sherriff effectively uses the opening stage directions to realistically depict the living conditions of World War I soldiers. He writes about 'the wooden bench' and 'gloomy tunnels', deliberately using precise language to focus on these minute details. This adds to the impression that life for wartime soldiers was both dull and uncomfortable, rather than the exciting experience that was suggested by propaganda literature. This immediately creates a sense of Sherriff's anti-war perspective.

Writing Assessment:

Write the narrative from the perspective of one of the people featured in the picture.

Checklist for creative writing

- choose between 1st person/3rd person limited/3rd person omniscient
- plan the setting and characterisation—sensory description, figurative language, precise details, prepositions
- follow the conventional story structure
- write in the present tense
- plan to use verbs for impact
- include fragments for impact
- use adverbial phrases
- include occasional dialogue

Topic 1: Getting Ready to Cook

Personal Hygiene – before starting to cook, you need to get yourself ready:

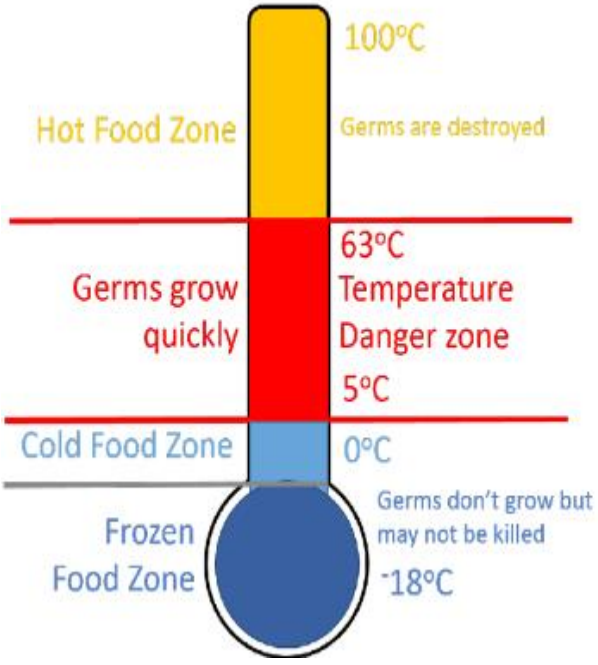
1. Taking off outdoor clothing (coats, blazers, jumpers and ties) and putting on a clean apron
2. Tying up long hair
3. Cleaning hands with hot soapy water

Good personal hygiene will stop you cross-contaminating food with the harmful bacteria that causes food poisoning. When preparing food you should not be eating your ingredients or licking your fingers.

Food Safety – some foods are 'high risk' because, if they are not stored, prepared and cooked properly, there is a high risk of them causing food poisoning. Food poisoning is caused by harmful bacteria (pathogens) which produce toxins when they reproduce. Common pathogens include salmonella (found in raw eggs), campylobacter (found in raw chicken) and E. Coli (found in uncooked meat).

Food Poisoning – when you eat food contaminated by bacteria the consequences can be serious. Symptoms include upset stomachs, headaches and dizziness. Bacteria needs food, moisture, warmth and time to reproduce. To prevent bacterial growth you need to use temperature control - keeping foods out of the 'danger zone' (5-63C) and following the 4Cs:

1. **Chilling** – when food is kept cold in the fridge (0-5C) bacterial growth slows down. Freezing food (-18C) stops growth but the bacteria will start to grow again when food is defrosted
2. **Cleaning** – removes bacteria from hands and work surfaces in the kitchen
3. **Cooking** – heating food to 75C+ kills bacteria. Once cooked, food should be kept warm above 63C
4. **Cross-contamination** – stops bacteria from spreading from high risk foods to other foods



Using the correct chopping board is one important way of avoiding cross-contamination. You should also clean your hands after touching raw meat and fish.

Topic 2: Healthy Eating

We need food for growth and repair of cells, energy, warmth, protection from illnesses and keep our bodies working properly.

Food is made of 5 nutrients. Each nutrient does a different job in the body. Eating a balanced diet means we get all the nutrients we need for a long and healthy life.

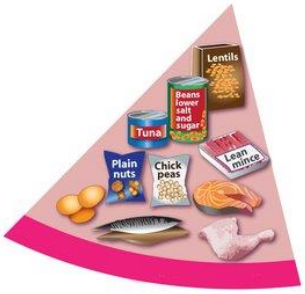
The amount of energy we need depends upon our age, gender, activity level and body size. If we eat more food than we need, and don't use it up by exercising, any energy that's left is turned into fat and we put on weight. If we eat less food than we need, the fat stores are used up and we may end up losing weight.

The Eatwell Guide shows how eating different foods can make a healthy and balanced diet. It divides up different food groups and shows how much of each group is needed. Extra information about the amount of water we need and the labels on food packaging is also provided.

There are also eight guidelines for a healthy lifestyle. They are:

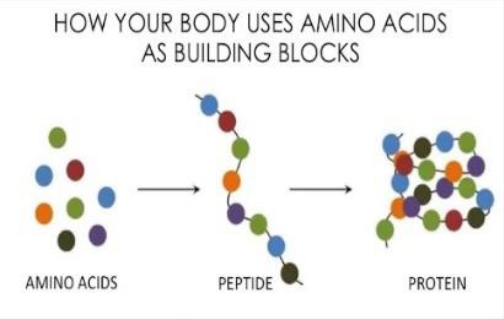
1. Eating at least 5 portions of fruit and vegetables every day
2. Eating higher fibre starchy foods like potatoes, bread, rice or pasta
3. Eating less food high in fats and sugar
4. Eating less salt
5. Eating more fish – including one portion of oily fish
6. Drinking plenty of fluids (at least 6 to 8 glasses a day)
7. Being more active
8. Eating breakfast every day

Topic 3: Protein – Meat, Poultry and Fish



Protein is one of the nutrients essential for life. It is needed for the growth and repair of our cells and for energy. Some groups of people need more protein than others, for example, children and pregnant women need more protein for growth.

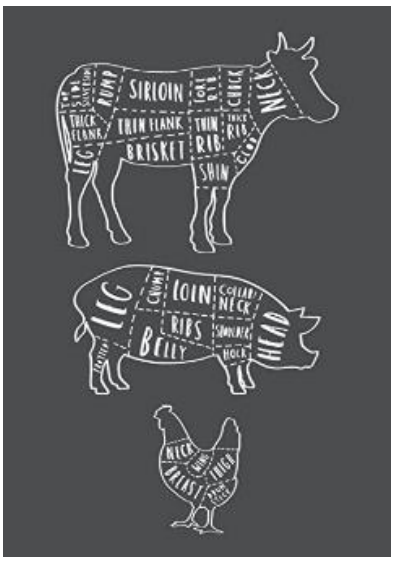
Each protein molecule is made up of a combination of 20 amino acids. It is essential that we include certain amino acids in our diet because our bodies cannot make them. There are 8 essential amino acids for adults and 10 essential amino acids for children (the extra 2 are needed for growth).



Sources of protein that contain all of the essential amino acids are called High Biological Value (HBV) or complete proteins. Sources of protein that contain some of the essential amino acids are called Low Biological Value (LBV) or incomplete proteins.

HBV proteins are mainly from animal sources. LBV proteins are mainly from plant sources such as beans, nuts and seeds. When combining LBV proteins you can consume all the essential amino acids (LBV + LBV = HBV). An example of this is beans on toast. This is called protein complementation.

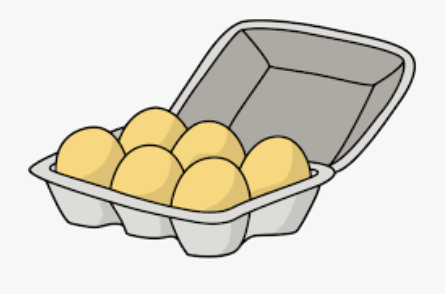
Meat is the muscle tissue of animals and it is high in protein, iron and B group vitamins. The main types of meat eaten in the UK are beef, pork and lamb. Meat from younger animals is tender and cooks quickly, meat from older animals is tougher and needs marinating or slow, moist cooking. Choose lean cuts of meat and mince, and eat less red and processed meat like bacon, ham and sausages.



Poultry are birds that are reared for eating. Popular poultry includes chicken, duck, turkey and goose. Poultry is high in protein and B vitamins and is lower in fat than meat. Poultry needs to be cooked thoroughly because it is a high risk food that can cause food poisoning.

Fish can be divided into three types, white, oily and shellfish. Fish is high in protein and you should aim for at least 2 portions of fish every week, 1 of which should be oily, such as salmon or mackerel, because it is high in vitamins A and D.

Topic 4: Protein – Eggs and Dairy Foods



Eggs are nutritious – they're a source of protein, vitamin D, vitamin A, vitamin B2, vitamin B12, folate and iodine. Eggs can be enjoyed as part of a healthy, balanced diet, but it's best to cook them without adding salt or fat, for example boiled or poached.

Eggs are produced by laying hens. Hens can be housed in cages or barns to lay their eggs or they can be 'free range' and have access to the outdoors. The British Lion Code of Practice ensures that eggs are produced to high standards – look out for eggs that have the Red Lion stamp.

Eggs are very versatile and can be used to make a wide range of sweet and savoury dishes including cakes, meringues and custard or savoury tarts, omelettes and Yorkshire puddings.

This is because the protein in eggs can denature (change shape) and coagulate (set). Proteins denature when heated, beaten or exposed to acidic foods such as lemon juice. Egg white becomes solid and turns white as it coagulates at 60C and egg yolk becomes solid at 70C.

Milk and dairy products, such as cheese and yoghurt, are great sources of protein and calcium. They can form part of a healthy, balanced diet, especially if you go for lower fat and lower sugar options.

Milk is supplied by dairy cows but it is also available from sheep and goats. You can look out for the Red Tractor logo on dairy foods. This is a quality assurance scheme that informs consumers that milk has been produced to high standards by UK farms.

The milk you buy in the shops is heat-treated to 72C to destroy bacteria. This process is called pasteurisation. Fresh milk should be stored in the fridge and will last 5 days. Longer life milk is also available. Ultra-heat treatment milk (UHT) is heated to 135C and can be stored at room temperature for about 6 months. Some or all of the fat in milk can be removed to make a healthier version so full fat (blue packaging), semi-skimmed (green packaging) and skimmed (red packaging) varieties are widely available.

Topic 5: Fats and Oils

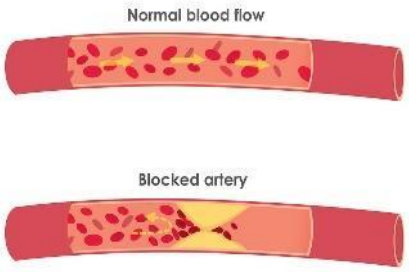
A small amount of fat is an essential part of a healthy, balanced diet. Fat is a source of essential fatty acids, which the body cannot make itself. It also provides energy and is converted into body fat to keep us warm and protect our vital organs.

Fat helps the body absorb vitamin A, vitamin D and vitamin E. These vitamins are fat-soluble, meaning they can only be absorbed with the help of fats.

The main types of fat found in food are:

- saturated fats from animal sources, including meat and dairy products, as well as some plant foods, like palm oil and coconut oil
- unsaturated fats found primarily in oils from plants and fish

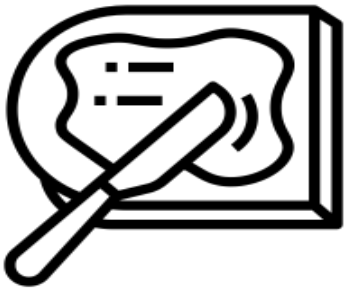
As part of a healthy diet, you should try to cut down on foods and drinks high in saturated fats and replace some of them with unsaturated fats, for example using a low-fat spread instead of butter or olive oil instead of lard.



There's good evidence that replacing saturated fats with some unsaturated fats can help lower cholesterol which is a major cause of heart disease as it can block up your arteries. Too much fat in the diet can also lead to obesity and Type 2 diabetes.

Fats are used to spread on bread, as a cooking medium and for shortening and aeration. Deep-fat and shallow frying are popular ways of cooking food that add colour, flavour and texture to food - but it also adds unnecessary calories.

Shortening is when you add fat to biscuits or pastry to give them a crumbly texture. When fat is rubbed into the flour using the fingertips, it surrounds the flour particles with a waterproof coating – fats with high levels of plasticity, for example butter, are best for this. This stops water becoming absorbed and gluten being formed (the protein in flour). Gluten makes dough stretchy and baked products chewy and is ideal in bread making but not desirable in pastry which should be melt-in-the-mouth.



Fat also helps to trap air in a mixture to give a light, springy texture (aeration). In cake making, fat and sugar are creamed together and bubbles of air enclosed in the mixture to make a stable foam.

Topic 6: Adapting Recipes

For some people, following the Eatwell Guide is more challenging because they cannot, or choose not to, eat some of the food groups.

People with allergies and intolerances are not able to eat some foods because they cause severe reactions or unpleasant symptoms. Common food allergens include fish, nuts and sesame seeds. People with severe allergies should avoid all traces of these food as they can go into anaphylactic shock which can be very serious.

Gluten intolerance means that people need to find alternatives to some starchy foods like bread and pasta. Gluten-free flour is now available in most supermarkets and ready-made gluten-free products are also easier to find in shops.

There are also calcium-fortified dairy alternatives like soya milks, soya yoghurts and soya cheeses which can make good alternatives to dairy products for people with lactose intolerance.

Other people choose not to eat animal products because they are vegetarians or vegans. They do not agree that animals should be slaughtered for food or kept for human food production. There are many high protein alternatives for people who do not eat animal products including Quorn, quinoa and foods made from soya.

Choosing to eat only organic, Fairtrade or free range products is also becoming more popular. Organic foods are produced without any chemicals. Fairtrade foods are grown by people who receive a good deal for their produce. Free range farming is when animals are allowed to roam outside during the day rather than being kept indoors in large numbers (intensive farming). Some people are also concerned about food production and the environment – saying we should look for alternatives to rearing cattle such as eating insects (entomophagy).

People also adapt recipes to take account of their personal preferences (their likes and dislikes) or their religion, to make them cheaper, to make them healthier or to add variety to their diet.

French Y8 Autumn Term Knowledge Organiser Unit 1: Les vacances – Holidays

Tu es allé(e) où?	Where did you go?
Je suis allé(e)	**I went to…**
Nous sommes allé(e)s…	**We went to…**
en Allemagne	Germany
en Espagne	Spain
en France	France
en Grèce	Greece
en Italie	Italy
au Maroc	Morocco
au Mexique	Mexico
au Portugal	Portugal
aux États-Unis	USA

Prepositions
en + feminine country
au + masculine country
aux +plural country
à + city name

Avec qui?	Who with?
ma famille	my family
mon collège	my class/school
mes ami(e)s	my friends
mes parents	my parents
mon frère	my brother
ma sœur	my sister

Tu as voyagé comment?	How did you travel?
J'ai voyagé…	**I travelled…**
Nous avons voyagé…	**We travelled…**
en avion	plane
en train	train
en bateau	boat
en voiture	car
en car	coach

Tu es où en vacances ?	Where are you on holiday?
Je suis…	**I am…**
Nous sommes	**We are…**
au bord de la mer	by the seaside
à la montagne	in the mountains
à la campagne	in the countryside
en colo (colonie de vacances)	at a holiday camp
chez mes grands-parents	At my grandparents' home

Qu'est-ce que tu as visité?	What did you visit?
J'ai visité…	**I visited…**
Nous avons visité…	**We visited…**
le château	the castle
le lac	the lake
le musée	the museum
le parc	the park
le stade	the stadium
la cathédrale	the cathedral
la mosquée	the mosque
la chocolaterie	the chocolate shop

C'était comment ?	How was it?
C'était…	**It was…**
amusant	fun/funny
génial !	great
ennuyeux	boring
cool	cool
sympa	nice
intéressant	interesting
nul	rubbish
Ce n'était pas mal	It wasn't bad

Qu'est-ce que tu as fait?	What did you do?
Pendant les vacances…	**During the holidays…**
J'ai joué au tennis/au foot	I played tennis/football
J'ai mangé des glaces	I ate ice creams
J'ai écouté de la musique	I listened to music
J'ai acheté des baskets	I bought trainers
J'ai regardé un film à la télé	I watched a film on TV
J'ai nagé dans la mer	I swam in the sea
J'ai retrouvé mes amis	I met my friends
J'ai traîné à la maison	I hung around at home

Qualifiers	
un peu	a bit
assez	quite
très	very
trop	too
vraiment	really

Sequencers	
d'abord	first of all
ensuite	next/then
puis	then
après	after
finalement	finally

The perfect tense with AVOIR

The perfect tense is used to say what you **did** or **have done** in the **past.**

To form the perfect tense of most verbs, you need:

1. The present tense of the verb AVOIR (to have)
2. A past participle (joué/mangé etc.)

To form the past participle for regular –er verbs, remove the **infinitive -er** ending and replace with **é**
e.g ***regarder*** **–** ***regardé***

1. AVOIR, present tense	2. Past participle	
J'ai	mangé	I ate
Tu as	acheté	You bought
Il/Elle/On a	nagé	He/She/We swam
Nous avons	joué	We played
Vous avez	écouté	You listened
Ils/Elles ont	visité	They visited

The perfect tense with ÊTRE

Some verbs use the verb ÊTRE in the perfect tense. One example is ALLER, the verb to go.

1. ÊTRE, present tense	2. Past participle (remember to add an extra e for females and s for plurals).	
Je suis	allé(e)	I went
Tu es	allé(e)	You went
Il/Elle/On est	allé(e)	He/She/We went
Nous sommes	allé(e)**s**	We went
Vous êtes	allé(e)**s**	You went
Ils/Elles sont	allé(e)**s**	They went

Au parc d'attractions	At the theme park
J'ai bu un coca	I drank a coke
J'ai vu un spectacle	I saw a show
J'ai vu mes personnages préférés	I saw my favourite characters
J'ai fait une balade en bateau	I went on a boat ride
J'ai fait tous les manèges	I did all the rides
J'ai pris des photos	I took photos
Je n'ai pas mangé de glaces	I didn't eat ice creams
Je n'ai pas acheté de souvenirs	I didn't buy souvenirs

Look out for irregular past participles :
boire (to drink) - ***bu*** (drank) prendre (to take) - ***pris*** (took)
voir (to see) - ***vu*** (saw) *faire* (to do) - ***fait*** (did)

French Y8 Autumn Term Knowledge Organiser Unit 2: Les fêtes – Festivals

Quelle est ta fête préférée ?	What's your favourite festival?
Ma fête préférée c'est…	**My favourite festival is…**
Noël	Christmas
Pâques	Easter
mon anniversaire	my birthday
la Toussaint	All Saint's Day
le Saint-Valentin	Valentine's Day
le Nouvel An	New Year
la Chandeleur	Pancake Day
l'Aïd	Eid
le carnaval	Carnival
le 14 juillet	Bastille Day

Pourquoi ?	Why?
Parce que…	**Because…**
J'aime/J'adore…	**I like/I love**
Je n'aime pas…	**I don't like…**
Je déteste…	**I hate…**
Je préfère…	**I prefer…**
manger du chocolat	to eat chocolate
acheter des cadeaux	to buy presents
danser et chanter	to sing and dance
faire une soirée pyjama	to have a sleepover
rendre visite à mes cousins	to visit my cousins
Parce que c'est…	**Because it is…**
amusant/ennuyeux/	fun/boring/
nul/sympa/ bête	rubbish/nice/ silly
trop commercial	too commercialised

Comment fêtes-tu ?	How do you celebrate?
Je retrouve mes copains	I meet my friends
Je mange des crêpes	I eat pancakes
Je danse	I dance
Je porte un masque et un déguisement	I wear a mask and a disguise
Je regarde la parade	I watch the parade
Je partage des photos	I share photos

The present tense

The present tense is used to talk about what **usually** happens, or what is happening **now.**
Je danse means 'I dance' and 'I am dancing'
To form the present tense of most verbs:

1. Choose the correct subject pronoun (je/tu/il/elle…)
2. Remove the -er/-ir/-re ending from the infinitive verb.
3. Add the appropriate ending from the table below.

Subject pronoun	-er verbs (JOUER)	-ir verbs (FINIR)	-re verbs (VENDRE)
Je/J'	joue	finis	vends
Tu	joues	finis	vends
Il/Elle/On	joue	finit	vend
Nous	jouons	finissons	vendons
Vous	jouez	finissez	vendez
Ils/Elles	jouent	finissent	vendent

Décris la photo	Describe the photo
Sur la photo il y a…	**In the photo there is…**
un homme/une femme	a man/woman
un garçon/une fille	a boy/girl
Il/Elle danse	He/She is dancing
Il/Elle mange…	He/She is eating
Il/Elle chante	He/She is singing
Il/Elle porte…	He/She is wearing
Il fait beau/mauvais	The weather is good/bad

For multiple people: Il**s**/Elle**s** dans**ent**.
The **-s** and **-ent** are silent.

Au marché	At the market
Vous désirez ?	What would you like?
Je voudrais…s'il vous plaît	I would like…please
Et avec ça ?	Anything else?
C'est tout, merci.	That's everything, thanks.
Ça fait combien ?	How much is it?
Ça fait…euros.	It's…euros.
Voilà.	Here you go.
Bonne journée !	Have a good day!

Qu'est-ce que tu vas faire ?	What are you going to do?
Je vais…	**I'm going to…**
visiter le marché de Noël	visit the Christmas market
acheter des cadeaux	buy presents
admirer les maisons illuminés	admire the illuminations
écouter des chorales	listen to some choirs
manger une tarte flambée	eat a tart
boire un jus de pomme chaud	drink a hot apple juice

The near future tense

To talk about things that are going to happen, use ALLER in the present tense, followed by an infinitive verb.

ALLER, present tense	Infinitive verb	
Je vais	acheter	I am going to buy
Tu vas	manger	You are going to eat
Il/Elle/On va	boire	He/She/We are going to drink
Nous allons	visiter	We are going to visit
Vous allez	écouter	You (pl.) are going to listen
Ils/Elles vont	choisir	They are going to choose.

Au marché	Au marché
du poisson	some fish
de la salade	some lettuce
de l'eau	some water
des haricots verts	some green beans
un morceau de fromage	a piece of cheese
une tranche de jambon	a slice of ham
un chou-fleur	a cauliflower
une douzaine d'œufs	a dozen eggs
un kilo d'oignons	1kg of onions
un demi-kilo de pommes	½ a kilo of apples
2 kilos de pommes de terre	2kg of potatoes
cent grammes de tomates	100g of tomatoes
six bananes	six bananas

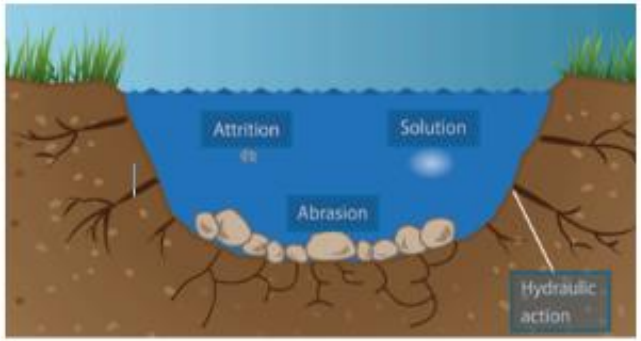
When buying food you can use:
1. the indefinite article: ***une** pomme*
2. a number: ***six** pommes*
3. a quantity followed by *de*: ***un kilo de** pommes*

YEAR 8 Geography: Rivers and Coasts

Break it: **Erosion** is the wearing away of rock

Move it: **Transportation** is the movement of material

Make it: **Deposition** is the dropping off of material



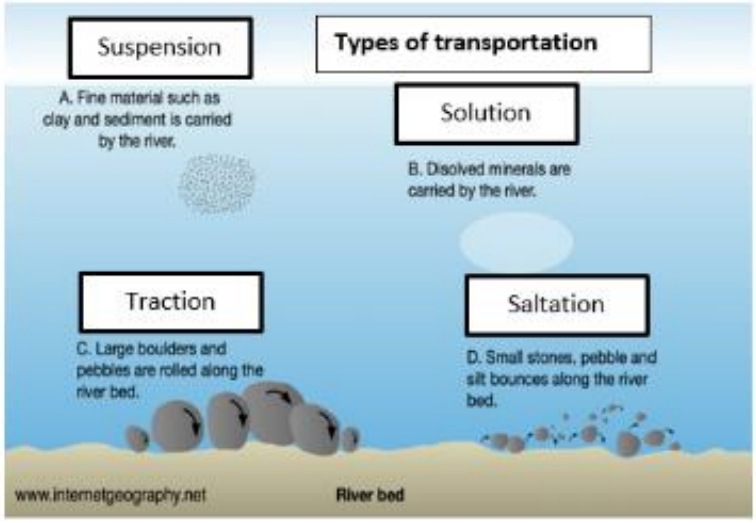
4 Types of Erosion

Attrition	Rocks in the river/sea bump into each other, breaking up, becoming rounder/smoother.
Abrasion	Material being carried scrapes river beds/cliffs wearing them down.
Solution/Corrosion	Certain rocks are dissolved by river/sea water.
Hydraulic Action	The force of water expands crack in river banks and coastal cliffs.

Weathering Types and Causes

Case study - river landforms: River Tees

The River Tees is located in the north of England. The **source** of the River Tees is located in the Pennines and it flows east to its mouth where the river joins the North Sea.



Coasts Case Study – Happisburgh

Reasons for coastal management

The coastline is eroding at an average of 2 metres a year.

Rock type – the cliffs are made from less resistant boulder clay (made from sands and clays) which slumps when wet.

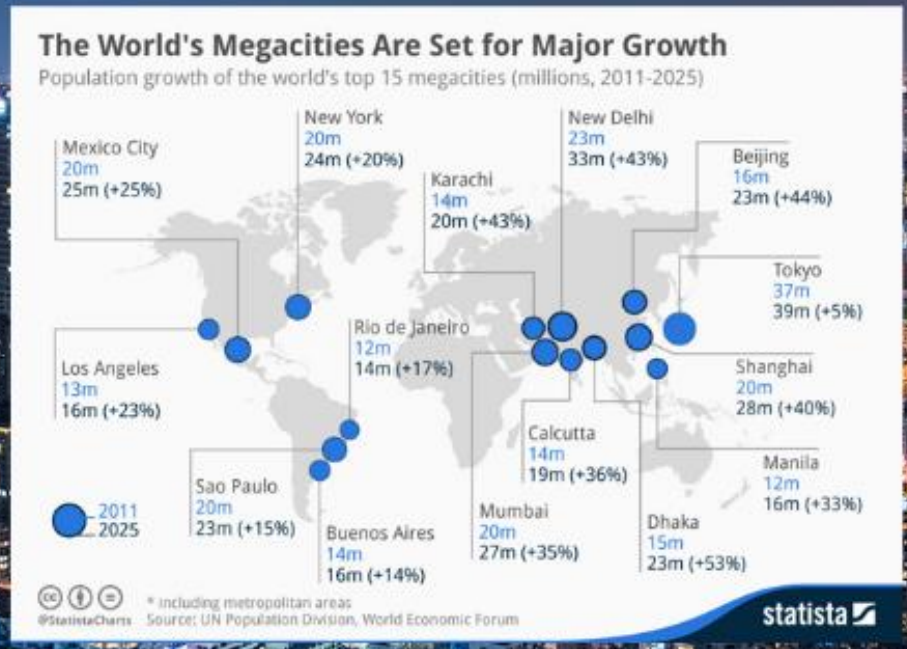
Naturally narrow beaches – these beaches give less protection to the coast as they don't reduce the power of the waves.

Man-made structures – groynes have been installed to stop longshore drift and build up the beaches in certain places. This narrows unprotected beaches elsewhere even further, as new sand does not come down to replace sand eroded by waves.

Powerful waves – waves at Happisburgh travel long distances over the North Sea (so have a long fetch) which means they will increase in energy.

Year 8 Geography: Population

Key Term	Definition
Population	The number of people living in a geographical area. The population of the world is approximately 7.8 billion people.
Megacity	A large city with a population over 10 million.
Population density	The number of people per unit of area, usually quoted per square kilometre or square mile.
Birth rate	The number of babies born every year per 1000 people in a population.
Death rate	The number of deaths that occur every year per 1000 people in a population.
Population pyramid	A graphical illustration that shows how many males and females of different age groups are in a population.



Key ideas

The world population is expected to reach **8 billion people by 2023**. Currently the highest levels of population growth are in the continents of Asia and Africa. Population growth in most parts of Europe is slowing or declining.

An **ageing population** occurs due to rising life expectancy and a declining birth rate within a population. This causes an increase in the average age of the population. In **Japan**, the number of people aged 65 years or older nearly has quadrupled in the last forty years, to 33 million, while at the same time the birth rate has declined. This has created social and economic problems for Japan.

The **One Child Policy** was a policy introduced in **China**, between 1979 and 2015, that limited most families to only having one child. The Chinese government was afraid that its birth rate was too high, and it would not be able to care for its population. The policy was relaxed in 2015 and most families are now permitted to have two children.

Y8 German - Autumn Term 1

Regular verbs
With regular verbs, remove the ending –en and add the ending that goes with the pronoun (person).
spielen- to play
spiel(-en)

Ich spiel(e)	*I play*
du spiel(st)	*you play*
er spiel(t)	*he plays*
sie spiel(t)	*she plays*
man spiel(t)	*one plays*
wir spiel(en)	*we play*
ihr spiel(t)	*you (plural) play*
sie spiel(en)	*they play*

haben - *to have*

ich habe	*I have*
du hast	*you have*
er hat	*he has*
sie hat	*she has*
man hat	*one has*
es hat	*it has*
wir haben	*we have*
ihr habt	*you have (plural)*
sie haben	*they have*

sein – *to be*

ich bin	*I am*
du bist	*you are*
er ist	*he is*
sie ist	*she is*
man ist	*one is*
es ist	*it is*
wir sind	*we are*
ihr seid	*you are (plural)*
sie sind	*they are*

fahren – *to travel/ ride/ go*

ich fahre	*I travel*
du fährst	*you travel*
er fährt	*he travels*
sie fährt	*she travels*
wir fahren	*we travel*
ihr fahrt	*you travel (plural)*
sie fahren	*they travel*

schlafen – *to sleep*

ich schlafe	*I sleep*
du schläfst	*you sleep*
er schläft	*he sleeps*
sie schläft	*she sleeps*
wir schlafen	*we sleep*
ihr schlaft	*you sleep (plural)*
sie schlafen	*they sleep*

sehen – *to see*

ich sehe	*I see*
du siehst	*you see*
er sieht	*he sees*
sie sieht	*she sees*
wir sehen	*we see*
ihr seht	*you see (plural)*
sie sehen	*they see*

essen – *to eat*

ich esse	*I eat*
du isst	*you eat*
er isst	*he eats*
sie isst	*she eats*
wir essen	*we eat*
ihr esst	*you eat (plural)*
sie essen	*they eat*

treffen – *to meet*

ich treffe	*I meet*
du triffst	*you meet*
er trifft	*he meets*
sie trifft	*she meets*
wir treffen	*we meet*
ihr trefft	*you meet (plural)*
sie treffen	*they meet*

lesen – *to read*

ich lese	*I read*
du liest	*you read*
er liest	*he reads*
sie liest	*she reads*
wir lesen	*we read*
ihr lest	*you read (plural)*
sie lesen	*they read*

tragen – *to wear*

ich trage	*I wear*
du trägst	*you wear*
er trägt	*he wears*
sie trägt	*she wears*
wir tragen	*we wear*
ihr tragt	*you wear (plural)*
sie tragen	*they wear*

Jahreszeiten *Seasons*

Frühling	*Spring*
Sommer	*Summer*
Herbst	*Autumn*
Winter	*Winter*

Connectives

und	*and*
oder	*or*
aber	*but*
denn	*because*

Frequency words

immer	*always*
oft	*often*
manchmal	*sometimes*
selten	*rarely*
nie	*never*

Five key words

Frühling	*Spring*
faulenzen	*to laze around*
er isst	*he eats*
ich treffe	*I meet*
ich fahre	*I travel*

Y8 German - Autumn Term 2

Kleider/ Klamotten
Clothes

der Rock	*skirt*
der Mantel	*coat*
der Anzug	*suit*
der Kapuzenpulli	*hoodie*
die Jeanshose/ die Jeans	*jeans*
die Hose	*trousers*
das Kleid	*dress*
das Hemd	*shirt*
das T-Shirt	*T-shirt*
die Schuhe	*shoes*
die Stiefel	*boots*
die Sandalen	*sandals*

Was trägst du? *What do you wear? What are you wearing?*

ich trage…	*I wear/ I am wearing*
einen kurzen Rock	*a short skirt*
einen langen Mantel	*a long coat*
einen lockeren Kapuzenpulli	*a casual hoodie*
eine weite Hose	*a baggy pair of trousers*
eine schmale Jeanshose	*a pair of skinny jeans*
ein kariertes Hemd	*a checkered shirt*
ein gepunktetes Kleid	*a spotty dress*
ein gestreiftes T-Shirt	*a stripy T-shirt*
schicke Stiefel	*smart boots*

Five key words

die Schuhe	*the shoes*
trendig	*trendy*
ich ziehe mich an	*I get dressed*
einige Leute	*some people*
viele Kinder	*many children*

Wie ist es? *What is it like?*

kurz	*short*
lang	*long*
weit	*wide-leg/ baggy*
schmal	*slim-leg/ skinny*
schick	*smart*
locker	*casual*
kariert	*checkered*
gepunktet	*spotty/ polka dot*
gestreift	*stripy*
glänzend	*glittery*

ein erstes Date *A first date*

Was wirst du machen?	*What will you do?*
ich werde…	*I will…*
die Karten im Voraus kaufen	*buy the tickets in advance*
einen guten Film auswählen	*choose a good film*
früh ankommen	*arrive early*
abholen	*pick up*
etwas Schickes anziehen	*put on something smart*
genug Geld mitnehmen	*take enough money with me*
mit dem Bus in die Stadt fahren	*go by bus to town*
ins Kino gehen	*go to the cinema*
essen gehen	*go out to eat*

Wie ist dein Stil? *What is your style?*

lässig	*informal*
trendig	*trendy*
sportlich	*sporty*
klassisch	*classic*

ich mache mich fertig *I get myself ready*

ich style mir die Haare	*I style my hair*
ich mache mir die Haare	*I do my hair*
ich putze mir die Zähne	*I brush my teeth*
ich schminke mich	*I put on make-up*
ich ziehe mich an	*I get dressed*
ich sehe mich im Spiegel an	*I look at myself in the mirror*
ich benutze ein Deo	*I put on deodorant*
ich wähle meine Kleider aus	*I choose my clothes*

High frequency words

wenn	*when/ if*
immer	*always*
zum Beispiel	*for example*
zuerst	*first of all*
seit	*since/ for*
für	*for*
möglich	*possible*
pro Jahr	*per year*
nächstes Jahr	*next year*
teuer	*expensive*
alle	*all/ everyone*
um… zu	*in order to*

Diskussion und Debatte *Discussion and debate*

Viele/ Einige Leute sagen	*Many/some people say*
Meiner Meinung nach	*In my opinion*
Erstens	*Firstly*
Zweitens	*Secondly*
Schließlich	*Finally*
Du hast gesagt … aber ich denke	*You said… but I think*
Auf der einen Seite	*On the one hand*

Chronology	
1603	Elizabeth 1 dies, James 1 becomes the first Stuart monarch.
1605	Gunpowder plot
1625	Charles I becomes King.
1629	Charles dissolves parliament for the next 11 years. 'Personal rule'.
1633	Charles appoints William Laud as Archbishop.
1634	Charles expands 'ship money'
1637	Leading puritans are mutilated
1637-39	Charles tries to introduce a new Prayer book in Scotland
1640	The Long Parliament
1641	The Grand Remonstrance
1642 Jan.	Charles tries to arrest 5 MPS
1642 March	Parliament takes control of the army.
1642 June	Nineteen Propositions
1642 August	Charles raised his standard at Nottingham- War began.
1642	Battle of Edgehill
1644	Battle of Marston Moor
1645	Battle of Naseby
1645-46	Witch Craze
1646-48	Second Civil War
1649	Execution of Charles
1649-60	Interregnum

Key People	Role
Matthew Hopkins	The Witch finder General
Charles I	Son of James 1
Charles II	The son of Charles I
James I	The first Stuart King
Henrietta Maria	Wife of Charles I
Pym	Organised the Grand Remonstrance.
Robert Catesby	Leader of the Gunpowder plotters.
Guido Fawkes	Gunpowder expert found in the cellar.
Prince Rupert	Nephew of Charles I. In charge of the Royalist Cavalry.
John Bradshaw	Led the trial of Charles I
Oliver Cromwell	Puritan army leader of the roundheads.
Lord Fairfax	Led the New Model Army
William Laud	Appointed Archbishop of Canterbury.
Burton, Prynne and Bastwick	Wrote pamphlets criticising Charles.

Common misconceptions

At least one in 10 – or perhaps as many as one in five – men in England and Wales fought in the Civil War. It has been calculated that loss of life, in proportion to the national population of the time, was greater than in the First World War.

In England, witchcraft became a crime in 1542, a statute renewed in 1562 and 1604. As such, most witches across Europe received the usual penalty for murder – hanging (though in Scotland and under the Spanish Inquisition witches were burned).

The Gunpowder plot was led by Robert Catesby.

Key discoveries / ideas

In 1533, Henry VIII broke from the church and married the now pregnant Anne Boleyn in a secret ceremony. This solved his heir problem, but Henry was excommunicated by the Pope. The English Reformation had begun.

James I was a Protestant but was tolerant towards the Catholics. However he introduced strict anti-Catholic laws after the Gunpowder Plot.
Charles I tried to introduce Arminian changes. Arminianism is a form of Protestantism that has a lot in common with Catholicism. Charles ended up fighting a civil war against Oliver Cromwell – who was a Puritan (a very strict Protestant who wanted to get rid of ritual in church services and lead a plain and simple life).

The printing press is thought to have been invented in Germany by Johannes Gutenberg around 1450 and by the end of the century printed books were available in London. This meant that ideas could be printed and spread quickly.

Useful Websites/books/films/documentaries

https://www.bbc.co.uk/bitesize/guides/zky82hv/revision/1

https://kids.britannica.com/kids/article/English-Civil-War/476240#:~:text=The%20English%20Civil%20War%20was,when%20England%20had%20no%20monarch.

https://www.youtube.com/watch?v=KDvQw9SzoV0

https://www.youtube.com/watch?v=cEE1FbHzZt0

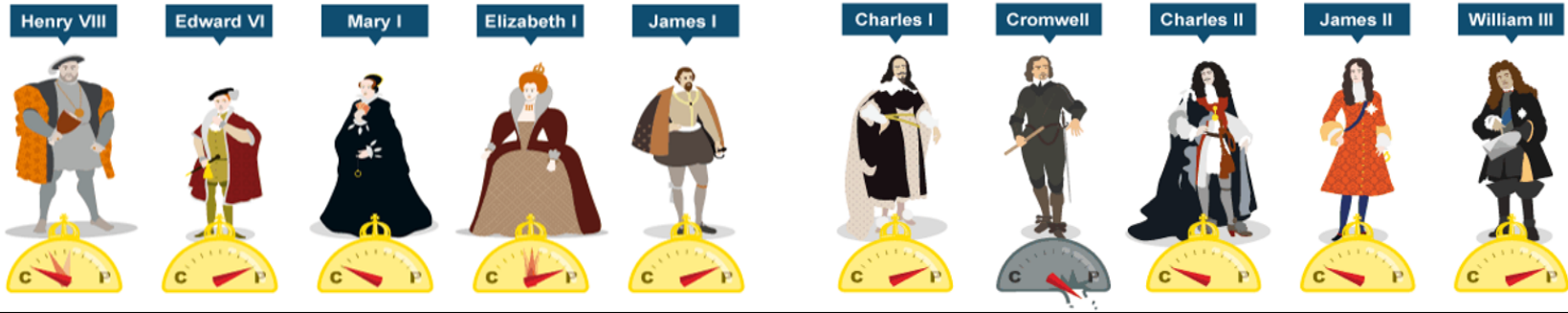
https://www.youtube.com/watch?v=bqi0Wd68Mio

https://vimeo.com/290470347

Key words and concepts

1. **Monarch** The king or queen	2. **Roundhead** The term given to the soldiers that fought for Parliament. Named after their short haircuts!	**3. Divine Right** The belief held by Kings & Queens that they had been appointed by God to rule.	4. **Puritan** **A** very strict form of Protestantism. Many MPs were Puritans.	**5. Reformation** A movement in the 16th century which led to the foundation of Protestantism.
6. **Treason** The crime of betraying one's country, especially by attempting to kill or overthrow the sovereign or government.	**7. Cavaliers** The term given to soldiers on horses. They fought for the King in the English Civil War.	8. **Ship Money** A tax normally paid by Costal towns. Charles extended this inland.	9. **Grand Remonstrance** Organised by John Pym. A summary of all the criticisms that Parliament had with the King.	10. **Parliament** Called by the king when he chose. Approved laws and proposed their own. Were supposed to approve all taxes.
11. **Nineteen Propositions** A set of demands that parliament laid out to Charles.	12. **Declaration of Breda** Promises that Charles II made to restore the monarchy.	13. **Republic** A country with elected representatives.	14. **Civil War** A war between citizens of the same country.	15. **Levellers** A group who wished to abolish the monarchy.
16. **Mew Model Army** England's first professional army.	17. **The Long parliament** From 1640 parliament was in session for the next 20 years.	18. **Royalist** Someone who supports the monarchy.	19. **Witch craze** People were accused of witchcraft in larger numbers.	20. **Conspiracy** A secret plan to do something harmful.
21. **Lord Protector** Oliver Cromwell's title.	22. **Regicide** The act of killing a king.	23. **Interregnum** In between kings.	24. **Superstition** Belief in the super-natural.	25. **Tyrant** A cruel and oppressive ruler.

Important images - Catholic or Protestant?



Year 8 Knowledge Organiser
SOLVING EQUATIONS

Key Concept
Inverse Operations

Operation	Inverse
+	−
−	+
×	÷
÷	×
x^2	$\sqrt{x}$

To check your answer, use substitution

Key Words

Unknown: A letter which represents a number we do not know the value of.

Terms: The numbers and letters in the expression or equation.

Inverse: The operation which will do the opposite.

Examples

x + 9 = 16 -9 -9 **x = 7**	x − 12 = 20 +12 +12 **x = 32**	$\frac{x}{3} = 5$ ×3 ×3 **x = 15**	2x + 5 = 14 -5 -5 2x = 9 ÷2 ÷2 **x = 4.5**

$\frac{x}{4} - 2 = 4$ +2 +2 $\frac{x}{4} = 6$ ×4 ×4 **x = 24**	2(3x + 5) = -14 expand 6x + 10 = -14 -10 -10 6x = - 24 ÷6 ÷6 **x = - 4**	2x + 7 = 5x + 1 -2x (smallest x term) +7 = 3x + 1 -1 -1 6 = 3x ÷3 ÷3 **2 = x**

Tip

Answers can be:
- Integers
- Decimals
- Fractions
- negatives

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177 – 184

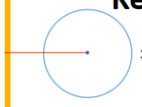
Questions

1) x + 8 = 19
2) y − 25 = 15
3) 2y = 82
4) $\frac{t}{4} = 7$
5) $\frac{p}{2} - 6 = 2$
6) 3(2x − 3) = 15
7) 4x − 8 = 2x + 1

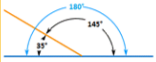
ANSWERS: 1) x = 11, 2) y = 40, 3) y = 41, 4) t = 28, 5) p = 16, 6) x = 4, 7) x = 4.5 or 9/2

Year 8 Knowledge Organiser
ANGLES (lines/points)

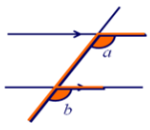
Key Concepts



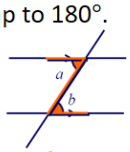
Angles at a point add up to 360°.



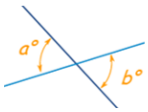
Angles on a straight line add up to 180°.



Corresponding angles are equal.



Alternate angles are equal.



Vertically opposite angles are equal.

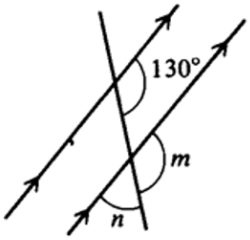
Key Words

Intersect: Two lines which cross.

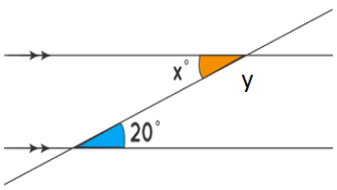
Parallel: Two lines which never intersect. Marked by an arrow on each line.

Transversal: A line which intersects two parallel lines.

Examples



m = 130° as corresponding angles are equal.
n = 50° as angles on a line add to 180°



x = 20° as alternate angles are equal
y = 160° as angles on a straight line add up to 180 °

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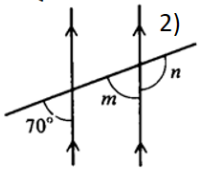
477 to 483, 812 to 815

Tip

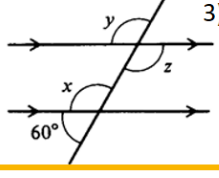
These angle properties can be used alongside all the other angle properties that you have learnt.

Questions – Find the labelled angles, give reasons.

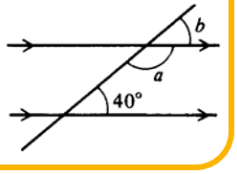
1)



2)



3)

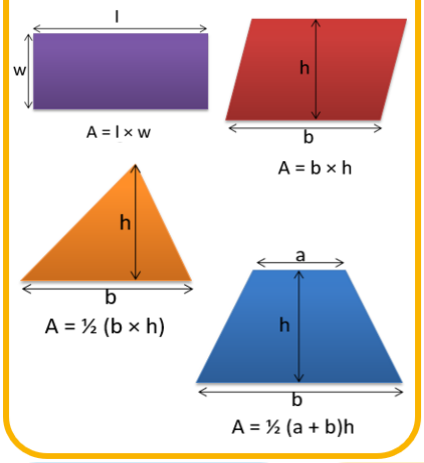


ANSWERS: 1) m = 70°, n = 110° 2) x = 120°, y = 120°, z = 120° 3) a = 140°, b = 40°

Year 8 Knowledge Organiser
AREA AND PERIMETER

Key Concepts

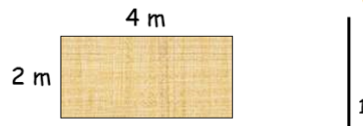
Area



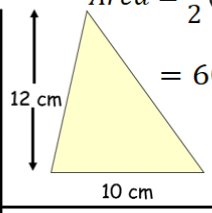
Key Words

Area: The amount of square units that fit inside the shape.
Perimeter: The distance around the outside of the shape.
Dimensions: The lengths which give the size of the shape.
Shapes: Rectangle, Triangle, Parallelogram, Trapezium, Kite.

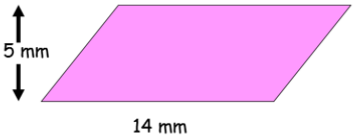
Examples



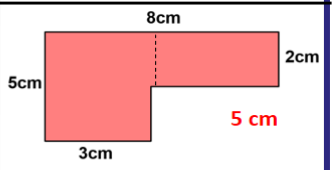
$Area = 2 \times 4 = 8m^2$



$Area = \frac{1}{2}(10 \times 12)$
$= 60cm^2$



$Area = 5 \times 14$
$= 70mm^2$



$Area$
$= (5 \times 3) + (2 \times 5)$
$= 25cm^2$

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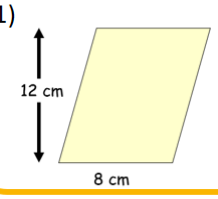
554 – 559

Tip

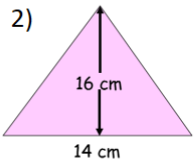
Always remember units. These units are squared for area.
mm^2, cm^2, m^2, etc

Questions – Find the area.

1)



2)



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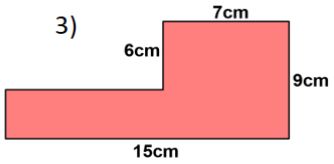
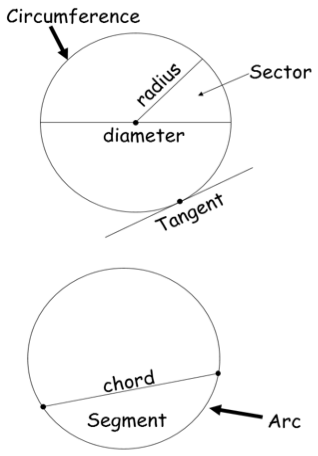


ANSWERS: 1) 96 cm^2 2) 112 cm^2 2) 87 cm^2

Year 8 Knowledge Organiser
CIRCLES AND COMPOUND AREA

Key Concepts

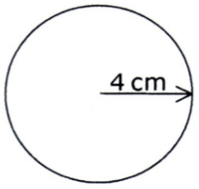


Key Words

Diameter: Distance from one side of the circle to the other, going through the centre.
Radius: Distance from the centre of a circle to the circumference.
Chord: A line that intersects the circle at two points.
Tangent: A line that touches the circle at only one point.
Compound (shape): More than one shape joined to make a different shape.

Examples

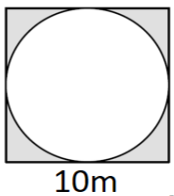
Find the area and circumference to 2dp.



$Circumference = \pi \times d$
$= \pi \times 8 = 25.13cm$

$Area = \pi \times r^2$
$= \pi \times 4^2 = 50.27cm^2$

Find shaded area to 2dp.



$Square\ area = 10 \times 10$
$= 100m^2$

$Circle\ area = \pi \times r^2$
$= \pi \times 5^2$
$= 78.54\ m^2$

$Shaded\ area = 100 - 78.54 = 21.46m^2$

hegartymaths

Clip Numbers
534-547, 556, 592

Tip

If you don't have a calculator you can leave your answer in terms of π.

Formula

$Circle\ Area = \pi \times r^2$
$Circumference = \pi \times d$

Questions

1) Find to 1dp the area and circumference of a circle with:
a) Radius = 5cm b) Diameter = 12mm c) Radius = 9m
2) Find the area & perimeter of a semi-circle with diameter of 15cm.

ANSWERS: 1) a) A = 78.5cm², C = 31.4cm b) A = 113.1mm², C = 37.7mm
c) A = 254.5m², C = 56.5m 2) A = 88.4cm², P = 38.6cm

Music

Introduction to Music Technology/Musical Futures

An introduction to the key terms of Music Technology	
DAW	Digital Audio Workstation – a computer programme (for example Garageband, Soundlab, Cubase, Logic) that allows music to be created and recorded.
Audio	Sound that has been recorded
Sample	Taking a pre-recorded piece of audio and using it in another piece of music
Loop	A sample that is repeated
Remix	Reworking a song into a different style.
Key term - Effects	
A process by which a sound can be changed or manipulated	
Reverb	An effect that changes the sound of the space that is performed or recorded in
Delay	An effect that repeats the sound like an echo
EQ	An effect that changes the frequency (tone quality) of the sound
Instruments	
Synthesizer	An electronic instrument that generates sound
Drum Machine	An electronic drum kit
Key term - Texture	
Layered Texture	A texture often referred to in pop and dance music where the texture is developed by adding and removing parts one at a time.

Music Technology Vocabulary	
Multitrack	Multiple tracks of audio layered together
Pan	Moving sound either left or right of the speakers or headphones
Solo	Playing only one track at a time
Mute	Silences a track
Quantization	Moving notes to lock into an accurate rhythmic grid, allowing correction when notes are slightly out of time
Velocity	The volume of each individual note
Overdubbing	Where multiple tracks are recorded separately at different times.
Reverse	The audio is played backwards

Music Technology	
Practical Skills	Learning how to edit and arrange music using computer software.
Listening	Identification and application of vocabulary relating to music technology
	Listening to songs to identify main structural features
Performing	Using a DAW to arrange and record music from pop and dance tracks
Composing	Compose, record and edit simple melodic lines and chord patterns using technology
Contextual knowledge	Short research project based upon Electronic music styles and composers

Music

Introduction to Music Technology/Musical Futures

Key term – Chords/Harmony	
Revising and developing knowledge of chords and triads from previous unit (Y7/2)	
Major Chords	I, IV, V
Minor Chords	ii, iii, vi
Bass line	Recognising the importance of a bass line in supporting the harmony
Key term - Structure	
Learning about the structural sections of a typical song	
Introduction	The opening
Verse	A section where the music is the same, but the lyrics change each time it is heard
Bridge	A section linking two sections, often between the verse and chorus
Chorus	The most memorable section with a catcy hook that is repeated several times during the song
Middle 8	A contrasting section often after the second chorus
Outro	The closing section often fading out.
Instrumental	A section with no lyrics but an instrumental solo

Musical Futures	
Skills	Learning chord sequences and performance techniques on a range of instruments
Listening	Listening to original versions of songs performed to identify performance features
Performing	Performing songs in class using a variety of instruments and voices.

8.1 & 8.2 KS3 Core PE Knowledge Organiser: Immediate Effects of Exercise on the Body

Immediate Effects of Exercise on the Body		
	Immediate Effects of Training	**Body System**
1	**Increase** temperature of **synovial fluid** in joints	**The Skeletal System**
2	**Increased** flexibility	
3	**Rise** in muscle **temperature**	**The Muscular System**
4	**Increased** blood flow to muscles	
5	**Increased** flexibility	
6	Muscle **fatigue** and **soreness**, sometimes **cramp** (due to increased lactate production)	
7	**Lactate accumulation**, if oxygen not supplied quick enough due to working anaerobically	
8	**Increased** heart rate, cardiac output and stroke volume	**The Cardiovascular System**
9	**Blood diverted to muscles** from digestion and other systems (**vascular shunting**)	
10	**Increase** in **blood pressure**	
11	**Increased** rate of breathing	**The Respiratory System**
12	**Increased** rate of **gaseous exchange** (uptake of O_2 and production of CO_2)	
13	**Increased** depth of breathing (**tidal volume**)	
14	**Oxygen deficit** (if oxygen supply cannot meet demand)	

Key Vocabulary:

Skeletal, Muscular, Cardiovascular, Respiratory, Muscles, Lactic acid (lactate), Flexibility, Heart rate, Blood, Breathing, Gaseous exchange, Oxygen, Carbon Dioxide

Common Misconceptions:

- **Immediate (short term) effects** – the way the body responds as soon as it starts to exercise or responds to an increase of intensity. These changes help to meet the increased demands.
- **Adaptations (long term) effects** – regular exercise or training will lead to adaptations of the body systems increasing performance in that type of exercise or sport and beneficial to general health.

Example question:
Q) Which **one** of the following is a **short-term effect** of exercise on the **cardio-respiratory** system?
A – decrease in heart rate
B – increase in muscle strength
C – decrease in breathing rate
D – increase in blood pressure

Command Word: WHICH
Mainly used in multiple-choice questions where a selection from a set of options is required, for example 'Which **one** of the following….'

Hint - Process of elimination can be good for multiple choice questions where you are unsure of the correct answer. Start by working out which answers are definitely incorrect. Use the keywords in the question to help you.)

Command Word: EXPLAIN Requires a justification/exemplification of a point. The answer must contain some linked reasoning

Worked example:
Q) Explain why sports performers may reduce the intensity they are working at during a game. (4 marks)
They may experience muscle fatigue (1). This occurs when the muscle is not able to produce the energy it needs for the level of activity, due to an increase in acidity in the muscle cells (1). This slows energy production (1), meaning that the muscles have to reduce the intensity they are working at to allow the muscles time to recover (1).

Applied to different sports…
For ***a footballer*** this may mean… less pace, losing their opponent and less impact on the game.
A **1500m runner** may become…not able to run as fast in later laps and record a slower time
What about in your favourite sport?

Other positive effects of exercise…

Indirectly, exercise improves mood and sleep, and reduces stress and anxiety. Problems in these areas frequently cause or contribute to cognitive impairment.

No matter what your current weight, being active boosts high-density lipoprotein (HDL), or "good," cholesterol and decreases unhealthy triglycerides.

Winded by grocery shopping or household chores? Regular physical activity can improve your muscle strength and boost your endurance.

Over 70% of the body's immune cells are produced in the gut, meaning the majority of our immune system is housed in the gut.

From boosting cognitive function to improving outcomes for prostate cancer patients to treating chronic pain, being physically active can improve overall health.

Regular physical activity can keep the muscles around affected joints strong, decrease bone loss and may help control joint swelling and pain.

Exercise should definitely be the mainstay of the prevention and treatment of osteoporosis; often however, physicians don't have enough know-how for evidencebased prescription of exercise.

Resistance exercises strengthen muscles, which, in turn, provide better support and protection for the foot as a whole.

Random Fact: Exercise makes you feel happier due to increased serotonin levels.

Religious Studies Year 8: Prejudice and Discrimination

Key Word	Definition
Prejudice	Pre-judging someone before you know them.
Discrimination	Treating someone differently because of eg race
Racism	Prejudice / discrimination based on ethnicity.
Gentile	A term used for someone who is not Jewish.
Anti-Semitism	Treating Jewish people with hostility.
The Shoah	Hebrew name for the Nazi destruction of Jews.
Slave Trade	Usually means black Africans transported and sold as slaves by European nations / North America.
Civil Rights Movement	Fighting for justice for black Americans.
Sexism	Gender prejudice.
Burka / burqa	One-piece veil covering face and body worn by some Muslim women.
Caste system	Classes within traditional Indian (Hindu?) society.
Outcaste	Someone outside the caste system, sometimes called an untouchable.

Key Quotes

Judaism / Christianity: 'All humans created in God's image' (Genesis)

Christianity: Jesus taught the Parable of the Good Samaritan and 'Love your neighbour'

Christianity: "So there is no difference between Jews and Gentiles, between slaves and free men, between men and women; you are all one in union with Christ Jesus." (St Paul in Galatians 3)

Islam : The Qur'an "Husbands should take good care of their wives'

What is prejudice and why?

Prejudice can lead to discrimination, where a person / group are treated differently. Prejudice is thoughts, discrimination puts it into actions. We usually think of prejudice and discrimination as negative and divisive, but some talk of positive discrimination, where a group is treated more favourably to counteract past prejudices. Why are humans prejudiced? We don't like difference, it can threaten us, make us afraid, or we can be jealous of a group, thinking that we would like to have what they have.

Racism

Racism includes colour prejudice, judging differently because of skin colour, and prejudice based on different nationalities. In the past countries like Britain participated in the slave trade, assuming whites were the superior race. Some Christians misused Bible teachings to justify this. There is continuing acknowledgement of the evils of the slave trade and other forms of racism. Most modern Christians would want to point to Jesus as someone who welcomed everyone regardless of their race. In the 20th century Rev Dr Martin Luther King is an example of a Christian who fought against racism with some success. He was a leader in the Civil Rights Movement and his dream was for equality..

Sexism

Gender prejudice is judging someone differently based on their gender. It is often assumed that women are seen as less important within Islam, with non-Muslims pointing to women wearing burkas as an example of this. However Muslims stress men and women are equal but different. Women have a key role to play in the home, while men have a duty to look after the family financially, but a woman may choose to work – and many Muslim women have become successful in business. Malala Yousafzai is an example of a Muslim who has spoken out for gender equality. Some Muslim countries like Saudi Arabia do have rules which seem to discriminate against women, but other Muslims point out this is about culture, not religion.

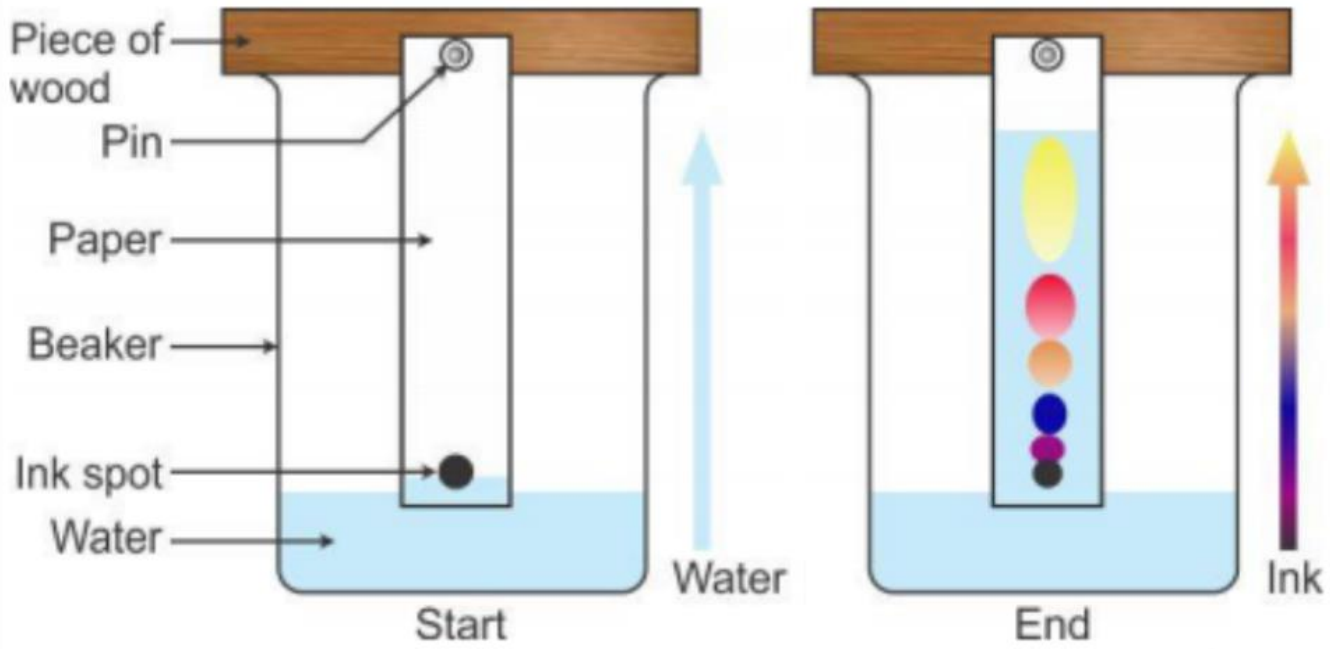
Anti-Semitism

Jewish people have too often been treated badly by others, most notably by Nazi Germany, with the Shoah culminating in the death of approximately 6 million Jews in death camps such as Auschwitz. In Europe Jews have been a minority, and the Christian majority often viewed them with suspicion. In medieval times Jews were persecuted in England, and still today there is anti-Semitism around.

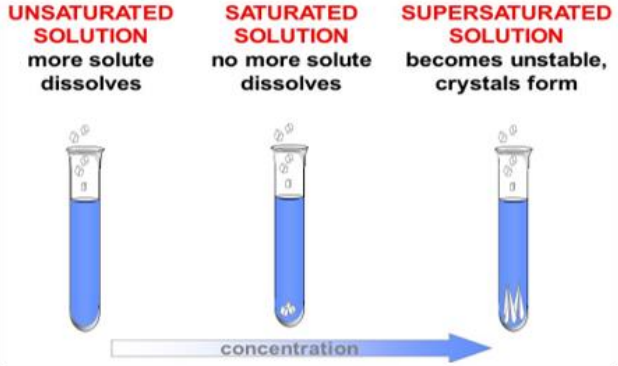
The Caste System

Traditionally Indian society was split into 4 castes, Brahmins at the top and Shudras (servants) at the bottom. Movement happened only after death with reincarnation, different castes had different duties and the outcastes were outsiders and treated badly at times. Most modern Hindus dislike the idea of caste, arguing it is tradition not religion and in India negative discrimination due to caste is illegal.

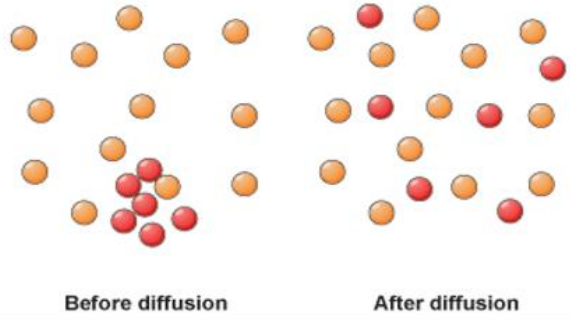
Chromatography – separates mixtures of **soluble** substances



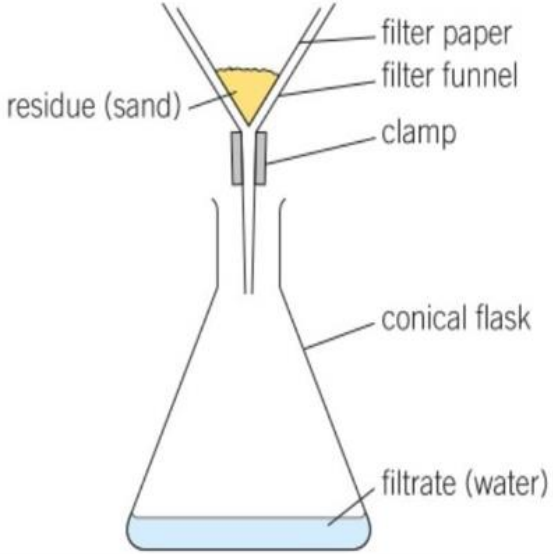
Saturation



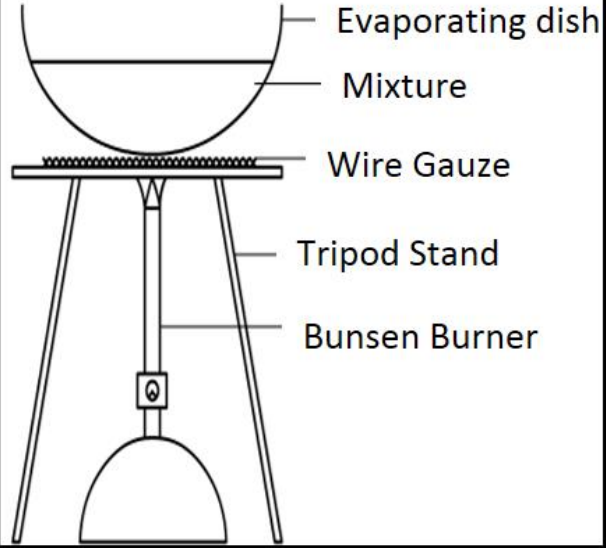
Model of diffusion of ink in water



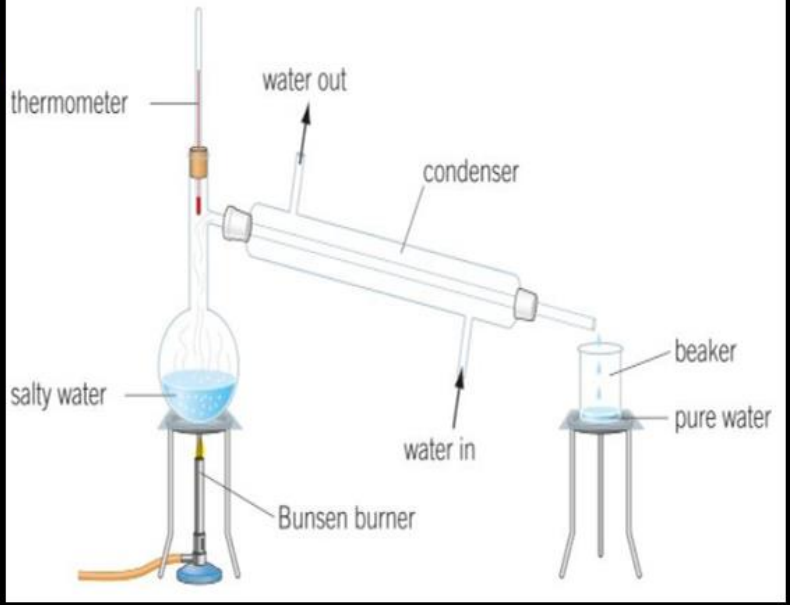
Filtration - separates **insoluble** substances from a liquid



Crystallisation - separates a **soluble** substance from a solution



Distillation - separates a **liquid** from a mixture



Year 8 Chemistry Knowledge Organiser - Solutions

Pressure

Gas pressure is the force exerted by gas particles per unit area of a surface.

Water Pressure

When we go below the surface of the water, it exerts a pressure on our bodies. The **deeper** we go, the **greater the pressure**.

Diffusion

The **movement** of liquid or gas **particles** from a place of **high concentration to** a place of **low concentration**.

Factors affecting diffusion

- temperature
- particle size
- state of diffusing substance

Solubility

How easily a substance will dissolve. The solubility of a substance is the **mass** that **dissolves** in a **100 g** of solvent

Factors affecting solubility

- temperature
- type of solute
- type of solvent

Effect of temperature on pressure in gases

When a gas is **heated** the **particles move faster**.
In a container the gas is **trapped** so the particles hit the wall of the container. As they move faster and faster they **hit the walls more often**. The **pressure** on the walls of the container therefore **increases**.

Brownian Motion

Particles in gases and liquids move about **randomly**. This is called **Brownian motion**. Particles are too small to see but we can use a **microscope** and smoke to watch them.

$$\text{Pressure (pascal, Pa)} = \frac{\text{Force (N)}}{\text{Area (m}^2\text{)}}$$

Conservation of Mass

In a chemical reaction, the **total mass** of **reactants** is **equal** to the **total mass** of the **products**.

Key word	Definition
solvent	a liquid that dissolves substances, *e.g.* water
solute	a substance that is dissolved by a solvent, *e.g.* sugar
solution	a solute dissolved in a solvent, *e.g.* sugar dissolved in water
soluble substance	a substance that will dissolve in solvent, *e.g.* salt (in water)
insoluble substance	a substance that will not dissolve in any amount of solvent, *e.g.* sand mixed with water
dissolve	when particles of a solute are separated and surrounded by a solvent

Tier 2 Vocabulary

Factor
Temperature
Concentration
Dissolving
Separating
Randomly
Soluble

Tier 3 Vocabulary

Particle
Pressure
Conservation of Mass
Reactant
Product
Solubility
Solvent
Solute
Solution
Diffusion
Brownian Motion
Filtration
Crystallisation
Distillation
Chromatography

Year 8 Knowledge Organiser Physics – Topic 1 - Energy

Types of material

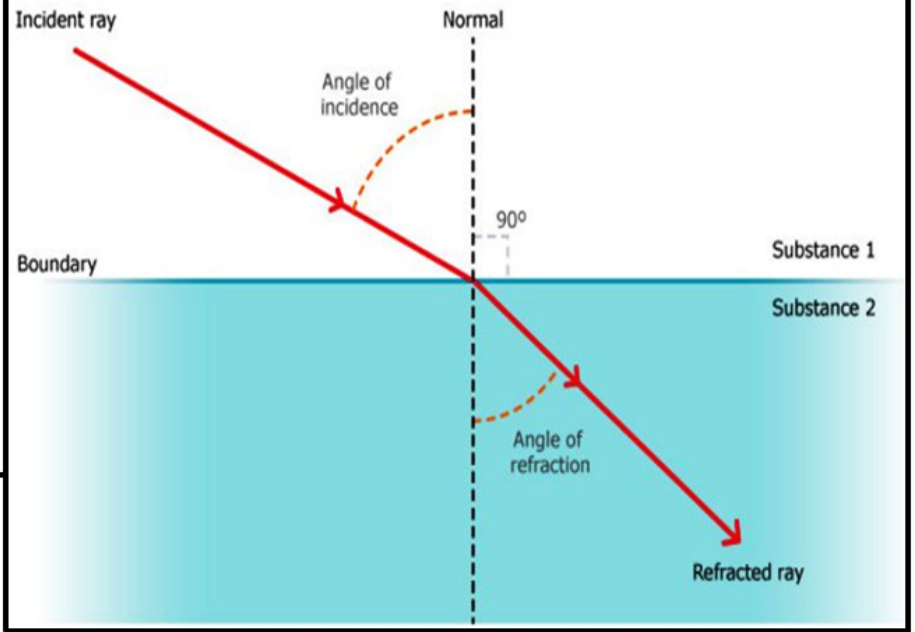
Transparent - allows light to pass straight through. Image is clear.

Opaque - blocks light. Light is not transmitted. No image.

Translucent - transmits some light, but image is blurry/fuzzy.

Refraction

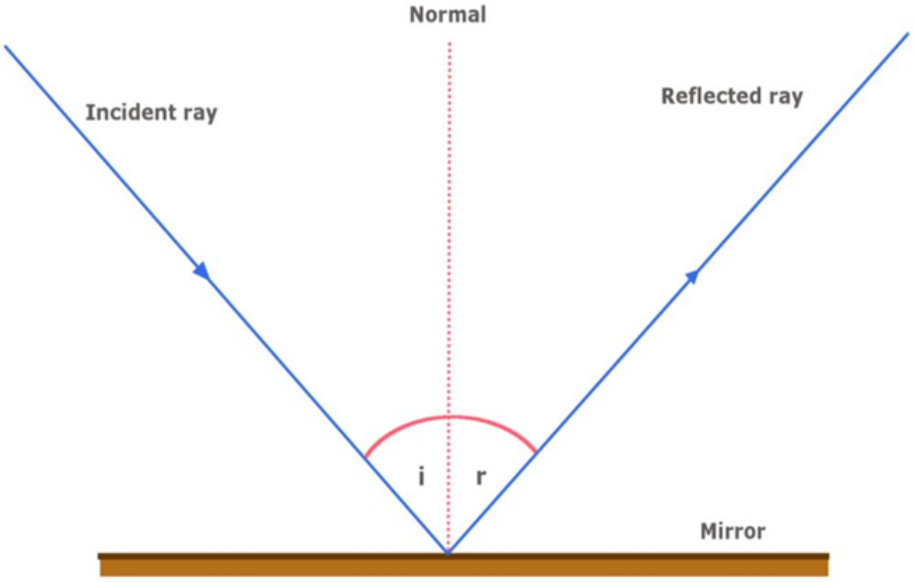
When light moves from one material to another it changes direction.



Reflection

Reflection is when light bounces off of a surface like a mirror.

The law of reflection states that the angle of incidence is equal to the angle of reflection.



Luminous/non-luminous

Luminous objects (like the Sun) emit (give off) their own light.

Non-luminous objects (like tables) can only be seen when they reflect light.

Tier 2 Vocabulary

Capacity
Charged
Chemical
Created
Destroyed
Efficiently
Elastic
Electricity
Energy
Fuel
Heating
Mechanical
Renewable
Reliable
Reflection
Transferred
Transparent

Tier 3 Vocabulary

Dispersion
Electrostatic
Field
Gravitation
Greenhouse effect
Kinetic
Luminous
Magnetic
Nuclear
Opaque
Radiation
Refraction
Translucent
Work

Energy
Energy is a model that describes an object's capacity to do work.

The symbol for energy is E and the unit is the joule (or J).

Work Done Work is done when an object is moved a distance d by a force F.

Work done (J) = Force (N) x Distance (m)

Conservation of Energy
Energy can neither be created nor destroyed, only transferred from one form to another.

Energy Pathways/transfers
Heating
Electrical work (current)
Mechanical work
Radiation

National grid
System of transformers and cables that transfer electricity efficiently.

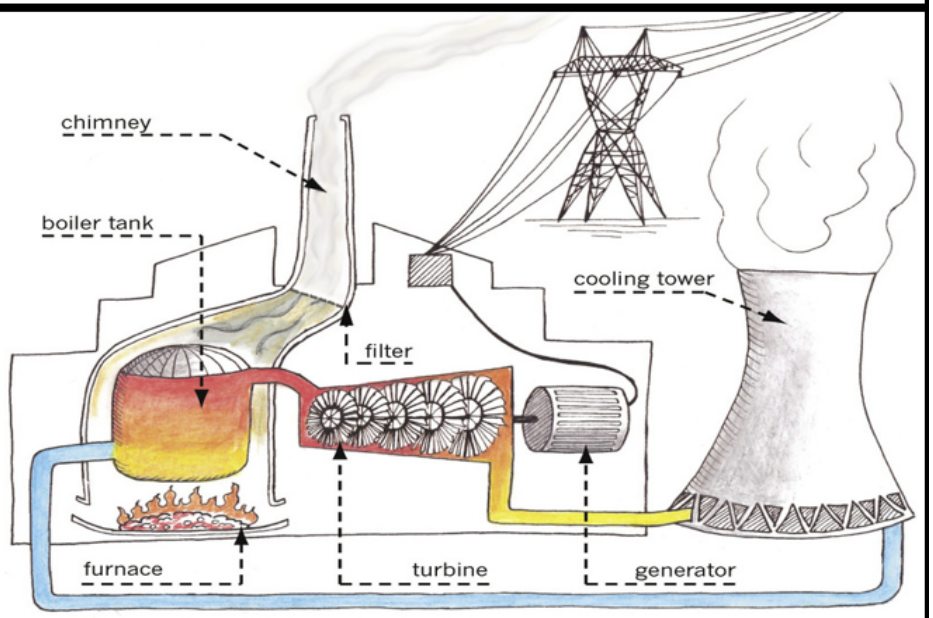
Energy Store	Example
Chemical	Cell, battery, food
Gravitational Potential	A raised object
Electrostatic	Nearby Charged particles
Magnetic	Iron nail in magnetic field
Kinetic	A moving object
Nuclear	Particles in the nucleus
Thermal	A heated object
Elastic Potential	A stretched or squashed object

Renewable energy resources
Renewable means the energy resource is replenished as quickly as it is used.
Wind and solar power are good examples of renewable resources.
Adv: No greenhouse gases are emitted.
Disadv: Unreliable (if no wind/sun).

Fossil fuels. Like coal, oil and gas. Created over millions of years by crushing organic material under sediment.

Adv: Reliable, available.
Disadv: Emits greenhouse gases, non-renewable.

Power stations Water is heated by a fuel source. Water turns into steam. High pressure steam turns turbine, which turns generator and produces electricity.



Spanish Y8 Autumn term Knowledge Organiser Unit 1: Las vacaciones - Holidays

Key spellings	
Learn these spellings, they will be really useful for this unit and you will be tested on them.	
1. fui	I went
2. hice	I did
3. fue	it was
4. el año pasado	last year
5. guay	cool

Key vocabulary and questions

¿Adónde fuiste?	Where did you go?
Fui a…	**I went to…**
Fuimos a…	**We went to…**
Alemania	Germany
Escocia	Scotland
España	Spain
Francia	France
Grecia	Greece
Gales	Wales
Inglaterra	England
Irlanda	Ireland
Italia	Italy
Portugal	Portugal
Can you use a dictionary to look up more countries?	

¿Cómo fuiste/viajaste?	How did you travel?
Fui/Fuimos en…	**I/we went by…**
avión	plane
tren	train
barco	boat
coche	car
autocar	coach
Can you find out what these other modes of transport are? *bicicleta, monopatín, autobús*	

¿Con quién fuiste?	Who did you go with?
Fui con…	**I went with…**
mi familia	my family
mi clase/mi insti	my class/school
mis amigos/as	my friends
mis padres	my parents
Can you remember other family members to add? e.g. mi hermano…	

¿Qué tiempo hizo?	What was the weather like?
hizo buen/mal tiempo	the weather was good
Hizo mal tiempo	The weather was bad
hizo calor/frío	it was hot/cold
hizo sol	it was sunny
hizo viento	it was windy
llovió	it rained
nevó	it snowed
Use these and the activities below to make some sentences using *cuando* (when).	

¿Qué hiciste?	What did you do?
bailé	I danced
compré una camiseta	I bought a T-shirt
descansé en la playa	I relaxed on the beach
mandé/escribí SMS	I sent/wrote texts
monté en bicicleta	I rode my bike
nadé en el mar	I swam in the sea
saqué fotos	I took photos
tomé el sol	I sunbathed
visité monumentos	I visited monuments
bebí una limonada	I drank a lemonade
vi un castillo	I saw a castle
conocí un chico/una chica	I met a boy/girl
comí paella	I ate paella
salí con mis amigos	I went out with friends

¿Cómo te fue?	How was it?
Fue…	**It was…**
divertido	fun/funny
fenomenal/estupendo	fantastic/brilliant
flipante/genial	awesome/great
guay	cool
regular	okay
un desastre	a disaster
horrible/horroroso	horrible/terrible
me gustó/no me gustó	I liked it/I didn't like it
me encantó	I loved it
Can you justify your opinión using *porque?* – e.g *fue horrible porque llovió*	

Key grammar – The preterite

Use the preterite to talk about past actions (I went, I ate, I swam).

1. Start with the infinitive (ending in -ar/-er/ir).
2. Remove the -ar/er/ir ending.
3. Add the appropriate ending using the table below.

Examples: Nadar = To swim. Nad- Nadé = I swam
Beber = To drink Beb- Bebió = he drank

Learn these endings so you can talk about anyone in the past tense.
Useful tip: The endings for -er and -ir verbs are the same in the preterite.

Bailar	To dance	Comer/Subir	To eat/To climb
bail**é**	I danced	com**í**/sub**í**	I ate/climbed
bail**aste**	you danced	com**iste**/ sub**iste**	you ate/climbed
bail**ó**	(s)he danced	com**ió**/ sub**ió**	s(he) ate/climbed
bail**amos**	we danced	com**imos**/ sub**imos**	we ate/climbed
bail**asteis**	you (pl) danced	com**isteis**/ sub**isteis**	you (pl) ate/climbed
bail**aron**	they danced	com**ieron**/ sub**ieron**	they ate/climbed

Spanish Y8 Autumn term Knowledge Organiser Unit 2: El tiempo libre – Free time

Key spellings	
Learn these spellings, they will be really useful for this unit and you will be tested on them.	
1. una película	a film
2. un programa	a TV programme
3. más	more
4. menos	less
5. prefiero	I prefer

Key vocabulary and questions

¿Qué haces con tu móvil?	What do you do with your mobile?
chateo con mis amigos	I chat with my friends
comparto vídeos	I share videos
descargo aplicaciones	I download apps
hablo por Skype	I speak on Skype
juego	I play
leo mis SMS	I read my texts
mando SMS	I send texts
veo películas	I watch films
saco fotos	I take photos
escucho música	I listen to music
Look back at how to use the preterite, can you put these into the past tense?	

¿Con qué frecuencia?	How often?
todos los días	every day
a menudo	often
dos o tres veces a la semana	2 or 3 times a week
a veces	sometimes
una vez a la semana	once a week
de vez en cuando	from time to time
nunca	never
Use these to make sentences with the activities above.	

¿Qué hiciste ayer?	What did you do yesterday?
fui al cine	I went to the cinema
hablé por Skype	I talked on Skype
hice gimnasia/kárate	I did gymnastics/karate
jugué en línea	I played online
vi una película	I saw a film
no hice los deberes	I didn't do homework

¿Qué tipo de música te gusta?	What type of music do you like?
Me gusta (mucho)…	**I (really) like…**
No me gusta (nada)…	**I (really) don't like…**
Me encanta…	**I love…**
Odio…	**I hate…**
el rap	rap
el RnB	RnB
la música clásica	classical music
la música electrónica	electronic music
la música pop	pop music
la música de…	……'s music
Escucho la música pop	I listen to pop music
Escucho de todo	I listen to everything
Remember to remove el/la before the type of music when you use it with Escucho: *Escucho ~~el~~ rap*	

¿Cuál es tu cantante/grupo favorito?	What type of music do you like?
Mi cantante favorito/a es…	My favourite singer is…
Mi grupo favorito es…	My favourite group is…
Mi canción favorita es…	My favourite song is…
porque es…	because it is…
porque me gusta/no me gusta…	because I like/don't like…
la letra	the lyrics
el ritmo	the rhythm
la melodía	the tune
Don't forget to use *porque* to justify your opinions.	

¿Qué tipo de programa prefieres?	What type of TV programme do you prefer?
Prefiero…	**I prefer**
Me gustan…	**I like…**
No me gustan…	**I don't like…**
las comedías	comedies
los programas de deportes	sports programmes
los concursos	gameshows
los documentales	documentaries
los realitys	reality shows
las series (policíacas)	(detective) series
las telenovelas	soaps
porque son…	because they are…
más/menos…que…	more/les…than…
divertidos/as	funny
informativos/as	informative
interesantes	interesting
aburridos/as	boring
emocionantes	exciting
Remember to make your adjectives agree – las telenovelas son divertidas.	

Key grammar – The present tense

The present tense works the same way as the preterite, but is used to talk about actions you do regularly or something you are doing right now. (I play, I am playing) Here is a reminder of the endings you learnt in Y7:

Bailar	Comer	Subir
bailo	como	subo
bailas	comes	subes
baila	come	sube
bailamos	comemos	subimos
bailáis	coméis	subís
bailan	comen	suben

D&T - Classification and Properties of Materials:

Classification on Woods	
Hardwood	
Oak, beech, mahogany	•Deciduous trees • Have broad leaves • Slow growing so expensive • Grow nuts or seeds
Softwood	
Pine, cedar and spruce	• Coniferous trees • Have needles • Fast growing so cheaper • Grow berries or fruit
Manufactured boards	
MDF, plywood, chip board	•Made in a factory • Binds wood with a resin • Comes in large sheets not planks

Classification on Metal	
Ferrous	
Wrought iron, pig iron, mild steel, stainless steels	•Contain iron • Magnetic (most) • Rust
Non-Ferrous	
Copper, tin, silver, gold, aluminium, bronze, nickel	•Do NOT contain iron • Are NOT magnetic • Do NOT rust
Alloys	
Solder, Pewter, Brass	•Mixture of more than one element • Combining 2 metal improves properties

Classification on Plastic	
Thermosetting	
Epoxy resin, polyester resin, urea formaldehyde	•Can only be heated and shaped once into a product. • Not recyclable
Thermoplastic	
Acrylic, PVC, polythene, nylon, polypropylene	-Can be heated and shaped repeatedly into different products. - Can be recycled

Specific Language and Terms

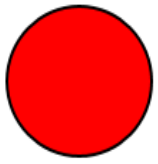
Durable	To be long lasting	**Thermal**	To be able to conduct or insulate head
Malleable	To be bent and shaped	**Electrical**	To be able to conduct or insulate electricity
Strength	To withstand forces and breaking	**Ductile**	To be drawn into a wire (stretched)
Toughness	To not break or snap	**Density**	A measure of mass per unit volume
Hardness	To withstand scratching or denting	**Absorbency**	The ability to take in moisture

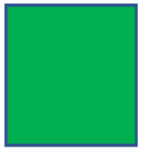
D&T - Health and safety and Hand tools:

Specific Language and Terms	
PPE	Personal protective equipment.
Hazard	A danger or a risk
BSI	British Standards Institute
Kitemark	Assures consumes that the product is safe and has been tested by the BSI
CE mark	Assures consumers that the product meets European safety standards

PPE Equipment		
Apron	To protect your clothing from soiling or from being caught in machinery/tools.	
Goggles	Protect your eyes from dust particles or any other flying debris from machining.	
Ear defenders	To protect your ears when using loud machinery.	
Gauntlets	Protect your hands- particularly from heat when brazing or carrying out heat treatments.	
Dust mask	To protect your breathing when working with dusty or hazardous materials.	

Tools and equipment		
Try Square	Drawing a line at 90 degrees OR checking a corner is square (90 degrees)	
Tennon Saw	Sawing straight lines in wood or plastic (not metal	
Coping saw	Sawing curve lines in wood or plastic (not metal)	
Flat File	Shaping or smoothing a piece of wood, metal or plastic.	
Vice	Hold work still and secure when drilling.	

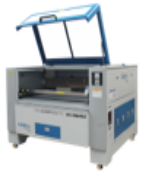




Red: Prohibition Do Not - Stop
Blue: Mandatory Must obey
Yellow; Warning Risk of danger
Green: Safety Means go

Walk safely and calmly around the classroom/ workshop.	Keep your work area and floor area clear – keep your belongings hung up	Follow the teacher's instructions for using equipment carefully.	Make sure that you are wearing the correct PPE equipment for tasks.	Return all equipment to the correct areas of the classroom/ workshop.	Report all spillages & clean up properly after yourself.

D&T - Machinery and CAD CAM:

Machinery					
Pillar Drill	A free standing machine that uses a motor to rotate a drill bit. This drill bit can then be used to cut holes in materials.		**Vacuum former**	A machine used to form sheet plastic into permanent objects using a mould.	
Sander	Is used for shaping and finishing wood. It consists of an electric motor that turns a continuous loop of sandpaper.		**Hegner saw**	A small electrical saw with a thin blade used to cut a variety if thin sheet materials	
Laser Cutter	A CAM machine that engraves and cuts through material using a high powered optical laser		**Vinyl Cutter**	A CAM machine that has a sharp blade to cut out designs on tin self-adhesive plastic	

Specific Language and Terms

Machinery	Mechanical or electrical device designed to be used to perform a function.
CAD	Computer Aided Design
CAM	Computer Aided Manufacture
Software	The programs used by a computer

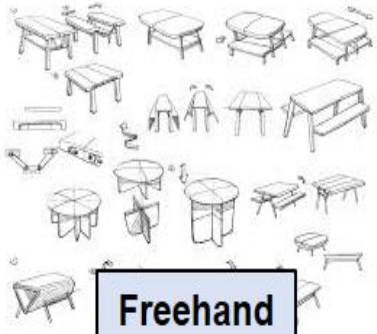
CAD- Computer Aided Design

Advantages	Disadvantages
Designs can be created, saved and edited easily, saving time	CAD software is complex to learn
Designs or part of designs can be easily copied or repeated	Software can be very expensive
Designs can be worked on by remote teams simultaneously	Compatibility issues with software
CAD is very accurate	Work can be lost if not backed up
Designs can be rendered to look-realistic to gather public opinion in a range of finishes.	

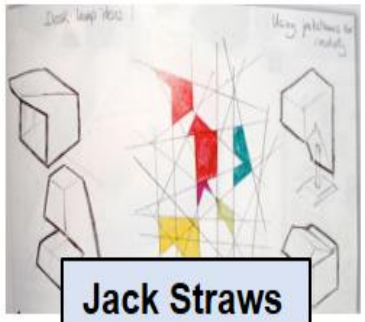
CAM – Computer Aided Manufacture

Advantages	Disadvantages
Quick – speed of production can be increased	Training is required to operate CAM
Consistency and accuracy – All parts manufactured are all the same	High initial outlay cost for machines
Less mistakes- there is no human error unless pre programmed	Loss of jobs for people
Cost saving – workforce can be reduced	Production stoppage – if the machines break down, the production would stop

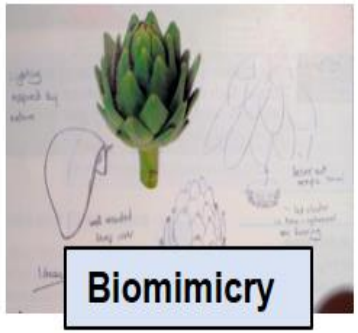
D&T - Creating ideas and Oblique drawing:



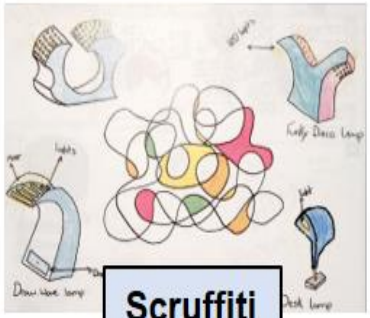
Freehand



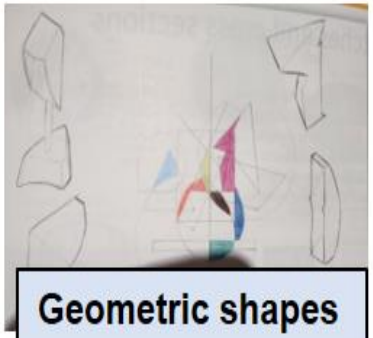
Jack Straws



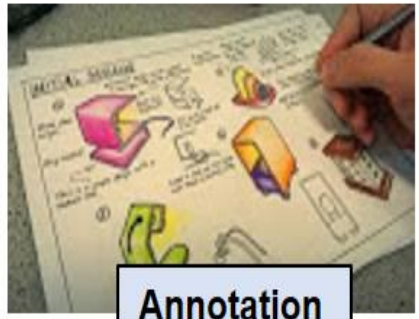
Biomimicry



Scruffiti



Geometric shapes

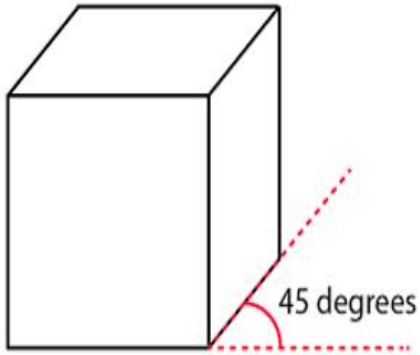


Annotation

Specific Language and Terms

Oblique drawing	A projective drawing on an object in 3D where the front face is drawn flat and all other lines are projected at 45 degrees
Freehand sketching	Quick sketching without using a ruler. This is to be used to get your first thoughts for ideas down on paper
Creative ideas	Thinking outside the box. Different ways to get creative are to use techniques such as Jack straws, Geometric shapes, Scruffiti and Biomimicry.
Annotation	The notes you write around your ideas explaining what they show and how it could be made.

Oblique Projection

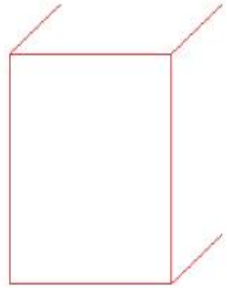


Opposite is a cube that has been drawn in Oblique projection.

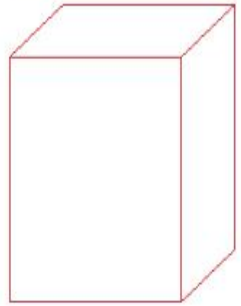
To draw it in oblique projection follow the three main steps below:

1. Draw the front or side view of the object.

2. Project 45 degrees lines from each corner



3. Draw the back two lines of the cube in position. Go round the outline of the cube with a fine black pen or dark, sharp pencil.



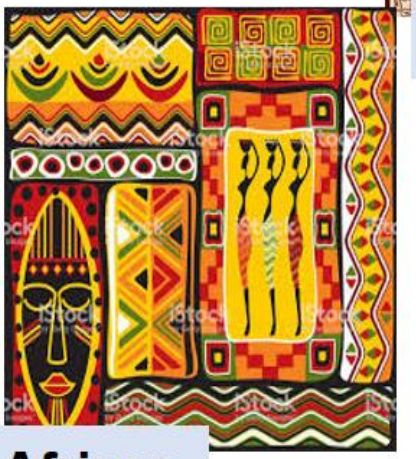
D&T - Art/Design Cultures and ACCESSFM:

British

Aboriginal

Ancient Chinese

Mexican



African

Access FM

We use ACCESS FM to help write a **specification** and to help **analyse** and describe an already **existing product**

- **A** is for **Aesthetics**
- **C** is for **Cost**
- **C** is for **Customer**
- **E** is for **Environment**
- **S** is for **Size**
- **S** is for **Safety**
- **F** is for **Function**
- **M** is for **Material**

Specific Language and Terms	
Culture	Culture is a pattern of behaviour shared by a society, or group of people. Many different things make up a society's culture. These things include food, language, clothing, tools, music, arts, customs, beliefs, and religion.
Product Analysis	A detailed examination of a product
Specification	Stating precise requirements of a design

D&T - Mechanical systems and Movement and forces:

Specific Language and Terms	
Mechanical system	A mechanical system is a set of physical components that convert an input motion and force into a desired output motion and force. Mechanical systems have at least three elements: input, process and output.
Mechanism	Is a device that transforms input forces and movement into a desired set of output forces and movement.
Machine	A system of mechanisms working together
Motion	A type of movement
Force	Is a push or pull in a certain direction that causes a change in speed, direction or shape.

Mechanisms

Mechanism	Definition	Example
Gears	Gears are toothed wheels (cogs) that lock together and turn one another. When one gear is turned the other turns as well.	
Pulleys	Pulleys are like gears, but the wheels do not lock together. The wheels are instead joined together by a drive belt. Pulleys can be used to affect the speed, direction or force of a movement.	
Levers	a rigid bar resting on a pivot, used to move a heavy or firmly fixed load with one end when pressure is applied to the other	

Forces

Force	Definition	Example
Compression	A pushing or squashing force	Mattress springs
Tension	A pulling or stretching force	Tug of war rope
Torsion	A twisting force	Turning a screw
Shear	A cutting force caused by two forces in opposite directions very close together	Scissors
Bending	When two forces act in opposite directions	Beam bridge

Types of Movement

Motion	Definition	Example
Linear	Moves in one direction	Bike, car, train
Oscillating	Swings back and forth	Pendulum, swing
Reciprocal	Repetitive back and forth linear motion	Sewing machine needle
Rotating	Moves in a circular motion	Car wheels, pedals

Timbers

Softwood
Fast growing tree **(Coniferous)**
Evergreen tree, **green foliage** all year round. Evergreens **do not shed needles** as much as **deciduous** plants that completely lose their **leaves** during **Autumn**.

Hardwood
Slow growing tree **(deciduous)**
Trees, which shed their leaves each **autumn.**

Felling
Is the process of **cutting** down a tree
An **Axe**, **saw** or **chainsaw** may be used to **fell** a **tree.**

Pine – Softwood
Used for: door frames, skirting boards, furniture etc.
Characteristics:
Lightweight
Easy to work with
Can split and be resinous near knots
Bears needles
Has a vibrant open grain pattern
Cheaper alternative to hardwoods

Spruce - Softwood
Used for: construction, furniture and musical instruments etc.
Characteristics:
Easy to work with
High stiffness to weight ratio
Creamy white
A delicate grain

Oak – Hardwood
Used for: flooring, furniture, railway sleepers, veneers etc.
Characteristics:
Tough
Hard
Durable
High quality finish
Light brown
A tight grain to pine where the grain is open and vibrant

Mahogany – Hardwood
Used for: high end furniture, joinery and veneers etc.
Characteristics:
Durable
Finishes well
Reddish brown, very dark deep tones

Grain
The uniqueness of a piece of wood is defined by many **characteristic** such as **colour**, hardness and **grain**.

Manufactured Boards
Manufactured boards are usually **sheets** of process **natural timber recycled waste (woodchips)** products or veneers mixed with **adhesives or resins, combined and compressed.**

MDF – Medium Density Fibreboard – No grain, fine woodchips
Plywood – veneers
Chipboard – woodchips

Knots
Knots come from where the **branches** have been **removed.**

Timbers – Finishes

Timber Finishes

Aesthetics relate to the way a material looks, and each example of **timber** has a **different pattern** on the **grain** and **texture**. The way a **timber looks** can be **altered** through **several methods**:

Timber Protection

Protects the wood from warping
Stops moisture
Rot & decay
Preservation/Extends life
Durability
Protects from insects, rodents and fungus
Colour /Aesthetics/Appearance

Clean Paint Brushes

You can simply use washing-up liquid for emulsion paints.
White spirits for oil-based or gloss paints.

Paint

- Applied with a brush or roller.
- Needs a primer or undercoat on bare wood.
- Paint gives colour finish and adds a layer of protection against weathering.
- The more sheen, the more the paint will reflect light and seem to shine.

Varnish

- **Varnish** is a **clear transparent** and enhances the **natural grain** of the timber.
- Varnish can be colour tinted with oil stain.
- Varnish comes in **gloss**, satin or matte finish.
- Protects wood from knocks and spills.

Wax

- A thin layer is applied with a **soft cloth** or very fine steel wool and pushed into the wood. Easy to apply and not messy to use.
- This enhances the natural colour and gives a deep shine.

Tanalisation

Tanalised timber has been pressure impregnated with wood preservative.
Used for outdoor applications to extend its life – in particular for fencing, decking etc.
This gives the added advantage that the timber does not need **further painting** or **staining**.

Stain

Permanently **stains** wood.
The colour can be affected by the base wood.
Brings out the **natural grain.**
It does not protect!

Veneers & Laminating

A sure way to recognise wood laminate is when the grain does NOT follow through your piece.
A plastic material veneer used in kitchens, school desks etc.
Wood veneer is wood strips glued (compressed)together, both on particle board or plywood.

Timbers-Carpentry Joints

What are Carpentry Joints?
Carpentry joinery involves cutting, shaping and fastening wood and other materials together to produce a finished product. Preparation of joints is one of the important operations in wood work.

Comb Joints
The cross-section of the joint resembles the interlocking of fingers between two hands, hence the name "finger joint".

Butt Joints

Two pieces of timber that are butted together at the ends, this also means that the joint isn't very strong in fact it is the weakest joint that is used in woodwork.

It is also the easiest to make.

Basic/simple.

Not strong due to little adhesive area.

Pins and nails often used.

Dowel Joints

Similar to Butt Joint but with wooden dowels.

Add strength.

Glued for extra strength.

Jigs are used to hold a piece of material during cutting, drilling or bending. Improve accuracy and efficiency.

Comb Joints

A finger joint, also known as a comb joint, is a woodworking joint made by cutting a set of complementary, interlocking profiles in two pieces of wood, which are then glued.

More attractive and decorative. Strong.

Mitre Joints

A joint made by cutting each of two parts to be joined, across the main surface, usually at a 45° angle, to form a corner, usually a 90° angle.

More attractive and decorative.

Used for door frames, skirting, photo frames etc.

Mortise and Tenon

A mortise and tenon joint connects two pieces of wood.

Woodworkers around the world have used it for thousands of years to join pieces of wood, mainly when the adjoining pieces connect at right angles.

The joint is both simple and strong.

Timbers-Tools & Machinery

Bench Hook
A bench hook is a workbench accessory used in woodworking to hold workpieces in place.

Try Square
A ruled metal straightedge set at right angles to a straight piece, used for measuring and marking square work.

Carpentry Vice
Wood often needs to be **clamped** when completing tasks such as sawing, drilling or carpentry.

Coping Saw
Narrow blade stretched across a D-shaped frame, used for cutting **curves** in wood, acrylic – used to cut through thin material.

Tenon Saw
Cutting **shallow**, **straight lines** into small pieces of wood.

Mitre Saw
Is a specialized tool that lets you make **cuts** at a variety of **angles**.

Pillar Drill
This drill bit can be used to cut holes of different diameters into different types of material such as wood, acrylic or metal.

Portable Drill
Hand held tool.

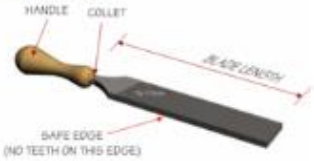
Scroll Saw

Scroll saws are often used to **cut intricate curves** and joints, a task you can complete **quickly** and with great **accuracy**.

Disc Sander
Used to smooth materials such as woods and plastics.

Glass Paper
Sheets of paper coated with an **abrasive** surface ranging from **coarse** to **fine**.

Engineer File
Hand files are a type of hand tool used to **smooth**, **deburr** and **shape** a range of materials including metals and **wood** whilst **removing** any unwanted material after **cutting** or **sharpening**.



Chisel
Carving or **cutting** a hard material such as wood, stone, or metal by hand, struck with a **mallet**, or mechanical power.

Health and Safety Rules in the D&T Workshop!

No Jewellery to be worn in workshops!

No running in the workshop! No bags or stools out – trip hazard!

Fully covered footwear to protect your feet!

Only 1 person allowed to operate any machinery/tools!

Always wear eye protection when using machinery!

Know where all the emergency stops buttons are for all machinery!

Don't touch any equipment/machinery that you have not been trained to use!

Wear an apron to protect clothing.

No food or drink!

Tie long hair up to avoid injury!

Remove:
Tie
Blazer
Jumper!

Watch teacher demonstration and follow all instructions!

Pay Attention to Signage!

Mandatory signs – Obey/Must do!

Safe Condition signs

Warning signs: chemicals, take precaution or care!

Hazardous signs – alerts/ warns you to stop! Restricted area!

Notes Page

Notes Page