

Y8 Revision Skills

**Effort + Time =
Success**

Your Targets:

1)

2)

Name: _____

Form: _____

Contents

1. Why Revise?
2. Top Tips for Effective Revision
3. Effective Revision Methods - Prepare, Retrieve and Apply
4. Knowledge Overviews

1. Why Revise?

Revision means to 'go over again'.

'Being familiar with something is not the same as knowing it'

We can often falsely assume we really know something. If we haven't actually engaged with something, and being made to think hard about this, it's likely we aren't able to recall this.

Look at the multiple-choice question below.

1. Which logo is the correct colour combination for Google?

- A) 
- B) 
- C) 
- D) 

Whilst Google is a logo we have all seen multiple times each week, or even daily, we haven't necessarily studied the correct colour pattern. Therefore, we aren't able to recall the correct answer.

Revision is the bridge in achieving this. Going over content again and again means that the information is far more likely to stick in our long-term memory.

However, in order for revision to be purposeful, we have to 'think'.

The following strategies listed below are **NOT effective**, and often give the illusion that we feel we are revising, when actually it serves very little impact:

- Reading
- Highlighting
- Re-writing notes out in the same format

2. Top Tips for Effective Revision

- Revision needs to be carried out in a quiet space with no distractions (put your phone away, turn the TV and your earphones off).
- Revision needs to be short. Carry out short 20-minute sessions with a small break in between.
- Revision **MUST** be spaced out. Cramming a few nights before your exam is proven to not be effective.

3. Effective Revision Methods

Effective Revision is a cycle. This cycle needs to be repeated continuously for core knowledge to ensure it gets stuck in our long-term memory.

- 1) Prepare
- 2) Retrieve
- 3) Apply

Part 1) Prepare

First, we need to break down the important information to our own words.

Making revision material is an important part of revising. When you make your own resource, you are taking large amounts of content from a revision guide or textbook and reducing it down.

Part 2) Retrieve

This step is about checking your knowledge. Here you need to work out what is sticking in your brain and what you are struggling to remember so that you can go back over it.

Part 3) Apply

Attempt your questions **FROM MEMORY**, do not copy from your notes - it is important for you to find out what you can remember!

1) Prepare

Mind Maps

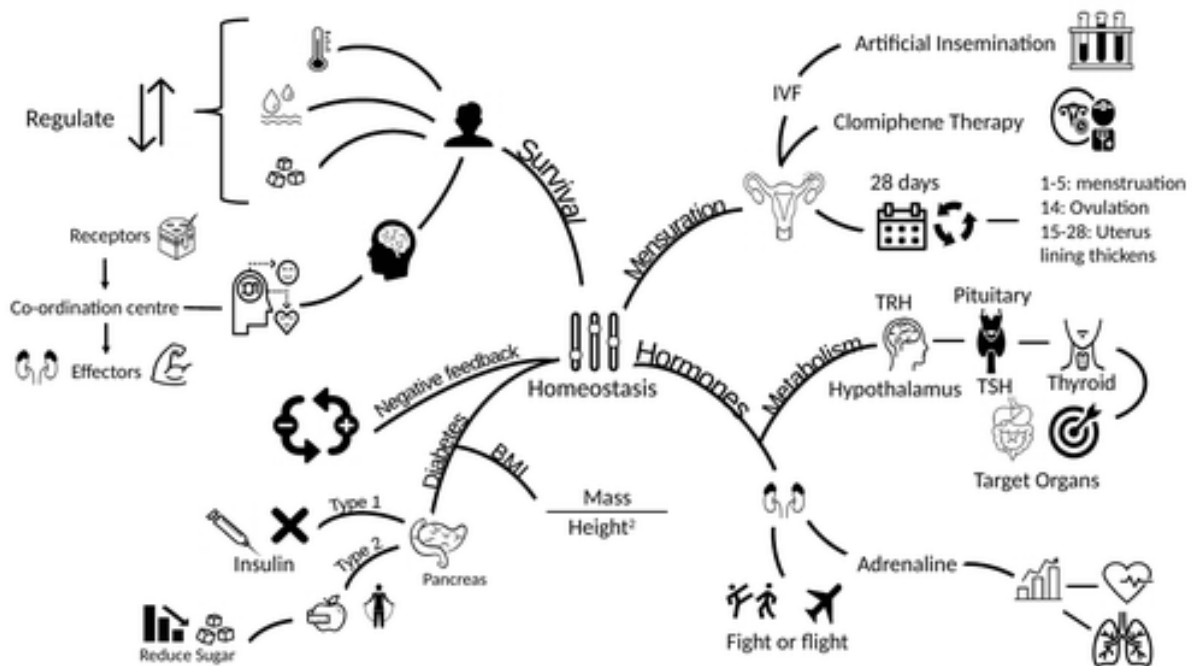
Creating Mind Maps

Step one: Read through the material you want to review and highlight (or underline) the important points.

Step two: Identify the sub-topics in what you have read, and then add these to your mind map.

Step three: Add the important points to the correct sub-topic (make sure it is short and to the point)

Step four: Add colour or images to make important points stand out.



Flashcards

Front

What happened during the Battle of Hastings?

Back

Harold Godwinson's army made a shield wall on top of Senlac Hill.

The Norman army tried to break the shield wall with archers, knights and foot soldiers.

The Normans pretended to retreat and the English army left the safety of the hill.

The Normans won and Harold Godwinson was killed.

Creating Flashcards

Step 1) Take one page of A4, and cut this into four squares.

Step 2) On the front cover, write the topic title and key questions - 'How can you support your child with their revision?'

Step 3) On the reverse side write 4-5 short facts which answer the question or are linked to the topic.

2) Retrieve

Look, Cover, Write, Check

Step 1) Read through the content in your knowledge organiser.

Step 2) Cover up the information and see how much you can **write from memory**.

Step 3) Go back and **check**. Did you miss anything? If so, add in your corrections in a different colour pen.

Step 4) Repeat again until you can write everything out from memory, with no corrections needed.

- 1.) Most volcanoes and Earthquakes occur along plate boundaries.
- 2.) ^{At a} Convergent Plate Boundary, plates move towards each other, ^{and one oceanic plate or two continental plates}
- 3.) ^{This can} can occur with one continental plate or two oceanic plates.
- 4.) At a divergent plate ^{boundaries} boundary, plates move ^{apart} away from each other, ^{mostly} mostly under oceans.
- 5.) At conservative plate ^{boundaries} boundary the plates slide past each other.
- 6.) Volcanoes can be formed away ^{plate boundaries} from each other, called hotspots.

Using Flashcards

Step 1: Organise your flashcards in a pile with the questions facing up.

Step 2: Ask yourself the questions on each flashcard, then turn it over to see if you got it right. Create a pile for the ones you answered correctly and a pile for ones you didn't.

Step 3: Repeat step 2 for the cards you got wrong until all of the cards are in the correct pile.

Step 4: Shuffle the cards ready for the next time you use them (at least three times).

Other ways of using flashcards

1. Get someone else to test you using the questions and answers.
2. Use the flashcards with the answer facing up. Can you work out what the question was?

3) Apply

- Re-do questions from their exercise books or homework
- Example questions in revision guides and workbooks

Year 8		
Subject	Term 1	Resources
Art	<ul style="list-style-type: none"> • Zentangle pattern • Oil Pastel Lifts • Artist 'Faye Halliday' 	<ul style="list-style-type: none"> • https://www.youtube.com/watch?v=NOlxG3yjZQ8 • https://www.youtube.com/watch?v=n-j-sx7oSvI • https://www.youtube.com/watch?v=U2tbT6zg6hE
Computing	<ul style="list-style-type: none"> • Computer Networks • Modelling Data • Software Skills • Scratch • Impact of Technology • Networks 	<ul style="list-style-type: none"> • Knowledge organiser • https://www.bbc.co.uk/bitesize/subjects/zvc9q6f • https://www.bbc.co.uk/bitesize/subjects/z8mtsbk
Design Technology	<ul style="list-style-type: none"> • Brief • Specification • Mind Maps • Research • Environmental considerations • Product Analysis • Drawing types • Modelling 	<ul style="list-style-type: none"> • Knowledge organiser • Yardleys VLE • BBC Bitesize
English	<ul style="list-style-type: none"> • Power • Poetry Anthology • Grammar for writing non-fiction texts 	<ul style="list-style-type: none"> • Red exercise book • Yellow exercise book • Poetry anthology • BBC bitesize (grammar)

French	<ul style="list-style-type: none"> • Sports and free time - naming the sports and free time activities and using the correct verb with it • Present tense - verb conjugations, infinitive verbs, and present tense time expressions • Near future tense - formation of near future, near future time expressions • Weather - saying what you do depending on the weather 	<ul style="list-style-type: none"> • Exercise book • Purple Grammar book • K.Os in exercise books • DIP tasks and improvement tasks • K.O revision packs • www.linguascope.com • Username: yardleys • Password: europe2
Geography	<ul style="list-style-type: none"> • Coastal landscapes - processes, landforms and OS map skills. • Megacities - Urbanisation and migration • Atmospheric hazards - Typhoon Haiyan • China - a country study of development 	<ul style="list-style-type: none"> • Green exercise book • Knowledge Organizers on VLE • BBC bitesize

History	<ul style="list-style-type: none"> • The Reformation • Tudors and the Church of England • The English Civil War • The Mughal Empire • The British in India • The American Revolution 	<ul style="list-style-type: none"> • Exercise book • Booklets • Knowledge organisers (VLE)
Maths	<ul style="list-style-type: none"> • Prime Factorisation • Using Prime Factors • Probability • Calculating with Mixed Numbers • Rounding to Significant Figures • Working with decimals • Ration calculations • Speed • Calculating with percentages 	<ul style="list-style-type: none"> • Corbett Maths
Music	<p>Controversy in Music</p> <ul style="list-style-type: none"> • Learn to play with two hands together • Learn how to play simple triadic chords • Learn how to play with swing 	<ul style="list-style-type: none"> • VLE Lesson PowerPoints

	<ul style="list-style-type: none"> • Learn how to play in time with a partner • Use musical elements of increasing complexity to analyse and describe music. 	
RE	<ul style="list-style-type: none"> • Messianic Prophecy in Judaism • Jesus as the Christian messiah • Parables of Jesus • Jesus' Disciples • Jesus' final days - Last supper and trial • Judas as a betrayer of Jesus • Early Christian martyrs • Holy Trinity • God in the Old Testament vs the New Testament • Hinduism, Sikhism and Judaism (Y7) 	<ul style="list-style-type: none"> • Knowledge Organiser • Exercise book
Science	<ul style="list-style-type: none"> • Reproduction • Light and Sound • Environmental Chemistry • + year 7 synoptic topics 	<ul style="list-style-type: none"> • Knowledge organiser • https://www.bbc.co.uk/bitesize/subjects/zng4d2p

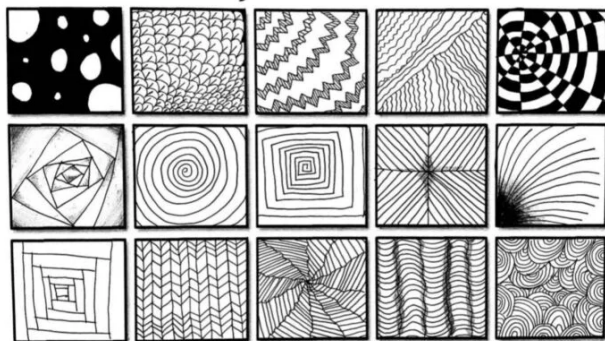
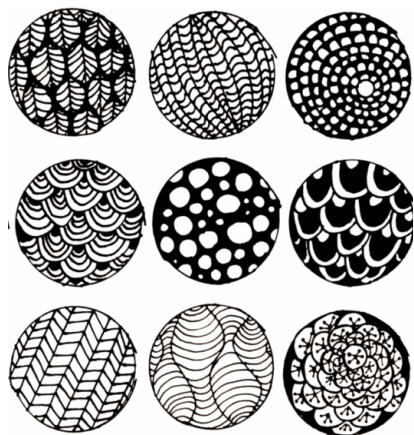
Spanish	<ul style="list-style-type: none"> • Sports and free time - naming the sports and free time activities and using the correct verb with it • Present tense - verb conjugations, infinitive verbs, and present tense time expressions • Near future tense - formation of near future, near future time expressions • Weather - saying what you do depending on the weather 	<ul style="list-style-type: none"> • Exercise book • Purple Grammar book • K.Os in exercise books • DIP tasks and improvement tasks • K.O revision packs • www.linguascope.com • Username: yardleys • Password: europe2
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Year 8: Zentangle Pattern

The zentangle Method is an easy-to-learn, relaxing, and fun way to create beautiful images by drawing structured patterns. We call these patterns, tangles. You create tangles with combinations of dots, lines, simple curves, curves and orbs. These patterns are drawn on small pieces of paper called "tiles." We call them tiles because you can assemble them into mosaics.



Zentangle art is non-representational and unplanned so you can focus on each stroke and not worry about the result. There is no up or down to zentangle art. In fact, you can most easily create zentangle art by rotating your tile as you tangle -- always keeping your hand in a relaxed position. You don't need to know what a tangle is going to look like to draw it.



Key vocabulary

Structured: construct or arrange

Combinations: joining or merging

Assemble: fit together

Perimeters: a continuous line

Sequence: a particular order

Contrast: The degree of difference between colour, tones, values, and shapes. In drawing and painting for example, contrast can be created when artists add shadows to a tonal study or colours that clash.

Dimension: 2D/3D

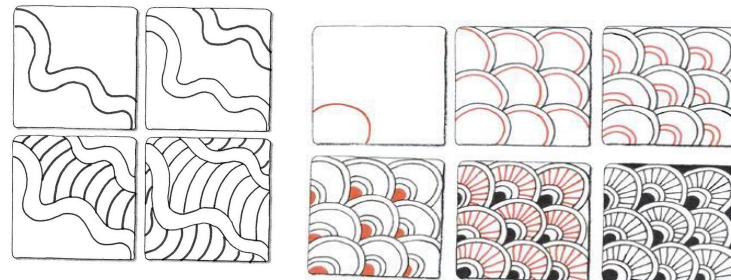
How to draw using Zentangle:

1. Draw a border. Use a pencil to draw a light square border around the edges of your paper. The pattern you make will be drawn inside the perimeters of the border. Do not use a ruler or any sort of straight edge to draw your border. Just sketch it lightly near the edges of the paper. Do not press down too hard with the pencil as you freehand the border. It is not meant to be visible once you finish creating your zentangle in pen.

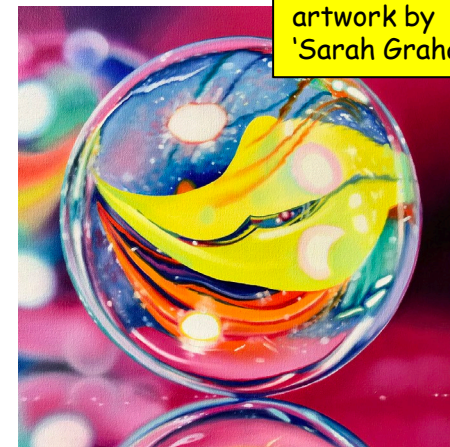
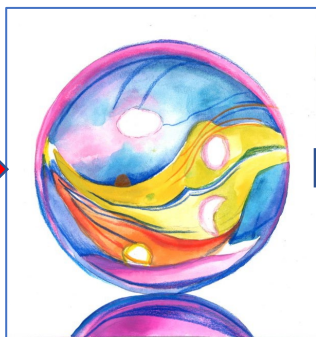
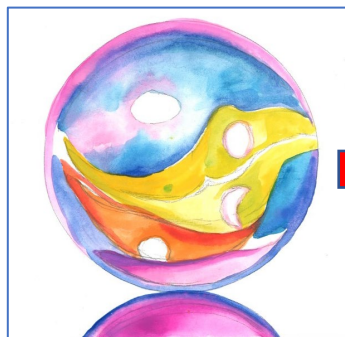
2. Inside the border, draw a light pencil line or lines to make what we call a "string." The string separates your tile into sections, in which you draw your tangles. A string can be any shape. It may be a curvy line that touches the edge of the border now and then, or series of straight lines that go from one side of the border to the next.

3. A tangle is a sequence of simple strokes that make up a pattern. Draw your tangles inside the pencil strings and borders.

Add shades of grey with a graphite pencil to bring contrast and dimension to your tile. The black and white two-dimensional tangles transform through shading and appear three-dimensional.



Year 8 - Applying Watercolour Paint, Colour Pencil & White Pen to create 'realism'.



Reference artwork by 'Sarah Graham'

1 Apply the base colours lightly using watercolour. Dilute the paint to create lighter tones. Paint around the highlights leaving them white.

2. Darken some areas of watercolour to create tone. Mix more paint with the paintbrush to achieve a darker tone.

3. Allow the paint to dry.

4. Apply the finer details using sharp colour pencils (the bold lines, shadowed areas and outlines)

5. Look at where the highlights and reflective speckles are within the marble in the reference image.

6. Apply the highlights using a white gel/acrylic pen.

'Blending' to create a gradient



Key vocabulary

Outline: a line or set of lines indicating the shape of an object in a sketch or diagram.

Diluted: weakened by the addition of water

Highlights: the lightest part of a drawing or painting

Acrylic: type of paint that is mixed with a water-soluble resin

Blending: applying two or more colours together so that the paint transitions from one colour to another

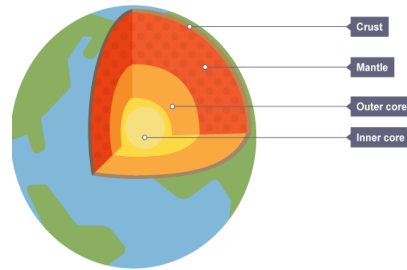
Gradient: colours that gradually and smoothly fade into each other

The Formal Elements

LINE	the path left by a moving point, e.g. a pencil or a brush dipped in paint. It can take many forms, e.g. horizontal, diagonal or curved.
TONE	means the lightness or darkness of something. This could be a <u>shade</u> or how <u>dark</u> or <u>light</u> a colour appears
TEXTURE	the surface quality of something, the way something feels or looks like it feels. There are two types : <u>Actual</u> and <u>Visual</u>
SHAPE	an area enclosed by a <u>line</u> . It could be just an outline or it could be <u>shaded</u> in.
PATTERN	a design that is created by repeating <u>lines</u> , <u>shapes</u> , <u>tones</u> or <u>colours</u> . can be <u>manmade</u> , like a <u>design</u> on fabric, or <u>natural</u> , such as the markings on animal fur.
COLOUR	There are 2 types including Primary and Secondary . By mixing any two <u>Primary</u> together we get a <u>Secondary</u>

The Earth's structure and plate tectonics

The Earth is made up of different layers:

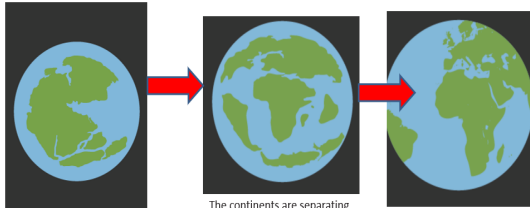


1. The **inner core** is in the centre and is the hottest part of the Earth. It is solid and made up of iron and nickel with temperatures of up to 5,500°C.
2. The **outer core** is the layer surrounding the inner core. It is a liquid layer, also made up of iron and nickel.
3. The **mantle** is the thickest section of the Earth at approximately 2,900 km. The mantle is made up of semi-molten rock called magma.

Wegener's theory

Wegener suggested that mountains formed when the edge of a drifting continent collided with another, causing it to crumple and fold. For example, the Himalayas formed when India came into contact with Asia.

It took more than 50 years for Wegener's theory to be accepted. One of the reasons was that it was **difficult to work out how whole continents could move**. It was not until the 1960s that evidence of convection currents within the mantle was discovered to support the theory fully.



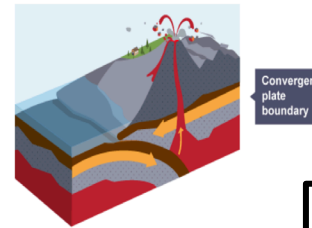
Earth around 200 million years ago – all the continents are merged into one supercontinent - Pangaea

Plate boundaries

There are three different types of plate boundary, depending on how the plates are moving relative to one another.

Destructive boundaries (also known as convergent boundaries)

A boundary where the **plates are moving towards each other**. Often, the **denser of the two plates is pushed under** the other plate where it **moves into the mantle and melts**. This creates molten rock (magma) which can then be pushed up through the plates, causing earthquakes and volcanoes. The molten rock then cools to form new igneous rock.



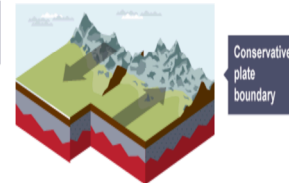
Constructive boundaries (also known as divergent boundaries)

A boundary where the **plates are moving away** from each other. **Magma from beneath the plates is released from the gap** as it rises up, **cools and forms new igneous rock**. If this happens under **pressure**, it is known as a volcanic eruption. An example of this boundary type is the Mid-Atlantic ridge.



Conservative boundaries

A boundary where the plates slide past one another without moving towards or away from each other. If the plates move a significant distance very suddenly, this causes an earthquake. There are no volcanoes at this type of boundary as melting of the rock does not occur. An example of this type of boundary is the San Andreas fault, California.



Rock formation and the Rock Cycle

Sedimentary Rock Formation **Weathering** is where rocks are broken into smaller pieces of rock called sediments. This can happen by physical (wind or water), chemical (acid rain) or biological weathering (plants and animals).

Erosion and transport- the sediments move away from their rock, this is called erosion. They are then transported further away by water, wind and gravity.

Deposition-Eventually the sediments stop moving and settle in one place. Layers of different sediments may settle on top of each other, these are called strata. Dead plants and animals may settle in with the sediment.

Compaction and cementation-Over many years the deposited sediments join together to make new rocks. This happens by compaction, where the weight of the sediment layers above squashed together the sediments below. This can also happen by cementation..

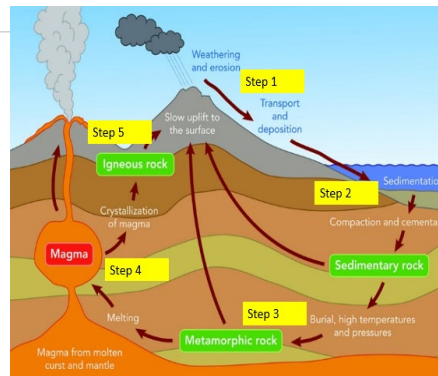
Igneous rocks are type of rock made from cooled magma. Lava is molten (liquid) rock above the ground and when it cools and solidifies, it becomes and igneous rock

Metamorphic rocks are made when heat and pressure changes the arrangement of particles in older rocks. E.g. Limestone (a sedimentary rock) is changed into marble due to heat and pressure underground, rearranging its particles so that it looks different and has different properties.

Weathering of Rocks

Weathering is the **breakdown** of land into smaller pieces.

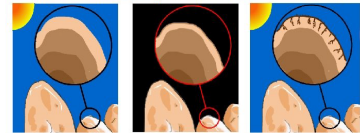
- **Erosion** is the **movement** of the pieces removed by **weathering**. This **movement** is caused by natural elements such as **wind, ice and water**.
- The two processes usually **work together**.
- For example, a limestone cliff may be **weathered**. This means that rock in the cliff becomes **broken** into **smaller pieces**.
- **Erosion** happens when these pieces of rock **fall away** down the cliff.



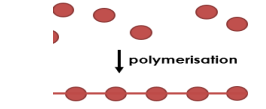
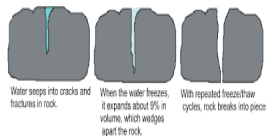
Mining Disadvantages: Abandoned mines are dangerous places for curious people to explore. Mining can put dangerous pollution into the environment. Mines can destroy habitats that animals rely on to survive. Mining results in contamination of the soil and groundwater from the chemicals in the mining zones.
Advantages of mining: Mining provides jobs. New devices and ideas make mining safer. They make mining more efficient

Recycling Advantages: Reduces pollution and waste sent to landfill and it stops natural resources from running out.
Disadvantages: Trucks that transport recycled materials burn fossil fuels. Recycling process uses lots of energy.

Onion-skin weathering is a type of physical weathering.



1. During the day the sun heats up the surface of the rock causing the rock to **expand**.
2. During the night the rock cools down and **contracts**.
3. As the rock keeps expanding and contracting, pieces of surface rock begin to **flake and fall off**.



Materials-Ceramics are strong because they have **very strong bonds** between atoms.

These bonds are so strong it **takes a lot of energy to break them apart**, which is why they have a very high melting point.

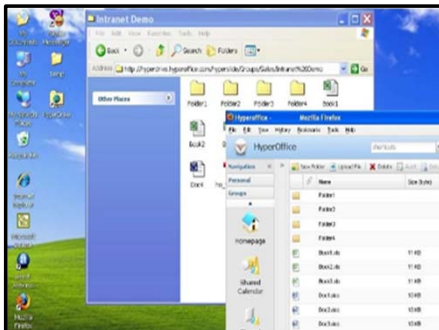
Polymers are long molecules made of repeating smaller molecules joined together.

Polymerisation is a chemical reaction that joins together smaller molecules to make a polymer.

Year 8 Knowledge Organisers Part 1

Software Skills

Software Skills	
Key Vocabulary	Definition
Microsoft Excel	A spreadsheet software which features calculation, graphing tools and pivot tables.
Microsoft Outlook	An e-mail-based software used over a server.
Microsoft Publisher	A professional layout software used to design professional documents.
Microsoft Word	A word processor, it is used to “process”— format, manipulate, save, print, share — a text-based document.
Microsoft PowerPoint	A presentation software – you can create, edit, view, present, or share presentations.
E-Mail	Electronic Mail is a message sent over a server.
Carbon Copy	The process of copying in another person when sending an email.
Blind Carbon Copy	Sending an email to an anonymous recipient, people who are not directly involved with the email but they need to see it for information purposes.
Subject	What an e-mail is about.
Attachment	A file sent with an email e.g., a document.
SPAM	Junk mail which is there to mislead the user.
Phishing	An email sent to a user which is trying to get access to their personal data.



Impact of Technology

Impact of Technology	
Key Vocabulary	Definition
E-Safety (Electronic Safety)	This relates the sensible steps you need to take whilst online in order to avoid any problems. For example, what to do and not do in internet chat-rooms. What to do and not do when shopping online and so on.
Cyberbullying	When a person uses social media to bully another user.
Social Media	An online platform to share content with friends and family.
Privacy	The right to keep information private.
Online profile	This is how other people see you online.
Hacking	The act of intruding into a system by unauthorised means. This is also in breach of the UK Computer Misuse Act.
Malicious damage	In computer terms, this is when a person intentionally sets out to corrupt or delete electronic files, data or software program.

Using Email

Allows you to attach files to be sent with the email

Who is the email being sent to (The Recipient)

What is the email about?

Greeting i.e. Dear, To, Good morning

Main message

Closing i.e. Kind regards, yours sincerely, Thank you

Press to send an email

The text editor is where you get to write and edit the email.

Networks

Networks
What is the internet? – A group of Inter-connected Networks
Protocol - A set of rules that networks follow
Wireless technologies examples: <ul style="list-style-type: none"> Bluetooth WiFi Mobile data/mobile signal (3G/4G/5g)
Bandwidth – The amount of data that can be carried at a time, measured in Megabits per second (Mbps)
Internet Protocols: <p>TCP -Transmission Control Protocol: Splits the messages sent across the internet into smaller pieces called ‘packets’ and assembles the packets in the correct order at the receiver end</p> <p>IP– Internet Protocol: A protocol to route the packets. Each device on the internet has an IP address that uniquely identifies it from all other devices</p>
IP Addresses – Identifies each device on the network, also is on each data packet to show where it comes from
Internet services: <ul style="list-style-type: none"> World Wide Web Email Online gaming Instant messaging Voice over IP (VoIP) – audio calls Internet of Things (IoT) Media streaming (e.g. watching Netflix online)
Data Packets- Data transmitted over the Internet is broken down into smaller chunks or packets to be sent
Search engine - is a website that allows you to look up information on the World Wide

Year 8 Knowledge Organisers Part 2

Modelling Data

Parts of a spreadsheet

Menu and toolbar

Cell reference

Row

Column

Text appears on the left of the cell

Numbers appear on the right of the cell

Formulas

Basic symbols + - * /

A1 add B1

A2 take away B2

A3 multiplied by B3

A4 divided by B4

	A	B	C
1	10	5	15
2	100	25	75
3	40	6	240
4	60	5	12

Formulas:

- =A1+B1
- =A2-B2
- =A3*B3
- =A4/B4

Functions

Function	Description
=SUM(A1:A7)	This would add up the cells from A1 to A7
=AVERAGE(A1:A7)	This would work out the average of cells A1 to A7
=MIN(A1:A7)	This would find the lowest value from cells A1 to A7
=MAX(A1:A7)	This would find the highest value from cells A1 to A7

All calculations start with an =

The : symbol means "to"

Put cell references in brackets

SUM means "add together"

Enter the starting and ending cells for the range.

=SUM(A1:A7)

Formatting

Font

Font-size

Wrap Text

General

Bold, italics and underline

Text colour

Text rotation

Text alignment

Border

Fill tool

Number format i.e. Currency

Scratch

- **Sequence:**
 - Running instructions in order.
- **Selection:**
 - Making choices.
- **Iteration:**
 - Doing the same thing more than once.

Condition-Controlled

Condition-controlled will execute the commands until the condition you set is no longer being met.

Example: "Write out lines until 4pm"

Count-Controlled

Count-controlled iteration will execute the commands a set number of times.

Example: "Write out lines 100 times"

Variables

A variable is used to store data for use in your program.

Variables can be used to store lots of different types of data such as names, numbers and scores.

score 0

Loops

Loops are used as a way of repeating instructions. Also known as iteration.

Repeats a certain number of times.

Repeats an instruction forever.

IF Statements

IF statements can be used to select different scripts of a program depending on a condition. Also known as selection.

if then

Computer Systems

Computer Systems	
Key Vocabulary	Definition
Computer	An electromechanical device which receives input, processes it and produces and output
Program	A sequence of instructions written in a programming language that a computer can execute or interpret
Software	A set of programs used to operate computers and perform specific tasks
Hardware	The physical components of a computer
Processor	The part of the computer that interprets and carries out instructions
Main memory	The part of the computer that stores data that is currently being used by the processor
Secondary storage	The part of the computer that stores data long term that is not currently being used by the processor
Operating system	Specialised software that communicates with computer hardware to allow other programs to run
Logical operator	The name of a logic circuit (AND, OR, NOT)
Logical expression	A text based method of describing a logic circuit
Logic gate	A physical device which performs a logical operation
Artificial intelligence (AI)	Any machine that performs tasks that typically require intelligence in humans (suggestion - there's no agreed definition)
Machine learning	A type of AI in which a range of techniques are used to attempt to imitate the way that humans learn

D&T - Brief, Specification & Mind Map

Design Brief - is a **short** statement of the task you are undertaking. It is always given at the start of a project.

For example - to design and make a low-cost, portable speaker for the teenage market.

Once **research** has been carried out and you understand what your target market wants/needs. A **Specification** is created. It is a detailed list of features that the product will have.

When writing a **specification**:

- The points should be specific, manageable and testable
- You justify the decisions you have made

After the specification, the concept designs should be created.

Mind Map

A mind map is a graphical way to represent and organise ideas
A good mind map should make good use of space and be well laid out, organised, attractive and easy to follow. It should also contain relevant information, but not be too wordy.

D&T - Target Market - ACCESS FM

Target market - is the person/group of people you are designing for. You may want to consider some things about your market such as; their age, their gender, their hobbies, their likes/dislikes, their budget and their wants/needs of the product

ACCESS FM

Aesthetics - the way the product should look, shape and colour

Cost - how much the product should cost

Customer - who the product should be aimed at

Ergonomics - how the product is designed with the user in mind.

Environment - where it will be used/ the impact on the environment.

Size - the dimensions the product should be

Safety - how the product will be made safe for the user and to ensure safety of the product itself

Function - how the product should work

Material- what the product should be made from

Research - There are two ways to collect research.

Primary Research - This is where you collect the information yourself e.g. Interviews and questionnaires.

Secondary Research - This is where you use information from other sources e.g. Newspapers & websites

Environmental Impact -

To ensure that the environment is considered during design and manufacture some of the things we can do are:

- Use materials that can be recycled
- Use sustainable materials
- Use biodegradable materials
- Consider how far a product travels during its life
- Carry out a lifecycle analysis of the product

Product Analysis - By analysing existing products, we can learn many things. We can analyse a product by using ACCESSFM. We can do this by thinking about the aesthetics, value for money, functionality, target market, etc.

Drawing Styles - We do several different styles of drawing in DT, below are some types and why we do them.

Isometric - This is good to show realism and scale

Sketching - This is a quick & inexpensive way to get your ideas across

Orthographic - This is good for showing measurements and hidden details

Presentation - This is an impressive, neat, high-quality drawing of what your product looks like.

The rules of isometric drawing are:

1. All vertical lines must remain vertical
2. All horizontal lines are drawn at 30 degrees
3. All parallel lines must remain parallel

Modelling - Creating prototypes is part of the design process. We create models to test features of the product, to get feedback, and to see if any improvements can be made but the real things is manufactured.

Conceptual Framework: Power

- (noun): the ability to direct or influence the behaviour of others or course of events.
- Power can be something that is earned and given, e.g., if you have a job with a leadership responsibility you might have power to make decisions and direct others. However, power is also something that, throughout history, can be connected to someone's identity, e.g., historically women have had less power than men.

Key Unit Vocabulary:

hierarchy (noun): a system which organises people according to their power and authority

discrimination (noun): unjust treatment of different categories of people, people who are victims of discrimination have less power

authority (noun): the power or right to give orders and make decisions

inferior (adj.): lower rank, status or quality

superior (adj.): higher rank, status or quality

exploit (verb): to take advantage of. Someone who is powerless might be exploited by someone in power, alternatively someone with authority could exploit their position of influence (for good or bad).

usurp (verb): to take a position of power or importance illegally or by force.

Sentence Construction

For a sentence to be complete, it must: a **subject**, **object** and **verb**.

Ellen dominated the boardroom.

The sentence above is a **main clause**. As there is only one clause, it is a **single clause sentence**.

Because the subject is performing the verb's action, this sentence is written in the **active voice**.

I could also write my sentence in the **passive voice** which is where the subject is acted upon by the verb. I will need to include the verb's past participle:

The boardroom was dominated by Ellen.

You can extend your sentence and create a mult clause sentence by:

1. joining two main clauses together, with a **co-ordinating conjunction**.



2. adding a subordinate clause; this does not make sense alone and will be introduced with a **subordinating conjunction**.



Adding More Detail

You could add more detail to your sentences by including:

1. **noun phrases**: these are phrases that contain both a **noun** and an **adjective**.
They can be pre-modified: *huge wooden posts*
Or post-modified: *posts which were huge and wooden*
2. **relative clauses**: a type of subordinate clause that, describes or modifies nouns. They begin with a **relative pronoun** such as: who, whose, when, where, which, that, whom, e.g., Recycling (**which can be done at home**) helps reduce the need for landfill. You can use **brackets**, **dashes** or **commas** to demarcate your relative clause.

Listing

Syndetic listing means listing connected with a conjunction. This creates an accumulation and things and makes it seem like there is a lot to do or overcome.

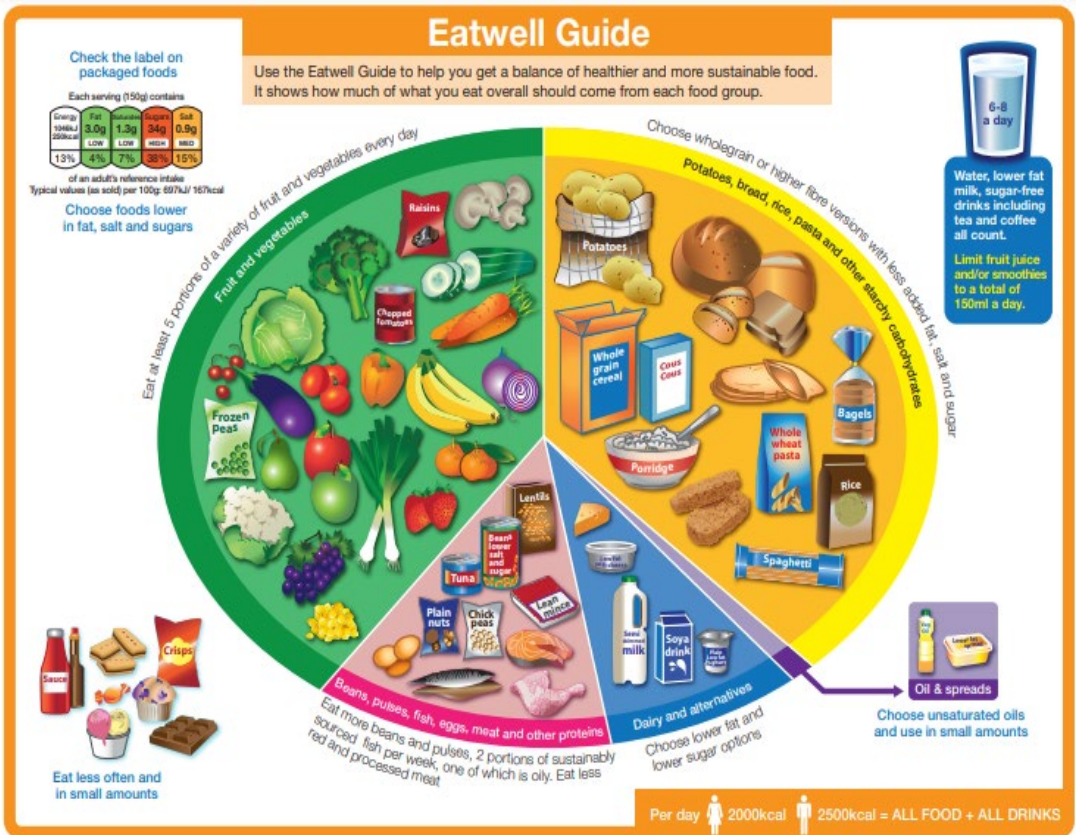
Asyndetic listing means listing without conjunctions but still using commas or semi-colons. This speeds up the pace of writing and can mimic a worried tone.

Punctuation

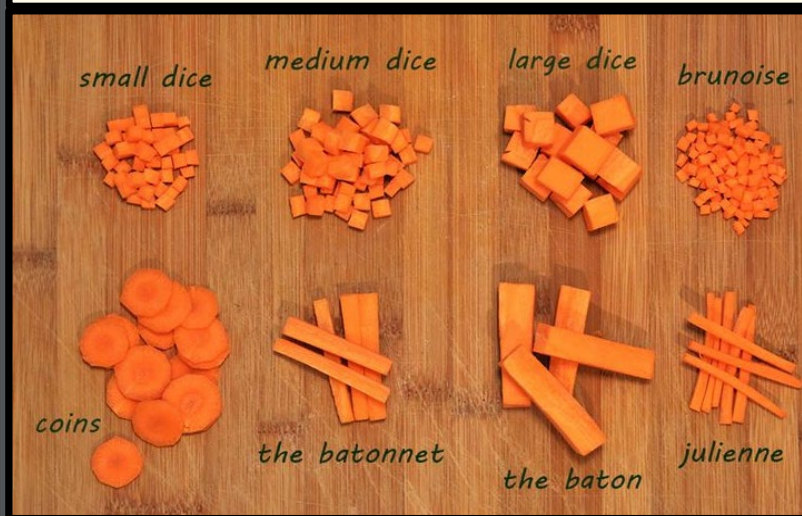
- **Semi-colons (;)** separate two main clauses and can be used instead of a co-ordinating conjunction.
- **Colon (:)** are used to introduce related information, at the beginning of a list or in place of 'because'.
- **Dash (-)** can be used in place of a colon when you want to emphasise the conclusion of your sentence.

Year 8 Food and Nutrition Knowledge Organiser

Shows the 5 main food groups needed for good health. Can you identify 4 foods from each section?

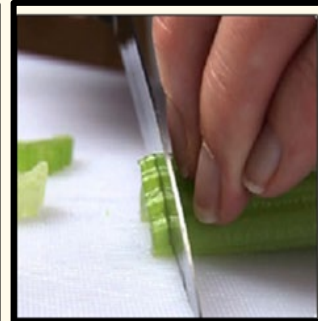


Learn the vegetable cuts below - what dishes could the different cuts go in to?



Bridge Hold

Claw Hold



Prevent Cross Contamination

Use the correct colour coded chopping boards and knives

-  **Raw meat foods only**
-  **Raw fish foods only**
-  **Raw unwashed Vegetables, fruit and salad only**
-  **Cooked meat foods only**
-  **Washed Vegetables, fruit and salad only**
-  **Bakery and dairy products only**



Year 8 Food and Nutrition Knowledge Organiser

Cooking methods



Chopping



Mixing



Rubbing in method



Shaping



Baking



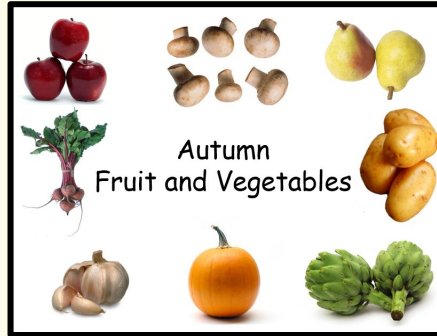
Whisking



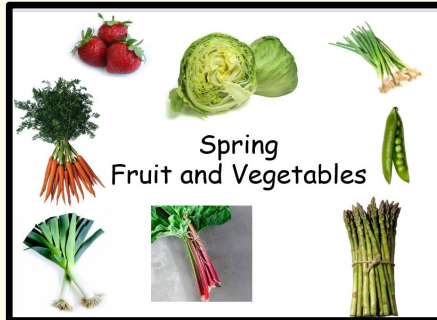
Boiling



Marinate



**Autumn
Fruit and Vegetables**



**Spring
Fruit and Vegetables**

Seasonal food

is the time of year when food is at its best, in terms of flavour or harvest.

Many foods are available all year, as they are imported from other countries.

When local seasonal food is available it tends to be fresher and cheaper - there has been less travel/storage from farm to fork.



**Summer
Fruit and Vegetables**



**Winter
Fruit and Vegetables**



SIGHT



SMELL



TASTE



HEARING



TOUCH

Year 8 French Knowledge Organiser

Subordinating Conjunctions

Subordinating conjunctions are words that link a main clause (makes sense of its own) to a subordinate clause (gives extra information that doesn't make sense on its own).

because = **parce que**
 if = **si**
 when = **quand**
 while = **lorsque**
 as/since = **puisque / comme**

seeing that = **vu que**
 given that = **étant donné que**

➤ Frequency

normally = **normalement**
 generally = **généralement**
 usually = **d'habitude**
 sometimes = **parfois / quelquefois**
 from time to time = **de temps en temps**
 most of the time = **la plupart du temps**
 always = **toujours**
 often = **souvent**
 rarely = **rarement**
 on weekdays = **en semaine**
 at the week-end = **le week-end**
 in the morning = **le matin**
 in the afternoon = **l'après-midi**
 in the evening = **le soir**
 every day = **tous les jours**
 once a week = **une fois par semaine**
 twice a week = **deux fois par semaine**

Fronted adverbials

Adverbial phrases tell you how, when, where or how often something happens.

➤ Time

now = **maintenant**
 today = **aujourd'hui**
 immediately = **tout de suite**
 after = **après**
 before = **avant**
 soon = **bientôt**
 firstly = **d'abord**
 later = **plus tard**
 then = **puis/ensuite**
 finally = **pour finir**
 this morning = **ce matin**
 this afternoon = **cet après-midi**
 this evening = **ce soir**

Coordinating

Conjunctions (FANBOYS)

for = **car** or = **ou**
 and = **et** yet = **or**
 nor = **ni** so = **donc**
 but = **mais**

Place

here = **ici**
 there = **là / là-bas**
 far from = **loin de**
 close to = **près de**

Year 8 French Knowledge Organiser

jouer	to play
Je joue	I play
Tu joues	You (sg) play
Il, elle joue	He, she plays

aller	to go
Je vais	I go
Tu vas	You (sg) go
Il, elle va	He, she goes

faire	to do
Je fais	I do
Tu fais	You (sg) do
Il, elle fait	He, she does

en été	<i>in summer</i>
en hiver	<i>in winter</i>
en automne	<i>in autumn</i>
au printemps	<i>in spring</i>

Les passe-temps

Pendant mon temps libre...

je fais du vélo.
 je fais la cuisine.
 je fais les magasins.
 j'envoie des textos.
 je regarde des DVD.
 je lis un livre.
 je fais mes devoirs.
 je surfe sur l'Internet.
 je vais au cinéma.
 je sors avec mes copains.
 je joue sur l'ordinateur.

Pastimes

During my free time...

*I ride my bike
 I do the cooking
 I go shopping
 I send texts
 I watch DVDs
 I read a book
 I do my homework
 I surf the Internet
 I go to the cinema
 I go out with my friends
 I play on the computer*

For/since

'Depuis' is used to say since or for. In French, you use the present tense with it.

1. **Je joue** au foot **depuis** deux ans.
I have been playing football **for** two years.

2. **Je fais** de la gymnastique **depuis** l'année dernière.
I have been doing gymnastics **since** last year.

Opinion

j'aime
 j'adore
 je préfère
 ...me plaît
 je n'aime pas
 je déteste
 à mon avis
 je pense que

Quel est ton sport préféré?
 Mon sport préféré est...

Opinion

*I like
 I love
 I prefer
 ...pleases me
 I don't like
 I hate
 In my opinion
 I think that*

*What's your favourite sport?
 My favourite sport is*

Les raisons

parce que
 c'est...
 un peu
 assez
 très
 vraiment

amusant
 sain
 reposant
 agréable
 divertissant

Reasons

*because
 it is...
 a little
 quite
 very
 really*

*fun
 healthy
 relaxing
 pleasant
 entertain
 ing*

Year 8 - Topic One: Coasts

Key vocabulary



Coast - The area where the land meets the sea.



Process - a force/action that changes the world e.g. erosion.



Landform - naturally formed features on the Earth's surface e.g. headlands, bays, spits.



Sediment - materials such as rocks and minerals that are eroded and deposited.



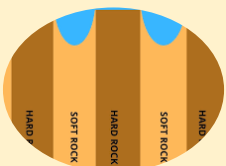
Erosion - The process of rock being worn away/broken down and transported.



Transportation - the process of sediment being moved from one place to another.



Deposition - The dropping of sediment when waves lose energy.



Discordant coastline - A coastline of alternating layers of hard and soft rock.

Destructive wave



Destroy coastlines, powerful, weak swash, strong backwash, tall height

Constructive wave



Build up beaches, strong swash, weak backwash, low energy, low height

Four types of erosion



Hydraulic action - the power of the waves eroding rock.



Abrasion - rocks are picked up by waves and thrown at cliffs, scraping more rock away.

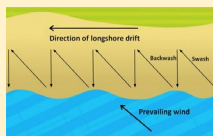


Attrition - rocks in the waves knock against each other, breaking apart to become smaller and more rounded.



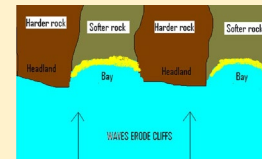
Solution - sea water dissolves certain rocks e.g. chalk and limestone.

Longshore drift - transportation along coast



-The prevailing (strongest) wind pushes swash onto the beach at an angle
 -Backwash carries sediment back into the sea at a right angle (gravity)
 -This repeats and creates a zig zag movement of sediment along the beach

Erosional landforms

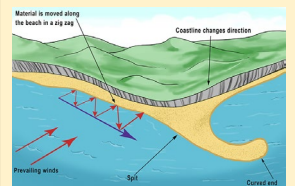


-Headlands and bays form along a discordant coastline
 -Destructive waves attack the coastline
 -Softer rock is less resistant to the processes of hydraulic action and abrasion, so it erodes more quickly, forming bays.
 -Hard rock is more resistant so harder rock is left sticking out, forming headlands.



-Erosion can create caves, arches, stacks and stumps along a headland.
 -Hydraulic action and abrasion create a crack in the headland, this erosion continues until a cave is formed, and then an arch.
 -Eventually the arch cannot support the top of the arch, so it collapses.
 -This leaves a headland on one side and a stack on the other. Eventually the top can be eroded away, leaving a stump.

Depositional landforms



-Spits are formed when longshore drift carries sediment along the coast in a zig zag pattern.
 -When the coast changes direction, sediment is deposited in the original direction in the shallow sea.
 -This sediment builds up over time, forming a spit.
 -Waves cannot get past a spit, which creates a sheltered area behind the spit where sediment is deposited and salt marshes form.

OS Map Skills

[OS map skills- bitesize](#) - click on this link to revise & practice

Year 8 – Topic Two: Megacities

Key vocabulary



Urbanisation – the increase in the percentage of people living in urban areas globally.



Urban – A built up environment with a high population density e.g. a city or a town.



Rural – An environment with a lot of green space and a low population density e.g. countryside.



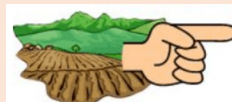
Megacity – A city with a population of over 10 million people.



Squatter settlement – A term to describe low-quality housing in urban areas, that the poorest people in the city live in e.g. slums.

Causes of rural - urban migration

Push factors -



A negative factor that makes people want to leave a place.

Examples:

- Lack of employment opportunities.
- Jobs in farming are hard work and poorly paid.
- Less access to education and healthcare facilities.
- Lack of infrastructure.

Pull factors -



A positive factor that attracts people to move to a new place.

Examples:

- Increased employment opportunities.
- Higher urban wages.
- Increased access to education and healthcare.
- 'Bright lights' perception of the city.

Squatter settlements in Megacities – Mumbai, Dharavi

- Mumbai is a megacity in India, Asia.
- It has a squatter settlement called Dharavi, with a population of over 1 million people, which is the largest squatter settlement in the world.

Advantages of Dharavi

- People have a strong sense of community as people live and work closely together, doing things like washing clothes and dishes.
- There are mosques and temples catering for religious needs.
- There is a strong economy with many businesses running in the slums such as waste recycling, pottery, jewellery and electronics.

Disadvantages of Dharavi

- Up to 500 people share one toilet
- The clean water only works for a few hours a day
- Diseases such as cholera and tuberculosis spread easily due to people using dirty water
- Some houses have 5-20 people sleeping in one room.
- The area is heavily polluted which affects people's health.
- The houses are built of poor materials that can break easily.

Main causes of urbanisation

1. Rural to urban migration



The movement of people from the countryside to towns and cities.

2. Natural increase



The birth rate is higher than the death rate, resulting in the population increasing.

Causes of natural increase

Birth rate – the number of live births per 1000 of the population per year.

Higher in cities because:

- More young people are moving to the city who are the most likely age group to have children.
- Lack of contraception in NEEs/LICs.

Death rate – the number of deaths per 1000 of the population per year.

Lower in cities because:

- Increased access to healthcare (hospitals/doctors).
- Increased access to vaccinations and other medications.

Methods of improving slums

- **Charge tourists a fee to take a guided tour of the slum** – this provides employment opportunities as tour guides, and the money made can be invested in improving the slum.
- **Provide a clean, safe water supply** – this helps improve hygiene and sanitation and will decrease the spread of disease.
- **Provide a legal and safe electricity supply** – improves peoples safety and people can cook, clean and wash more easily.
- **Work with factory owners to release children so they can attend school** – improves access to education for children so in the future they can access skilled and better paid employment opportunities.

The Reformation and the Tudors		
1	Who started the Reformation?	Martin Luther
2	Why did Henry VIII need to leave the Catholic Church to get a male heir?	Pope Clement VI refused his request for an annulment
3	What did the Act of Supremacy (1534) do?	Confirmed the Break with Rome and made Henry VIII Supreme Head of the Church of England
4	How did (Protestant) Edward VI change the church?	<ol style="list-style-type: none"> All churches had to have services in English All decoration removed from Churches
5	How did (Catholic) Mary I change the church?	<ol style="list-style-type: none"> Pope was head of the English Church Services in Latin 283 Protestants burned
6	How did (Protestant) Elizabeth change the church?	The Church was Catholic in appearance but Protestant in belief

Causes of the English Civil War		
7	Power - Charles believed in the Divine Right of Kings, 11 Years Tyranny	Parliament felt he was a tyrant who abused his power
8	Money - Charles created Ship Money	Charles was using the country's for money for himself
9	Parliament's demands - The Grand Remonstrance, a list of problems with Charles	Charles felt Parliament were challenging him
10	Charles tried and failed to arrest 5MPs in the House of Commons	Charles had become aggressive and declared war on Parliament

Consequences of the English Civil War		
11	Which battle destroyed the Royalist Army?	Naseby
12	When was Charles I executed?	30 th January 1649
13	What title did Oliver Cromwell take in 1653?	Lord Protector
14	When did Charles II become King of England, Scotland and Ireland?	1660

Mughal Emperors

15	Who was the first Mughal Emperor?	Babur
16	Which emperor made the capital Delhi?	Humayun
17	By 1576, how many people lived in Akbar's Mughal Empire?	100 million
18	How did Akbar show religious tolerance?	Allowed non-Muslims into his court and government
19	What was the role of Nur Jahan?	She involved in ruling the Mughal Empire with Jahanghir
20	How did Shah Jahan gain his wealth?	He had an administration that collected taxes efficiently
21	How was Aurangzeb less tolerant?	Diwali celebrations were restricted and he ordered temples to be demolished
22	Which kingdom did the Mughal Empire conquer in 1707?	The Hindu Maratha Kingdom

How did the East India Company take control of India?

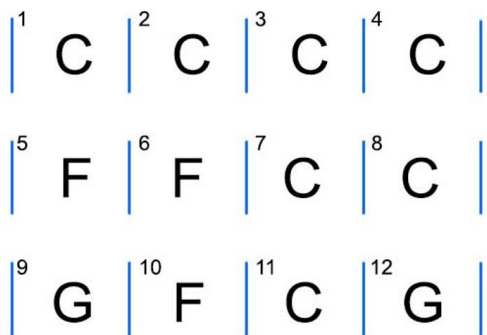
23	What was the East India Company?	A company that ran British trade with India
24	What were sepoys?	Indian soldiers who fought for the EIC
25	Where did the EIC defeat Siraj ud-Daulah?	The Battle of Plassey
26	What did the EIC gain after the Battle of Buxar?	Tax collecting rights for Bengal, Bihar and Orissa
27	How did the EIC react to the Great Bengal Famine?	They continued collecting taxes and didn't help the people

How did the British Empire take control of India?

28	Why were the Enfield Rifle cartridges a problem for the sepoys?	They were rumoured to have pork and beef fat on them
29	What did the British Empire name India after they took control?	The British Raj

Music

12 Bar Blues Chord Progression in C

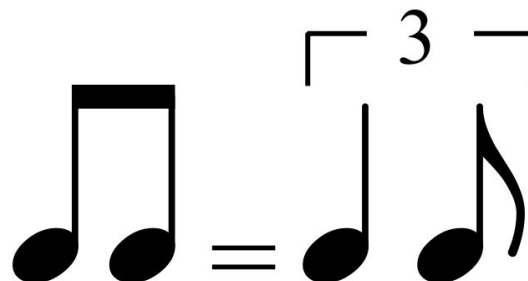


The 12 Bar Blues is the basic structure that most early Blues was played with. Only three chords are used: I, IV and V. (C, F and G in the key of C)

Swing!

- Blues music is played with a rhythmic device called Swing.
- This means that the quaver beat of the music is played in a slightly lazy way, where the first note is longer than the second.
- This gives the music a cool, laid back feel, and it is commonly used in Jazz music as well for the same effect.

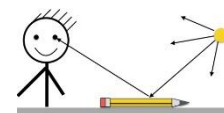
Accuracy and fluency	Technical Control	Expression
<ul style="list-style-type: none"> • Count along to the beat to play the melody. • Try to play at an even dynamic level • Ensure you have practiced LH and RH separately before attempting to combine. 	<ul style="list-style-type: none"> • Make sure you are using the same fingers each time in the RH • Your wrist should be higher than the keyboard. • Ensure you are facing the keyboard with good posture. (Straight back, loose arms) 	<ul style="list-style-type: none"> • Try to play the melody lightly, using the rebound off the keys. • Match your pace to your partner to enable better practice. • Make sure you are playing the piece at an appropriate speed.



Light and Sound KS3

Key notes

Light travels in **straight lines**. When light from an object is reflected by a surface, it changes direction. It bounces off the surface at the same angle as it hits it and enters our eyes. This is how we see different objects. A **ray diagram shows how light travels using a straight line and an arrowhead** pointing in the direction that the light travels (use a ruler and a sharp pencil).

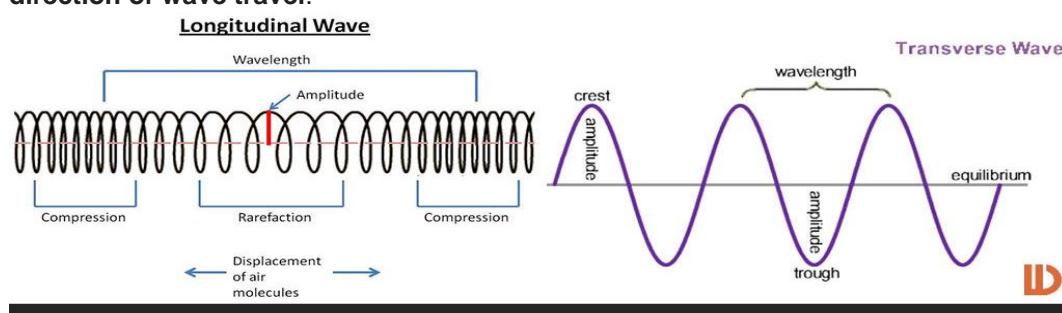


Light travels extremely quickly, with a maximum **speed is approximately 300,000,000 m/s**, when it travels through a vacuum (empty space). **Light travels faster than sound** (speed of 343 m/s in air) which is why you see lightning or a firework explode before you hear it.

Sounds are produced by vibrations, travelling as waves, which are vibrating particles.

Waves transfer energy, not matter, by oscillations or vibrations, about a rest position. For example, sound waves cause **air particles to vibrate back and forth** and ripples cause **water particles to vibrate up and down**.

There are **two types of waves; longitudinal waves and transverse waves**. In longitudinal waves, the vibrations are **parallel to the direction of wave travel**. In transverse waves, the vibrations are at **right angles to the direction of wave travel**.

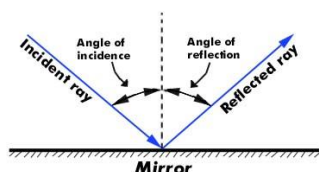


Key-concepts

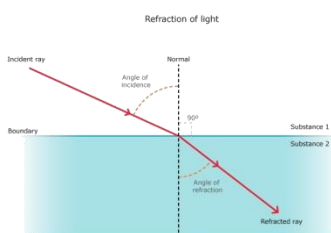
Light

Light travels in **straight lines**. Light travels as **transverse waves** that can travel through a **vacuum**. Light waves can be reflected, refracted and dispersed

The law of reflection states that the angle of incidence equals the angle of reflection, $i = r$. It works for any angle:



Refraction occurs when light changes **speed and direction** as it enters a **different material**. **Denser** materials will cause refraction **towards the normal**.



There are three primary colours of light; **green, red and blue**. All other colours can be made by mixing these together. The way coloured light mixes is very different from the way that paint does.

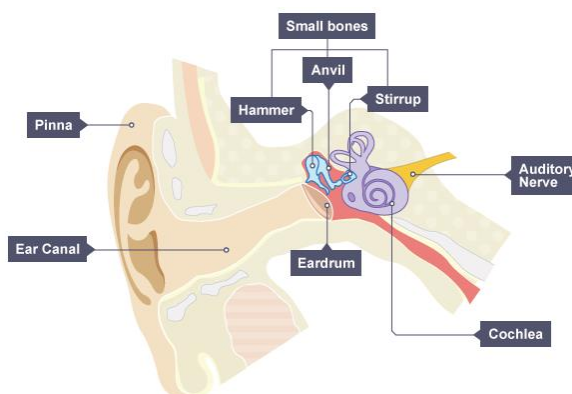
White light is a mixture of many different colours, each with a different frequency. White light can be split up into a spectrum of these colours using a prism, a triangular block of glass or Perspex.

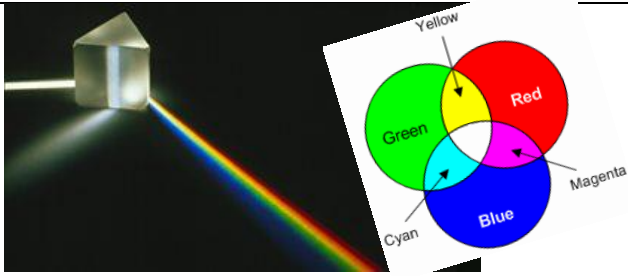
Sound

Sound waves are longitudinal waves that must pass through a medium, such as air. Sound waves are reflected by surfaces. Echoes are reflections of sounds

The ear converts sound waves (vibrations) in to electrical signals that the brain processes.

We can detect sound using our ears. An ear has an eardrum inside, connected to three small bones. The vibrations in the air make the eardrum vibrate, and these vibrations are passed through the three small bones (called ossicles) to a spiral structure called the cochlea. Signals are passed from the cochlea to the brain through the auditory nerve, and our brain interprets these signals as sound.





Objects appear black in white light because they absorb all colours and reflect none. Objects also appear black in any single colour of light if their colour is not the same as the light.

The frequency of sound waves is measured in hertz, which has the symbol Hz. . The frequency of ultrasound is above 20 kHz. It is too high pitched for humans to hear, but other animals (such as dogs, cats and bats) can hear ultrasound.

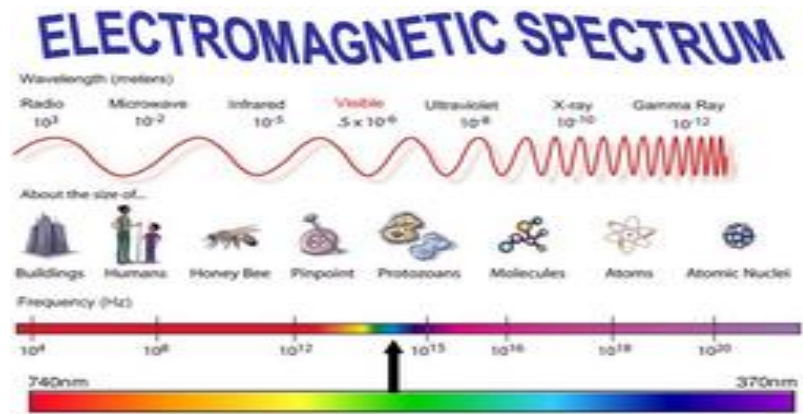
Ultrasound has many applications in medicine, including ultrasound scans to check on the health of unborn babies.

Ultrasound can be used to clean jewellery. The jewellery is placed in an ultrasonic bath, where the rapid vibrations shake the dirt loose. Ultrasound can also be used for physiotherapy. Its energy is absorbed by soft tissue in the body, bringing relief from sprains and arthritis (painful joints).

Electromagnetic Spectrum

Electromagnetic waves form a spectrum of different wavelengths. This spectrum includes visible light, X-rays and radio waves. Electromagnetic radiation can be useful as well as hazardous.

Over-exposure to certain types of electromagnetic radiation can be harmful. The higher the frequency of the radiation, the more damage it is likely to cause to the body:



The EM Spectrum - (Uses & Dangers)

Wave	Uses	Dangers
RADIO WAVES	Radio transmitters Radar Television	None
MICROWAVES	Microwave ovens Communication system	Internal heating of body tissue
INFRA-RED WAVES	Thermal imaging Remote controls	Burns skin
LIGHT WAVES	Optic fibers Seeing!	Strong light causes damage to vision.
ULTRA-VIOLET WAVES	Washing powder (whiter than white) Security marking	Skin cancer and blindness
X RAYS	Taking images of the skeleton	Mutations in cells and severe burns to the skin.
GAMMA RAYS	Cancer treatment Sterilisation of equipment	Cancers and cell mutation

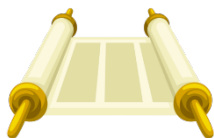
Year 8 RE Knowledge Organiser

1. Jesus as the false messiah in Judaism

Messiah - is the promised and expected saviour or liberator of the Jewish people.

According to the Torah, the Messiah will be:

- Human - human birth and have human parents
- Able to rebuild the Temple in Jerusalem
- Free the Jewish people and re-establish the holy land
- Bring peace
- Unite humanity
- Bring God's kingdom to earth



Jesus is seen as the false messiah in Judaism, as he did not fulfil these qualities. He didn't expel the Romans, he didn't rebuild the temple and didn't follow all Jewish laws, e.g. rest on Sabbath

2. Holy Trinity

Holy Trinity consists of 3 persons of one God: God the Father, God the Son (Jesus) and God the Holy Spirit.



3. Jesus' message of love, peace, justice and forgiveness

The Bible says that Jesus told stories with deeper meanings tied up in them - these are called **parables**.

Parable of the Sheep and Goat

Deeper meaning - To live by Jesus' example by helping those in need, visiting the sick etc. to go to heaven. *"For I was hungry and you fed me."*

Parable of the Good Samaritan

Deeper meaning - Show compassion to all people whoever they are, even your enemy if they are in need. *"Love God with all your heart, soul, strength and mind."*

Agape

Unconditional love without expecting anything in return. *"Love your neighbour as yourself."*

4. Opinions of Jesus

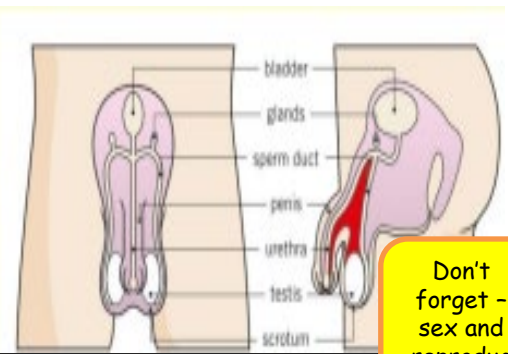
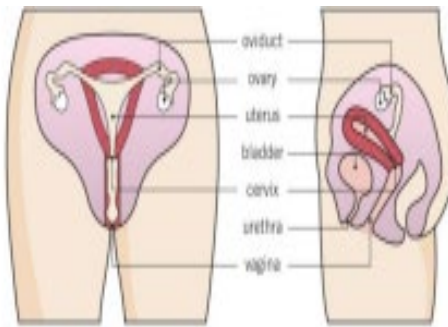
Sanhedrin - Jewish council made up of Sadducees and Pharisees

Sadducees (wealthy Jewish authorities) - Furious with Jesus for calling himself the Son of God as God cannot come down in human form (blasphemy).

Pharisees (Jewish teachers) - Jesus did not follow the basic Jewish law like keeping Sabbath holy as he would heal people.



Year 7 - Reproduction- Knowledge Organiser

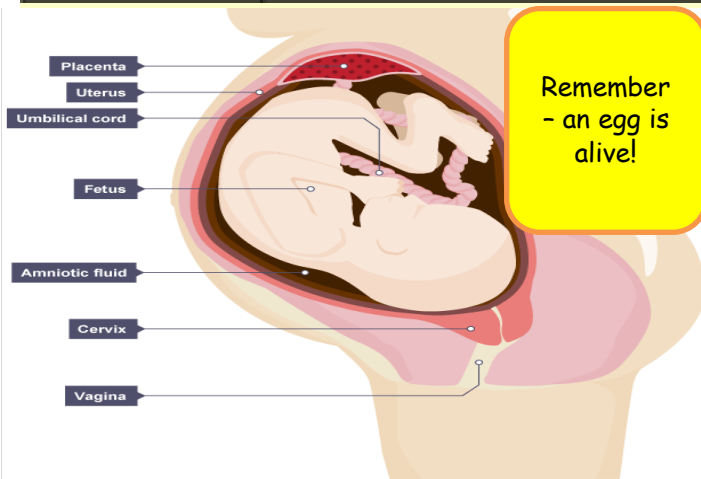


Don't forget - sex and reproduction are NOT the same.

- Male and female reproductive systems allow human reproduction.
- Fertilisation occurs when a sperm and egg join to form an embryo.
- An embryo develops into an unborn baby in the uterus during pregnancy.

Section 1: Adolescence

1 Adolescence	The period of time when a child changes into an adult (emotional and physical changes).
2 Puberty	The physical changes that take place during adolescence.
3 What happens to a girl during puberty?	Breasts develop, ovaries start to release eggs, periods start and hips widen.
4 What happens to a boy during puberty?	Voice breaks, testes and penis get bigger, testes start to produce sperm, shoulder widen, hair grows on face and chest.
5 Sex hormones	Female hormones made in ovaries , male hormones made in testes .



Remember - an egg is alive!

The fetus is protected by the uterus and a liquid called amniotic fluid.

The placenta is an organ responsible for providing oxygen and nutrients, and removing waste substances. It grows into the wall of the uterus and is joined to the fetus by the umbilical cord.

Remember, the menstrual cycle involves more than just a period!

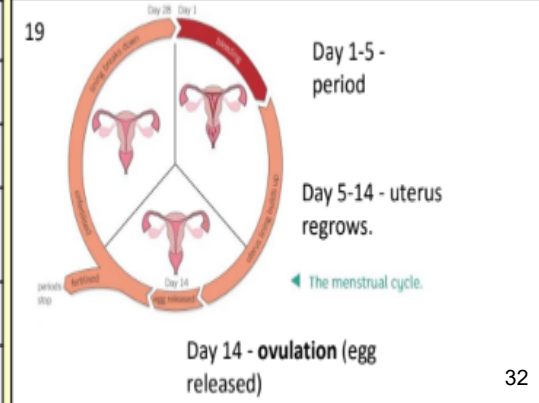
Section 2: Reproductive Systems

6 Ovaries	Female reproductive organs (production of eggs).
7 Testes	Male reproductive organs (production of sperm).
8 Oviduct	Carries egg to the uterus.
9 Sperm duct	Carries sperm from the testes to the penis.
10 Urethra	Tube that carries urine from the bladder out of the body.
11 Cervix	Ring of muscle at the entrance to the uterus above the vagina.
12 Vagina	Receives the sperm during intercourse (where the mans penis enters).

Section 3: Fertilisation and Development

13 Ejaculation	The release of sperm into the vagina .
14 Fertilisation	The point at which egg and sperm join together.
15 Implantation	When the fertilised egg (embryo) attaches to the lining of the uterus .
16 Placenta	An organ where substances are passed between the mother's blood and the foetus's blood.
17 Umbilical cord	Connects the foetus to the placenta.
18 Gestation	The period of development before birth (9 months for humans).

Section 3: Menstrual Cycle

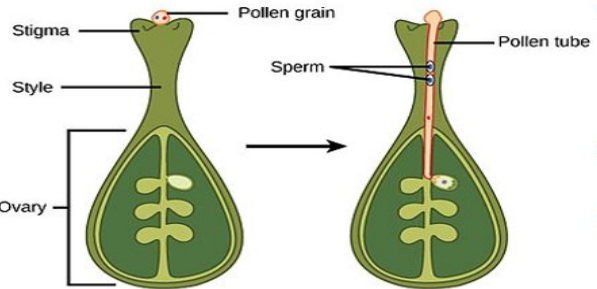
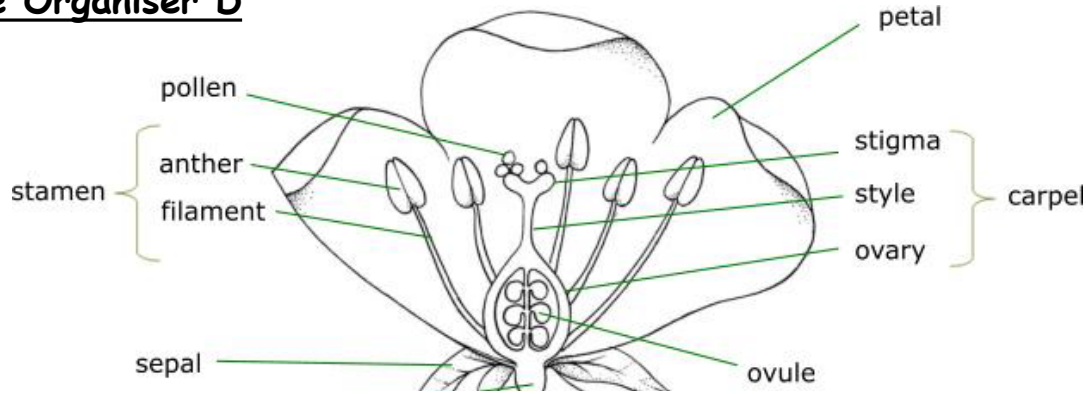


The menstrual cycle can be longer or shorter than 28 days, especially for young people who have just started having a period.

Day (approx)	Event
1	Bleeding from the vagina begins. This is caused by the loss of the lining of the uterus. This is called menstruation or having a period.
5	Blood loss stops. The lining of the uterus begins to re-grow and an ovum starts to mature in one of the ovaries.
14	Ovulation occurs. The ovum travels through the oviduct towards the uterus.
28	If the ovum does not join with a sperm cell in the oviduct, the lining of the uterus begins to break down again and the cycle repeats.

Year 7 - Reproduction in Plants Knowledge Organiser D

Section 5: Fertilisation and Germination in Plants	
20 Stamen	The male reproductive part of the plant.
21 Anther	Part of the stamen which produces pollen (the male gamete).
22 Carpel	The female reproductive part of the plant.
23 Stigma	Part of the carpel that is sticky to catch grains of pollen .
24 Ovary	Part of the carpel containing ovules (the female gamete).
25 Pollination	The transfer of pollen from the anther to the stigma .
26 Fertilisation	When the pollen tube , joins the pollen grain , to the nucleus of the ovule .
27 Germination	When a seed begins to grow (this requires water, oxygen and warmth).
28 Methods of seed dispersal	Wind (lightweight seeds with extensions to catch the wind), animal (fruits containing seeds eaten by animals), water (seeds that float on water) and explosive (fruits that burst throwing the seeds out).



- When the pollen grain has landed on the stigma, each pollen grain grows a pollen tube.
- This tube grows all the way down to the ovary.
- The pollen tube carries a male gamete to meet a female gamete.
- These gametes fuse in a process called fertilisation.
- This is **sexual reproduction** and is very similar to process of fertilisation in humans!

• The fertilised ovule then develops into a seed!

Remember that plants do have DNA and can reproduce sexually and asexually!



Feature	Insect-pollinated	Wind-pollinated
Petals	Large and brightly-coloured – to attract insects	Small, often dull green or brown – no need to attract insects
Scent and nectar	Usually scented and with nectar – to attract insects	No scent or nectar – no need to attract insects
Number of pollen grains	Moderate - insects transfer pollen grains efficiently	Large amounts – most pollen grains are not transferred to another flower
Pollen grains	Sticky or spiky - sticks to insects well	Smooth and light – easily carried by the wind without clumping together
Anthers	Inside flower, stiff and firmly attached - to brush against insects	Outside flower, loose on long filaments – to release pollen grains easily
Stigma	Inside flower, sticky - pollen grains stick to it when an insect brushes past	Outside flower, feathery – form a network to catch drifting pollen grains

How Seeds Travel

by the wind	by animals	by water	by bursting	by humans
 milkweed dandelion maple	 beggar-ticks sandbur blackberry	 lotus cattail coconut	 violet jewelweed witch hazel	 bean wheat cherry

Year 8 Spanish Knowledge Organiser

Los pasatiempos

¿Qué haces en tu tiempo libre?

bailar
chatear en el móvil
descansar en casa
escuchar música
jugar a la videoconsola
leer libros
navegar por Internet
practicar deportes
salir con mis amigos
ir de compras
ir al cine
ir a la piscina
hacer natación
montar en bicicleta
hacer mis deberes
ir a la bolera
ver la tele

Hobbies

What do you do in your free time?

to dance
to chat on the phone
to relax at home
to listen to music
to play on the games console
to read books
to surf the Internet
to do/play sports
to go out with friends
to go shopping
to go to the cinema
to go to the swimming pool
to go swimming
to ride my bike
to do my homework
to go bowling
to watch TV

Los deportes Sports

¿Qué deportes haces? What sports do you do?

Hago	I do
Juego	I play
atletismo	athletics
ciclismo	cycling
equitación	horse riding
esquí	skiing
natación	swimming
patinaje	skating
baloncesto	basketball
balonmano	handball
bádminton	badminton
béisbol	baseball
golf	golf
tenis	tennis
voleibol	volleyball
críquet	cricket
ballet	ballet
boxeo	boxing
gimnasia	gymnastics

Expressing

opinions

me chifla	I love
me fascina...	... fascinates me
me interesa...	... interests me
me mola	I love
me gusta (mucho)	I (really) like
No me gusta (nada)	I don't like (at all)
odio	I hate
detesto	I hate
prefiero	I prefer
en mi opinión	in my opinion
para mí	for me
porque	because
es	it is

aburrido/a	boring
apasionante	exciting
difícil	difficult
divertido/a	fun
emocionante	exciting
fácil	easy
lento/a	slow
rápido/a	fast
barato/a	cheap
bueno/a	good
caro/a	expensive
sano/a	healthy
interesante	interesting

El tiempo

¿Qué tiempo hace (en Madrid)?

Hace buen tiempo.
Hace mal tiempo.
Hace calor.
Hace frío.
Hace sol.
Hace viento.

Weather

What's the weather like (in Madrid)?

It's nice.
It's bad.
It's hot.
It's cold.
It's sunny.
It's windy.

Hay niebla.	It's foggy.
Hay tormenta.	It's stormy.
Llueve.	It's raining.
Nieva.	It's snowing.

Year 8 Spanish Knowledge Organiser

Present tense

	-ar	-er	-ir
<i>I</i>	o	o	o
<i>you</i>	as	es	es
<i>he/she/you (f)</i>	a	e	e
<i>we</i>	amos	emos	imos
<i>you (pl)</i>	áis	éis	ís
<i>they</i>	an	en	en

Step 1: take your infinitive (hablar)

Step 2: remove the ending (habl)

Step 3: add the new ending on, depending on who is doing the action (hablamos – we speak)

Near Future Tense

ir	to go
voy	I am going
vas	you are going
va	he/she/you(f) is going
vamos	we are going
vais	you (pl) is going
van	they are going

Step 1: take the present tense of 'ir'

Step 2: add 'a'

Step 3: add an infinitive

Eg:

- voy a jugar = I am going to play
- vamos a ir = we are going to go

Conjunctions

y	and
también	also
pero	but
además	furthermore
sin embargo	however
aunque	although
porque	because
ya que	as, since

Quantifiers

muy	very
bastante	quite
un poco	a little
mucho	a lot
demasiado	too
tan	so

Frequency words

todos los días	everyday
por la mañana	in the morning
por la tarde	in the afternoon
normalmente	normally
raramente	rarely
de vez en cuando	from time to time
a veces	sometimes
nunca	never
siempre	always

Present tense irregulars:

jugar	→ juego (I play)
hacer	→ hago (I do)
salir	→ salgo (I go out)
ir	→ voy (I go)
ver	→ veo (I watch)
dar	→ doy (I give)
conocer (person)	→ conozco (I know)
saber	→ sé (I know (a fact))
ser	→ soy (I am)
estar	→ estoy (I am)
tener	→ tengo (I have)

Infinitives

jugar	= to play	ir	= to go
hacer	= to do	tener	= to have
escuchar	= to listen	correr	= to run
ver	= to watch	ser	= to be
leer	= to read	estar	= to be
escribir	= to write	cantar	= to sing
comer	= to eat	esquiar	= to ski
beber	= to drink	navegar	= to navigate
montar	= to ride	salir	= to go out
vivir	= to live	nadar	= to swim