

Home Learning Booklet



Knowledge Goals Year 8 Half Term 4

How to self-test

Mind mapping

- Mind mapping is simply a diagram to visually represent or outline information.
- Use information gathered from your knowledge goals booklet to create mind maps, make sure to use colour and images, keep writing to the bare minimum.

How to mind map:



Information for parents on knowledge retrieval



Flash cards

Use your knowledge goals booklet to make flash cards. Write the questions on one side and on the other record the answer. Test yourself or work with a friend to make sure you know all the key information for each topic.

How to mind map:



How should students use the Knowledge Goals booklets?

Your Knowledge Goals booklet provide the essential knowledge that you need to learn in each subject this half term. You are **expected to spend 30 minutes per subject per week 'learning' the content**. You will be assessed during lessons using 'low stake' quizzing. **Your teacher may choose to set you additional homework.**

How can parents support?

- Read through the organiser with your child – if you don't understand the content then ask them to explain it to you – 'teaching' you helps them to reinforce their learning.
- Test them regularly on the spellings of key words until they are perfect. Get them to make a glossary (list) of key words with definitions or a list of formulae.
- Read sections out to them, missing out key words or phrases that they must fill in. Miss out more and more until they are word perfect.

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Suggested Homework Schedule (1 hour of independent study per night).

To help you get organized, we have planned out your weekly home learning to cover all subjects. You may choose to create your own version:

Week A

Day	Subject 1 (20mins)	Subject 2 (20mins)	Subject 3 (20mins)
Monday	Art	English Language	Physics
Tuesday	Biology	Technology	Maths
Wednesday	Chemistry	Spanish	Music
Thursday	Computer Science	Geography	RS
Friday	Design Technology	History	PE

Week B

Day	Subject 1 (20mins)	Subject 2 (20mins)	Subject 3 (20mins)
Monday	Drama	Personal Development	Teir 2 Vocab
Tuesday	Maths	English	Physics
Wednesday	Chemistry	English	Music
Thursday	Teir 2 Vocab	Maths	Biology
Friday			

Literacy Tier 2 Vocabulary

These words are all 'tier 2' words; in other words, they are seen as 'academic vocabulary' and if you know them, can understand them and use them, you will do better in your exams and be able to communicate more precisely and effectively in life.

#	Key word	Definition
1	Advocate	
2	Benefit	
3	Clarity	
4	Define	
5	Hierarchy	
6	Liberate	
7	Modify	
8	Notation	
9	Objective	
10	Qualify	

Literacy Tier 2 Frayer Model

examples

Definition	Characteristics
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<div style="border: 2px solid black; border-radius: 15px; width: 100px; height: 40px; margin: 0 auto;"></div>	
Examples	Non-examples
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

Definition	Characteristics
<p>A shape with equal length sides and equal angles between each side. They differ from irregular polygons in that they not only cannot have unequal length sides or angles, but they can also not have curved lines.</p>	<p>Enclosed shape of straight sides Sides are equal length Angles are equal between the sides No curved lines Can be drawn on flat surface</p>
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; display: inline-block; color: yellow; font-weight: bold;">Regular Polygons</div>	
<p>Examples</p>	<p>Non-examples</p>

Definition:	Characteristics:
<p>A cold-blooded, air breathing animal that has scales instead of hair or feathers. There are around 6,000 species</p>	<ul style="list-style-type: none"> - Dry, scaly skin - Reproduce by laying eggs - Cold blooded & air breathing - Backbone
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; display: inline-block; font-weight: bold;">Reptiles</div>	
<p>Examples: Four existing orders of reptiles: Turtles, crocodiles & alligators, lizards & snakes, and tuataras.</p>	<p>Non-examples: - Amphibians e.g. frogs - Mammals e.g. elephants - Fish e.g. sharks</p>

DEFINITION	CHARACTERISTICS
<p>The multiple created when a positive integer is multiplied by the same positive integer</p>	<ul style="list-style-type: none"> • The process of creating a square number is called "squaring" and is shown using an exponent of 2 (a^2)
<div style="border: 1px solid gray; border-radius: 50%; padding: 10px; display: inline-block;">Square Number</div>	
EXAMPLES	NON-EXAMPLES
<p>4 ($= 2^2$) 9 ($= 3^2$) 100 ($= 10^2$) 484 ($= 22^2$) 1 ($= 1^2$) 10 000 ($= 100^2$)</p>	<p>2 ($\neq 1^2$) 10 1000 5 -4 $\frac{1}{4}$</p>

Definition	Characteristics/Features
<p>A change beginning around 1750 where a greater number of goods were produced in large factories rather than in homes or small family businesses.</p>	<ul style="list-style-type: none"> • improved agricultural production • increase in population and number of cities • steam-driven machinery used for transport and goods production • use of coal as an energy source • greater availability of iron
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; display: inline-block;">Industrial Revolution</div>	
<p>• First mechanical reaper in 1834. • Increase city size and density: London increased from 5 million in 1700 to nearly 9 million by 1800. • Mass production of goods occurs: o Britain: textile manufacture centralised to mills by 1780s o USA: by 1914, the USA was producing more steel than Britain, Germany, France and Austria-Hungary combined.</p>	<ul style="list-style-type: none"> • isolated communities with a hunter-gatherer economy • people living as subsistence farmers on small plots • people working fields by hand • transport predominately by horse and cart
Examples	Non-Examples

Have a go at creating a Frayer Model for each of the 6 tier 2 words from this term (blank templates are at the back of the booklet for you to complete this activity).

Watch these video for more information
<https://www.youtube.com/watch?v=LodDXM46YXI>
<https://youtu.be/vHOPdddnLCc>

Knowledge Goals: Art

Project overview

Using **architecture** as a theme, you will develop skills in observational drawing from secondary sources using coloured pencil crayons, poster paints **and ceramics**. You will research the work of artist/architects **Fritz Hundertwasser** and **Antoni Gaudi**. Students use their sketchbooks to develop ideas. Final outcomes are an A4 **patterned footprint** drawing and a **ceramic house**.

Key terms

Architecture – The practice of designing and constructing buildings

Form – A shape in 3 dimensions

Pattern – Repeating line, shape or colour

Sculpture - an artistic form in which materials are worked into three-dimensional art objects

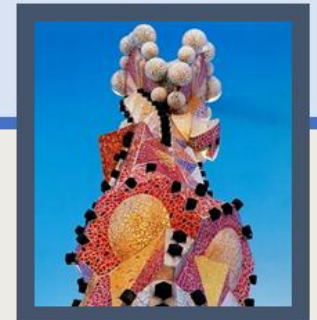
Fritz Hundertwasser

- Austrian architect, designer and artist.
- He had a mystical approach to art, which he developed self-consciously throughout the rest of his career.
- In the late 1940s he began producing his own abstract work.
- The common themes in his work utilised bright colours, organic forms, a reconciliation of humans with nature, and a strong individualism.
- He rejected straight lines.



Antoni Gaudi

- Spanish architect and designer.
- He designed architectural space using wrought iron, furniture, stained glass, sculptural work, mosaics and ceramics.
- The sea landscape was one of his most preferred inspirations.
- He was also inspired by nature and he also used a lot of mosaic to create this feeling.



Knowledge Goals: Biology - Respiration

Aerobic respiration

glucose + oxygen \rightarrow carbon dioxide + water (+energy)

- Uses oxygen.
- Occurs in the mitochondria.
- Releases large amount of energy.

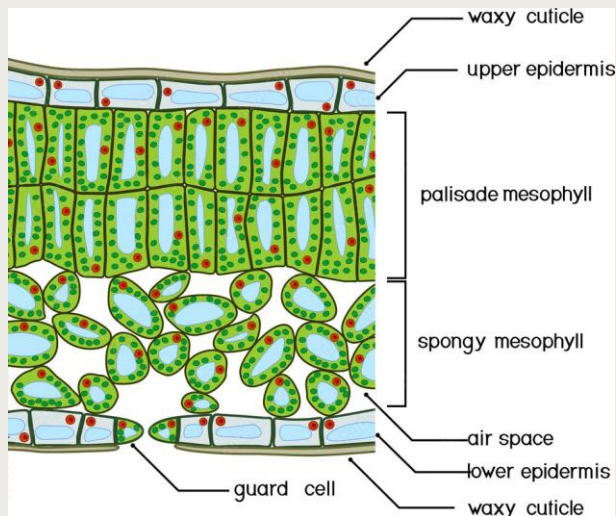
Anaerobic respiration

glucose \rightarrow lactic acid (+ energy)

- Does not use oxygen.
- Occurs in the cytoplasm.
- Releases small amount of energy but quickly.

Plants make their own food by a process called **photosynthesis**.

carbon dioxide + water $\xrightarrow[\text{chlorophyll}]{\text{light}}$ glucose + oxygen



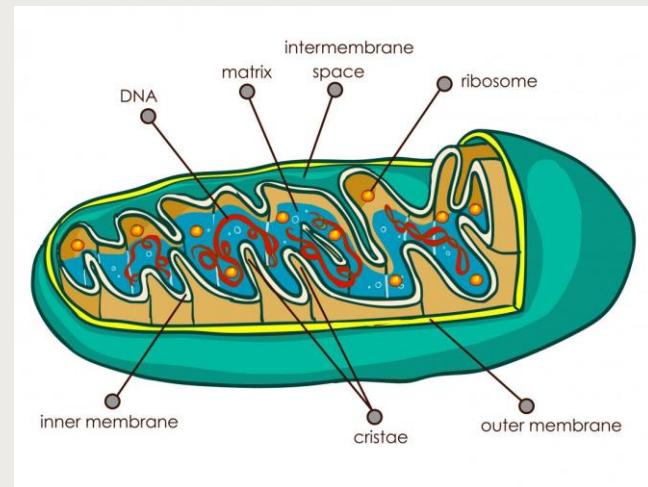
Stomata – found at the bottom of a leaf, surrounded by guard cells. They open and close to allow gases in and out.

Palisade cells – located near the top of the leaf. Contain lots of chloroplast where photosynthesis occurs.

Mesophyll – contain lots of air spaces to allow gases to move through the leaf.

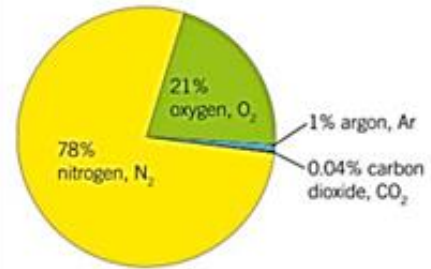
Factors affecting photosynthesis

- Light level
- Carbon dioxide
- Temperature



Aerobic respiration takes place in the mitochondria. The mitochondria has inner folds to increase the surface area for more respiration.

EARTH'S ATMOSPHERE



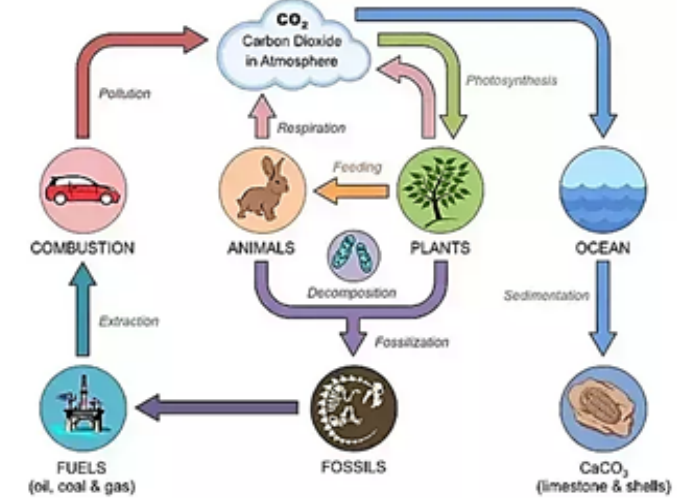
Knowledge Goals: Chemistry – Earth 2 - Climate

Most reactive
Potassium
Sodium
Calcium
Magnesium
Aluminium
Carbon
Zinc
Iron
Tin
Lead
Copper
Least reactive

EXTRACTING METALS

- Aluminium is extracted from bauxite rock (an ore).
- The method for extraction depends on the reactivity of the metal.
- Any metal below carbon in the reactivity series (e.g. zinc, iron, lead, copper) can be displaced from its compound by carbon. For example; carbon + copper oxide → copper + carbon dioxide
- If a metal is above carbon in the reactivity series (e.g. aluminium, magnesium, sodium), it will be extracted from its ore by electrolysis. This is an expensive process as the mineral must be heated to high temperatures so it melts (lots of energy is needed). Greenhouse gases may also be produced.

THE CARBON CYCLE



- Carbon is constantly recycled through natural processes in the atmosphere, ecosystems and Earth's crust. Human activities also contribute to carbon recycling.
- Respiration and combustion ADD carbon dioxide to the atmosphere.
- Photosynthesis and carbon dioxide dissolving in the oceans REMOVE carbon dioxide from the atmosphere.

Recycling

Examples

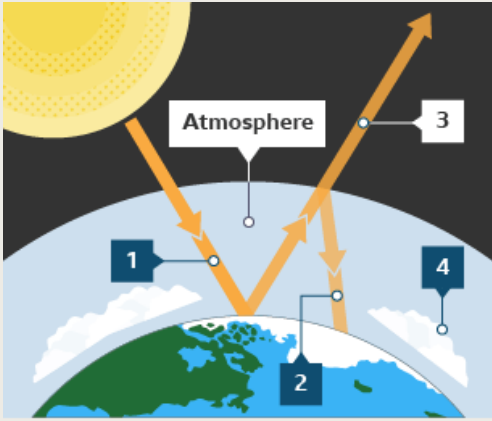
Aluminium (cans and foil containers), glass bottles and jars, paper and cardboard

Benefits

Earth's resources will last longer
There will be less waste to dump
There will be less pollution

Disadvantages

Some people think recycling is a nuisance
Lorries that collect recycling create pollution
A lot of recycling must be sorted by hand and is a very expensive process



- Thermal energy passes through the Earth's atmosphere
- Some thermal energy is absorbed by greenhouse gases
- Less thermal energy escapes back into space
- The lower atmosphere warms up

- The Sun heats the Earth's surface
- The warm surface emits radiation
- Some of this radiation goes into space but some is absorbed by greenhouse gases.
- This keeps the Earth warm (the Greenhouse Effect)

The Earth's temperature is gradually increasing and this is called global warming.
Examples of greenhouse gases in the atmosphere are carbon dioxide, water and methane

Climate change

Human activities can add extra greenhouse gases to the atmosphere such as burning fossil fuels, burning forests and intensive farming (especially cows). Extra greenhouse gas causes global warming. This can change weather patterns causing extremes of weather like storms, droughts or heatwaves. Long term this may cause polar ice caps to melt, sea levels to rise, crop failure or extinction of species.

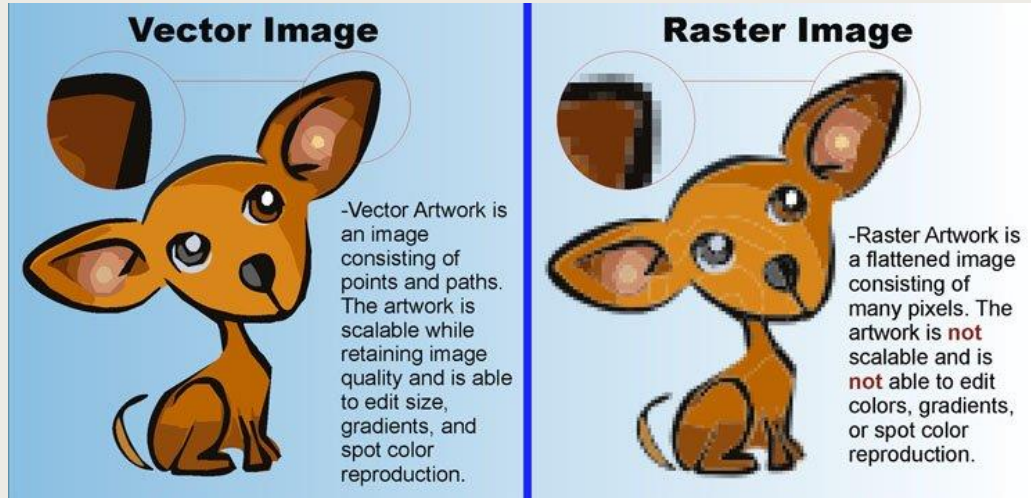
How can we slow down Climate change ?

Use cars less
Eat less meat
Buy and waste less
Generate electricity using solar panels or wind

Knowledge Goals: Computing

Graphics software you can use at home

- [GIMP](#)
- [Photopea](#)
- [Canva](#)



As with all files saved on a computing device, image files are saved into a **binary** format. We can convert binary (base-2 counting) into **denary** (base-10 counting) this way

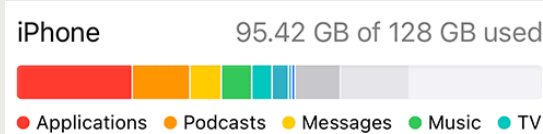
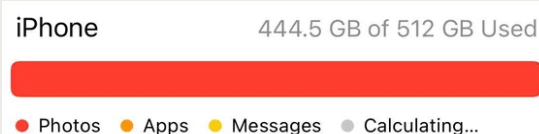
128	64	32	16	8	4	2	1	
0	0	0	1	1	0	1	0	= 26 (16+8+2)
1	0	1	0	0	1	0	1	= 165 (128+32+4+1)
0	0	0	0	1	0	1	0	= 10 (8+2)

Image file types		
Raster image types	.jpg	The most common type of image file type you will use. Uses lossy compression to reduce file size
	.gif	A type that can store a series of images to form animation
	.png	These images can be saved with a transparent background, making them very useful for image editing
	.tiff	A raster file that uses lossless compression, meaning it won't lose quality when copied, recompressed, etc.
Vector image types	.eps	A universal file type for vector artwork which can be used on most design software
	.ai	The file type for Adobe Illustrator, the industry standard software for design work
	.pdf	A file type developed by Adobe to assist in viewing vector designs without needing design software. Used for sharing graphics and documents

Many computer products use the numbers in the column headers for binary – check the memory on your phone, your PC, etc
 If we continue the column headers, we will get to **256, 512 and 1024**. Sound familiar?

Choose your capacity.
How much capacity is right for you?

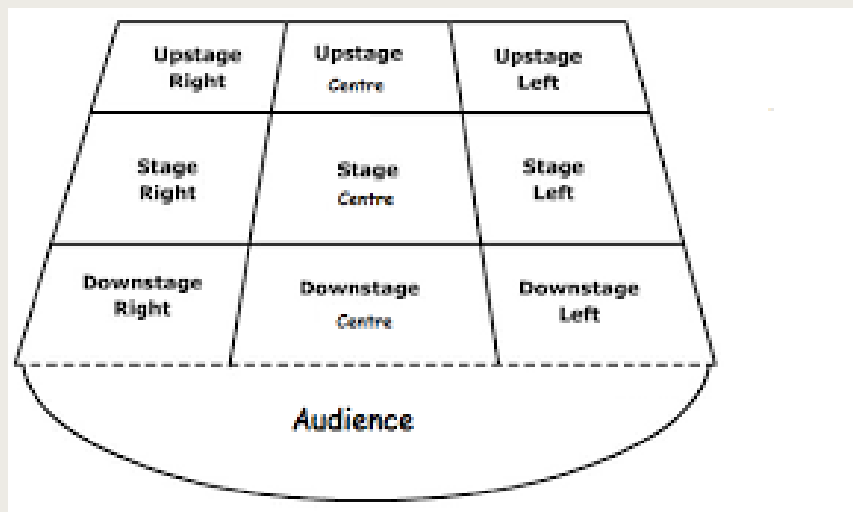
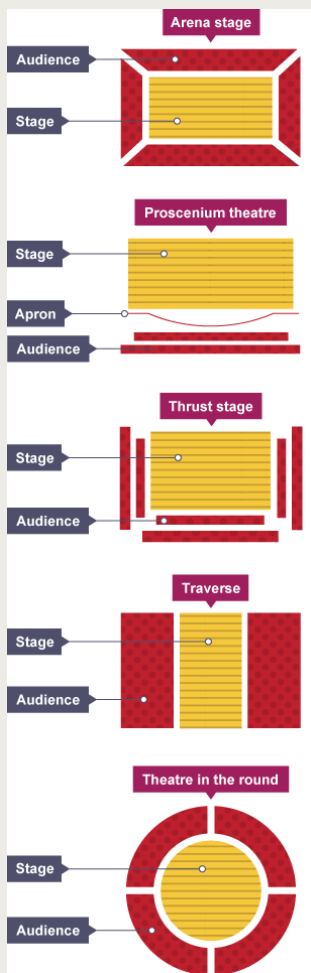
128GB ¹ From £999	256GB ¹ From £1,099
512GB ¹ From £1,299	1TB ¹ From £1,649



Knowledge Goals: Drama

Proscenium Arch

Thrust Stage



What are the advantages and disadvantages of the different types of stage?

Creating a Theatre Set

Set designs have many functions. Some of the most important are:

- Creating a sense of place (location) and time (period)
- Highlighting important dramatic themes or issues
- Creating an imaginative and interesting acting space

Audience Positioning

Decide which audience positioning is most appropriate for the scene or play: Theatre in the Round, Traverse, Thrust or Proscenium Arch. Try to think of some reasons why.

Stage Requirements

Look at the 'functional demands of the action'. What does the scene require in terms of set and props? Make a list of what you need and how you can get it.

Positioning of Props

Position scenery, furniture and props so entrances and exits are not blocked and the acting space is clearly defined. The centre stage area is usually left free for the actors to use.

Audience Sightlines

Can the audience see all the characters on stage? Positioning should allow the audience to see the actor's face. The audience should not be able to see off stage. Use levels if possible.

Is the Set Actor Friendly?

Does the set allow the actors to move around freely? Can they sit and stand without being cramped and confined? Do they face the audience?

Style and Atmosphere

Is the play dark and serious, or light and happy? What period is it set in? The style and atmosphere created through the set will help establish the mood.

Remember Try sitting in the audience to make sure everything is working.

Knowledge Goals: Technology - Electronics


Health and Safety
It is really important we **ASSESS** the **RISK** and **REDUCE** the **RISK** of **Injury** by **LISTENING** To the **TRAINING** and following the correct **PPE** usage

- Hair must be tied up in the workshop
- Blazers and ties must be removed
- Jewellery must be removed
- Only use machines you have been told to use and have been demonstrated to you
- Ensure you know where the emergency stop button is
- Do not eat or drink in the workshop
- No running


Input	Function	Use
Light-dependent resistor (LDR)	The resistance changes as the light level changes, and the change in resistance can be used as an input	Solar garden lights and street lighting
Thermistor	The resistance changes as the temperature changes, and the change in resistance can be used as an input	Fridges, central heating systems and freezers to maintain temperatures

Process	Function	Use
Switch	A switch can either allow or prevent electrical power from flowing round a circuit	Any device that needs power to be turned on and off
Resistor	To limit the flow of current - they are made to restrict current flow in varying degrees (resistance)	It helps control the flow of current and protects delicate components from being overloaded

Output	Function	Use
Speaker	Uses pulses of electricity to move an electromagnet that vibrates to create sound	Headphones and radios
Light-emitting diode (LED)	A long-lasting, low-power light	Torches, lamps and power indicators



Wire strippers: Remove the plastic coating from the wire to expose the wire to attach with soldering to other components



Solder- using a soldering iron it attaches two components together

KEY TERMS

Types of plastics


Thermosetting
Plastics **cannot be reheated** and **reshaped** due to a chemical reaction that occurs when they are first manufactured.

- Initially **set by heat**
- Cannot be **reshaped once set**
- Extremely **strong and durable**
- **CANT** be recycled

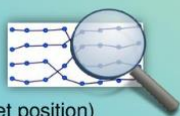
Thermoforming
Plastics **can be reheated** and therefore **reshaped**.

- **Soften** when heated
- Can be **reshaped**
- More commonly used in **school**
- **CAN** be recycled

Polymers



Think of the word "set" what does it mean?
(Put something in a set position)





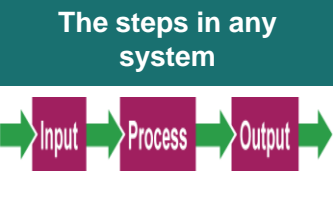
JIG: A production aid to make sure that every time the material is shaped to the same angle

CAM
Computer Aided Manufacture

Laser cutter

Laser cutting works by directing the output of a high-power laser. The focused laser beam is directed at the material, which then cuts the material leaving an edge with a high-quality surface finish. In school we mainly cut and engrave on Plywood and Acrylic



Knowledge Goals: English

What is travel writing?

Travel writing is non-fiction (real life) writing that describes travelling and visiting different parts of the world.

Where would you find travel writing?

Travel writing can take the form of newspaper/magazine articles, blogs, journals, tourist guides or even whole books.

What does good travel writing look like?

1. Personal account
2. Anecdotal
3. A hook – put questions in the reader’s mind
4. Strong Narrative thread
5. Quotations
6. Avoid clichés
7. Be natural
8. Interesting nuggets
9. Economical
10. Pertinent
11. Cinematic – evocative
12. Off-the-beaten-track
13. Detail, detail, detail
14. Show, not tell
15. Emotive (Awe is an emotion)
16. Plausible

Key Concept	Definition
Anecdote	A short, amusing story about a real incident or person.
Expanded noun phrases	A phrase made up of a noun and at least one adjective.
Connectives	A word or phrase that links two parts of a sentence together. Can also be used as a sentence opener to connect two parts of a text.
Main clauses	Part of a sentence that can stand on its own, like a full sentence.
Subordinate clauses	Part of a sentence that cannot stand on its own but adds extra information. Must be separated by commas.
Narrative	Story. Even non-fiction writing needs a narrative thread (a story that connects things together).
Sub-narrative	A section of narrative that runs alongside the main narrative thread like a less important story.
Quotation	Words taken from another person or text and copied into your work. Must be separated by "quotation marks."
Personal pronouns	I, you, he, she, it, we, they, me, him, her, us, and them
Pertinent information	Information that is necessary.
Paragraphing	A section of a text on a certain topic. Miss a line before and after a paragraph.
Topic sentence	A sentence at the start of a paragraph that tells the reader what the paragraph is about.
Rhetorical devices	Techniques used to persuade (AFOREST).
Show, not tell	Describing only action when writing instead of telling us thoughts and feelings.
In media res	Starting in the middle of the action

Connectives

after	unless
although	until
as	when
because	whenever
before	whereas
for	wherever
however	which
if	while
in case	whilst
since	who
that	whoever
though	whose
till	

A Alliteration

F Facts

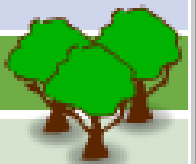
O Opinion

R Rhetorical question, repetition

E Exaggeration (hyperbole), emotive language

S Statistics

T Triple (list of three)



Knowledge Goals: Food Technology

Seasonality and Food Miles

What are seasonal foods?

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.

Food - a fact of life 2012



Micronutrients

Needed in small amounts to help the body function properly

Vitamin	Food Sources
Vitamin A	Carrot, sweet potato, milk, eggs
Vitamin B complex	Whole grains, legumes, nuts and seeds, meat, eggs, dairy
Vitamin C	Citrus fruits, strawberry, bell peppers, tomatoes
Vitamin D	Fatty fish, fish liver oil, egg yolk, mushrooms
Vitamin E	Wholegrain foods, nuts and seeds, avocado
Vitamin K	Green leafy vegetables, broccoli, cauliflower, cabbage, meat, fish, eggs

Macronutrients

Needed in large amounts to help the body to function properly

Fat

Function: Energy, Warmth, Protection of organs

Sources:

Saturated Fat (Bad Fats)	Unsaturated Fat (Good Fats)
Meat	Avocado
Processed Foods	Nuts
Lard	Olive oil

Saturated Fats - solid at room temperature and are from animal sources. Unsaturated fats are liquid at room temperature and are vegetable sources.

Carbohydrates

Function: Energy

Sources:

Bread, Pasta, Rice, Wheat, Potatoes, Cereals

Sugars: Cakes, Sweets, Fizzy drinks

We should consume no more than 30g of sugar per day

Protein

Function: Growth and Repair, Energy

Sources:

Plant	Animal
Nuts	Eggs
Quorn	Fish
Beans	Meat
Lentils	

Water

Keeps us hydrated.

Source

Drinks, fruit and vegetables, soup.

Function	Too little
<ul style="list-style-type: none"> Controls body temperature. Gets rid of waste in the body. 	<ul style="list-style-type: none"> Dehydration leads to headaches, irritability and loss of concentration.

Too much	Too little
<ul style="list-style-type: none"> Obesity Type 2 diabetes Heart Disease 	<ul style="list-style-type: none"> Fat soluble vitamin deficiencies

Too much	Too Much
<ul style="list-style-type: none"> Obesity Type 2 diabetes Heart Disease 	<ul style="list-style-type: none"> Tooth decay Type two diabetes Obesity

Too much	Too little
<ul style="list-style-type: none"> Turns to fat if not turned into energy 	<ul style="list-style-type: none"> Anaemia Slow growth in children

Fibre

Function: It helps with digestion, it helps to get rid of waste

Source: Wholegrain, Whole wheat, Wholemeal cereals, Peas and beans

Too Little

- Constipation
- Bowel Cancer

Vegetarianism

Lacto-ovo-vegetarians	Lacto-vegetarians
<ul style="list-style-type: none"> Eggs Milk Honey Plant food 	<ul style="list-style-type: none"> Eggs Milk Honey Plant food
Ovo-vegetarians	Vegans
<ul style="list-style-type: none"> Eggs Milk Honey Plant food 	<ul style="list-style-type: none"> Eggs Milk Honey Plant food

+ Yes, they eat these foods

- No, they do not eat these foods

Food Poisoning

Types of Food Poisoning

Food poisoning comes from many sources, including bacteria, viruses, and fungi.



Listeria
fresh milk, unwashed produce



E. coli
fecal contamination



Campylobacter
undercooking, unhygienic kitchen



Salmonella
undercooking, poor hygiene



Abdominal pain

Diarrhea

Fever

Nausea Vomiting

Knowledge Goals: French

Mots

Je vais à Paris.	<i>I am going to Paris.</i>	À Paris	<i>In Paris</i>
Pour combien de temps?	<i>For how long?</i>	Je vais voir ...	<i>I am going to see ...</i>
les vacances	<i>holidays</i>	la gare du Nord	<i>the main station for trains from the UK</i>
Quand?	<i>When?</i>	la tour Eiffel	<i>the Eiffel tower</i>
Je vais passer une semaine à Paris.	<i>I am going to spend a week in Paris.</i>	l'Arc de triomphe	<i>the Arc de Triomphe</i>
Il/Elle va à Paris du ... au ...	<i>He/she is going to Paris from ... to ...</i>	le musée du Louvre	<i>the Louvre museum</i>
juillet	<i>July</i>	la Grande Arche de la Défense	<i>the big arch at La Défense</i>
août	<i>August</i>	le Centre Pompidou	<i>Pompidou centre: (a library and cultural centre)</i>
Comment y vas-tu?	<i>How are you going?</i>	le Sacré-Cœur	<i>the cathedral of the Sacred Heart</i>
J'y vais ...	<i>I am going ...</i>	l'avenue des Champs Élysées	<i>Champs Élysées</i>
en avion	<i>by plane</i>	la Cité des Sciences et de l'Industrie	<i>the museum of Science and Industry</i>
en car	<i>by coach</i>	la Seine	<i>the river in Paris</i>
en ferry	<i>by ferry</i>	ce matin	<i>this morning</i>
en train	<i>by train</i>	cet après-midi	<i>this afternoon</i>
à vélo	<i>by bike</i>	ce soir	<i>this evening</i>
en voiture	<i>by car</i>	aujourd'hui	<i>today</i>
Pourquoi?	<i>Why?</i>	Prenez le métro	<i>Take the metro</i>
parce que c'est ...	<i>because it is ...</i>	la ligne	<i>line</i>
confortable	<i>comfortable</i>	direction ...	<i>in the direction of ...</i>
intéressant	<i>interesting</i>	changez à ...	<i>change at ...</i>
pratique	<i>practical</i>	descendez à ...	<i>get off at ...</i>
rapide	<i>fast</i>	un carnet de tickets	<i>book of 10 tickets</i>
moins cher	<i>good value</i>		

Qu'est-ce que tu as fait?	<i>What have you done?</i>	faire	<i>to do/make</i>
J'ai acheté ...	<i>I bought</i>	je fais	<i>I do</i>
des cartes postales	<i>postcards</i>	j'ai fait	<i>I did/made</i>
des souvenirs	<i>souvenirs</i>	voir	<i>to see</i>
J'ai vu ...	<i>I saw ...</i>	je vois	<i>I see</i>
la tour Eiffel	<i>the Eiffel tower</i>	j'ai vu	<i>I saw</i>
les peintures	<i>the paintings</i>	acheter	<i>to buy</i>
les artistes de mime	<i>the mime artists</i>	j'achète	<i>I buy</i>
les monuments	<i>the sights</i>	j'ai acheté	<i>I bought</i>
Où es-tu allé(e)?	<i>Where have you been?</i>		
Je suis allé(e) ...	<i>I went ...</i>		
Je suis rentré(e) ...	<i>I went back/ returned ...</i>		
Des verbes utiles	<i>Some useful verbs</i>		
aller	<i>to go</i>		
je vais	<i>I go</i>		
je suis allé(e)	<i>I went</i>		
jouer	<i>to play</i>		
je joue	<i>I play</i>		
j'ai joué	<i>I played</i>		

Knowledge Goals: French

Half Term 4: Tier 3 Vocabulary

#	Key word	Example
1	Connective	Et, aussi, mais, car, parce que, par contre, cependant
2	Opinion Verbs	J'aime, j'adore, je préfère, je n'aime pas, je déteste
3	Justifications	parce que / car c'est / ce n'est pas...
4	Qualifier	un peu, assez, très, vraiment
5	Adjective	Intéressant, rapide, confortable, pratique, barbant, ennuyeux, lent, cher
6	Time Phrase	Ce matin, cet après-midi, ce soir, aujourd'hui, le week-end prochain
7	Tenses	Past - J'ai visité / j'ai mangé / j'ai acheté / j'ai bu / j'ai vu / j'ai fait / je suis allé / c'était Present - Je vais / je mange / je fais / je bois / je joue Future - Je vais aller / je vais visiter / je vais faire / je vais manger Conditional (would) - je voudrais + verb



Knowledge Goals: Sleeping Giant Awakens - ASIA



The Regions in Asia

Southeast Asia – countries rely mainly on agriculture. They export rice and other foodstuffs, and also have rubber industries.

Central Asia – overall, these countries are not rich, and Central Asia has several large, sparsely populated countries like Kazakhstan and Turkmenistan. These countries do have oil, gold and minerals they are starting to exploit.

Western Asia, including the Middle East – this area includes many of the world's Arabic speaking nations. Has a large share of the world's oil and gas reserves, which has made some nations (e.g. Qatar) extremely rich. Dubai has the Burj Khalifa – world's tallest skyscraper.

Eastern Asia – main industrial area. China is the most populous country in the world; and is known for its exports, particularly electronics for the home. Japan is technologically advanced and has the world's highest life expectancy. North and South Korea are here.

South Asia – overall, the poorest region. India is the world's second most populous country and is a Newly Emerging Economy with a significant service industry. Exports from South Asia include textiles and foodstuffs, e.g. Bangladesh is known for its textiles industry

Northern Asia - dominated by Russia, largest country in the world by area. Russia sells oil and gas to other countries by pipeline, and is mostly sparsely populated. Some parts of Russia, e.g. Siberia, are very cold. Russia also has a coastline to the Arctic Ocean.

Physical Characteristics of Asia

Asia contains some of the most extreme temperatures on the planet. The temperature has reached 53.9°C in Israel, and has been as low as -67.8 °C in Siberia, Russia. Asia has a mix of climate regions. Polar, subarctic, and temperate climates occur along the continent's northern and north-eastern areas. Arid (dry) and highland (high areas – varied because temperature drops with altitude) zones are found in the continent's middle and south-eastern areas. A mix of grassland and tropical rainforest climates are found in the southern areas of

Asia's Ecosystems

Tundra – A cold region in the north where the ground is deeply frozen. Only the top layer thaws in the summer. Only small plants found here.

Taiga – coniferous forest, found between Tundra and Steppes. Long cold winters; short, hot and damp summers.

Steppes – large flat area of treeless grassland, characterised by low precipitation. Found in the middle of the continent. Hot summers and cold winters.

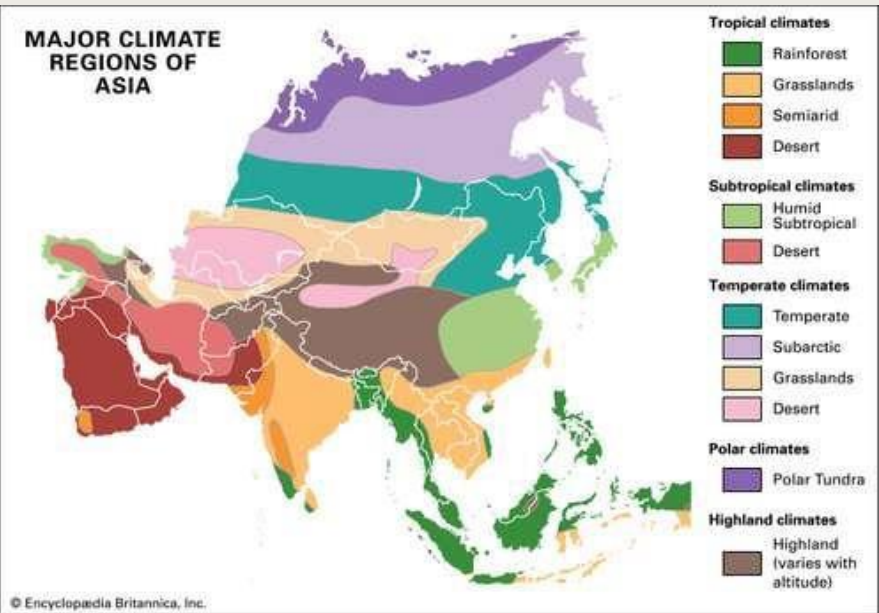
Temperate forest – region of deciduous trees. Found between Steppes and the coast. Hot summers and cold winters.

Cold desert – found north of the Steppes. Very dry. Summers are hot; but cloudless skies mean cold nights. Winters very cold (- 40°C). Little vegetation.

Hot desert – found south of the cold deserts. Usually very hot during the day and cold at night. Little vegetation.

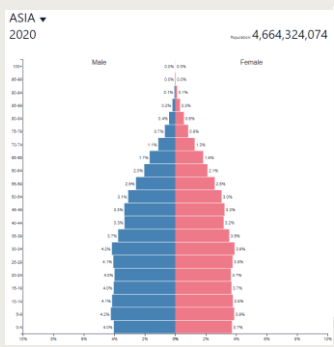
Mountainous – temperature falls with altitude, so the higher you go the colder it gets. At high altitudes trees no longer grow and there are glaciers.

Warm moist forest – furthest south, in and near the tropics. Includes tropical rainforests and mangrove swamps.



Growing Urban Population

In 2020, around 2.36 billion people across Asia lived in cities. The urban population across Asia was projected to increase continuously over the next years and is on track to reach an estimated 3.48 billion by 2050.

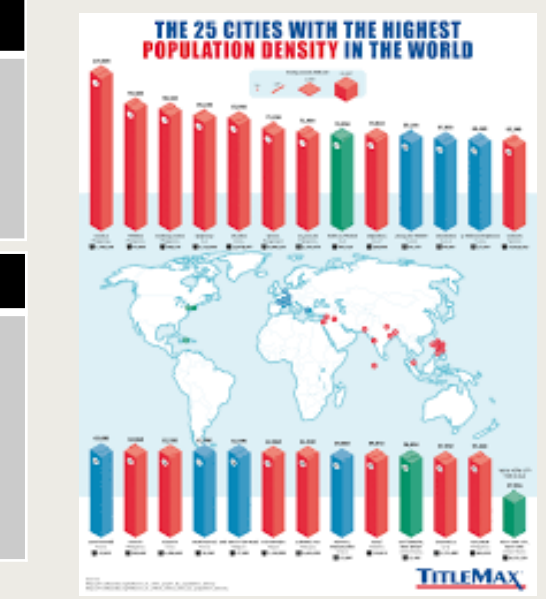


Population Structure

The 'make up' or composition of a population. Looking at the population structure of a place shows how the population is divided up between males and females of different age groups. The population structure is often shown in a population pyramid either showing percentage of the population in each group, or the total number of people in each age group.

The Palm Oil Issue

Southeast Asia is the centre of global palm oil production – with Indonesia and Malaysia producing around 85% of the world's supply. But oil palms did not arrive there until 1848, when Dutch botanists planted four seedlings in the botanic gardens in Bogor (then Buitenzorg) on the



Year 8 Knowledge Goals – Industrial Revolution

1712—First steam engine invented. 1759—Wedgwood company is founded. 1764—Invention of the Spinning Jenny. 1771—Arkwright’s first factory opens. 1776—US Declaration of Independence. 1829—Rainhill (locomotive) Trials. 1876—Patent granted for the telephone.	1833, 1842, 1847	Factory Acts passed to control children’s hours of work.	1856	Law passed to enforce all cities and counties to set up police forces.
	1851	The Great Exhibition showcased Britain’s industrial successes.	1870, 1880, 1899	Education Acts made education compulsory (1880) and free (1899) for working-class children.
			1867, 1884	Working men given the vote.

What was the Industrial Revolution?

Industrial Revolution, in modern history, is the process of change from an agrarian (farming) economy to one dominated by industry and machine manufacturing. These technological changes introduced new ways of working and living and fundamentally transformed society.

What was life like during the Industrial Revolution?

Housing:

Poor quality housing: houses were built very close together so there was little light or fresh air inside them. They did not have running water and people found it difficult to keep clean. Houses often suffered from damp due to their thin walls and roofs made out of cheap materials. Many households had to share a single outside toilet that was little more than a hole in the ground.



Children:

Parish apprentices: orphans from workhouses were "apprenticed" to factory owners, supposedly to learn the textiles trade. They worked 12-hour shifts, and slept in barracks attached to the factory in beds just vacated by children about to start the next shift.
Children were often chosen to perform the most dangerous jobs because they were smaller and able to get under machinery.
 They were employed as machine cleaners, in mines, chimney sweeps.

Factories: Long working hours: normal shifts were usually 12-14 hours a day, with extra time required during busy periods. Workers were often required to clean their machines during their mealtimes. □ **Low wages:** a typical wage for male workers was about 15 shillings (75p) a week, but women and children were paid much less, with women earning seven shillings (35p) and children three shillings (15p). For this reason, employers preferred to employ women and children. Many men were sacked when they reached adulthood; then they had to be supported by their wives and children. □ **Cruel discipline:** there was frequent "strapping" (hitting with a leather strap). Other punishments included hanging iron weights around children's necks, hanging them from the roof in baskets, nailing children's ears to the door and dowsing them in water butts to keep them awake.
Public water: people could get water from a variety of places, such as streams, wells and stand pipes, but this water was often polluted by human waste.
Pollution: coal was used to heat houses, cook food and heat water to produce steam to power machines in factories. The burning of coal created smoke, which led to terrible pollution in the cities.
Overcrowding: due to large numbers of people moving to the cities, there were not enough houses for all these people to live in. Low wages and high rents caused families to live in as small a space as possible. Sometimes whole families lived in one room.

What progress was made during the Industrial Revolution?

Public Health

- **Edwin Chadwick** set up Boards of Health in cities across Britain to investigate the cleanliness and hygiene of towns. He sent teams of doctors out around the country to figure out what was causing disease. He then wrote a report to the government that recommended cleaning up the streets!
- **John Snow** discovered the cause of cholera. He realised that people who were getting sick were all using the same water pump. When the water pump was shut off, cholera stopped. Snow realised it was contaminated water.
- **Joseph Bazalgette** solved the problem of the Great Stink by designing and building 134km of sewers under London in 1870. A canal is a long, narrow, man-made channel of still water. Canals were used to transport heavy goods such as coal and steel to factories. They were quicker and more efficient than using horse drawn methods on roads.

Transport

- **Railways** – locomotives were invented from as early as 1804 but the first use of widespread passenger train services was in 1829-30. Railways connected towns all over Britain and allowed for better trade but also for people to go on holiday!
- **Roads** – Turnpike Trusts were formed to improve Britain's roads – they charged a toll to travel on them and the

Inventions

- **Richard Arkwright** invented the water frame to speed up textile production.
- **James Watt** designed a steam engine that moved a wheel – steam could now be used to power machines.
- **George Stephenson** designed the first steam locomotive (engine)
- **Michael Faraday** discovered how to generate electricity.
- **Charles Babbage** designed the first 'computer' – a machine that could perform calculations.
- **Isambard Kingdom Brunel** was a master engineer who designed and built the Clifton Suspension bridge and the Great Western Railway.

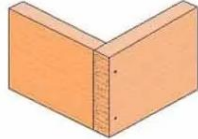
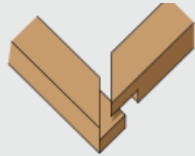
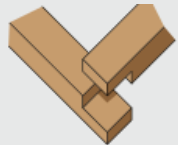
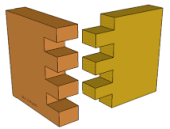
Medicine

- **Louis Pasteur** discovered germs were living things and heating would kill bacteria.
- **Florence Nightingale** was a nurse during the Crimean war. She advocated for cleaning the wards, washing hands and improving the cleanliness of wards. Death rates fell from 40% to 2%.
- **Edward Jenner** invented the first vaccine. He realised milk maids did not get Smallpox because they had already been exposed to cow pox.
- **Joseph Lister** realised that his patients were dying due to infection. He trialled using carbolic acid as an antiseptic and spraying all instruments with it. This massively reduced infection and led to

Knowledge Goals: Technology - Materials

Wood Joints

Finger Half-Lap Half-Lap Mitre Butt



Scales of production

One off production – These products are expensive at cost price, sometimes bespoke, and often take a long time to make and cost of materials & labour are high. Many prototypes are 'one off products'.

Batch production – these products are identical and produced in small batches, daily, weekly, monthly or when needed. They can range in cost priced. Production normally runs from between 2 - 10k.

Mass production – These products are produced in very high volumes, 10k+. They are normally products that are in high demand and can range in expense, cars are a good example.

Continuous production – These items are normally very cheap to but make and could be considered 'throwaway'. These factories are often found in developing countries where land for factories and equipment are cheaper.

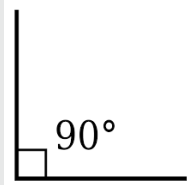
Just in time production (JIT) – This scale of production relies on the product been manufactured to a time schedule. This allows raw materials to be delivered at an exact time for production and then manufactured and are shipped straight to distribution /retailers. Apple INC uses JIT production.



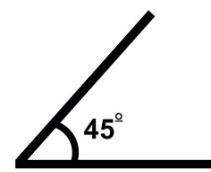
Plan of Manufacture: The steps to manufacture the product in order including health and safety and Quality Control

Maths

90 degrees



45 degrees



Saws

Tenon Saw
For straight lines



Mitre Saw
Sawing 45 degrees



Health and Safety

It is really important we **ASSESS** the RISK and **REDUCE** the RISK of Injury by **LISTENING** To the **TRAINING** and following the correct PPE usage

- Hair must be tied up in the workshop
- Blazers and ties must be removed
- Jewellery must be removed
- Only use machines you have been told to use and have been demonstrated to you
- Ensure you know where the emergency stop button is
- Do not eat or drink in the workshop
- No running

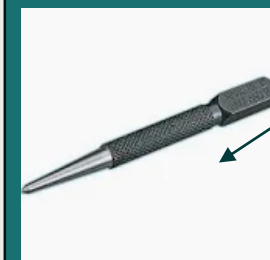


Cross-headed screwdriver



Engineers square

Mitre-Square



Scribe



Router

Knowledge Goals: Maths

Unit 7 – 3D Shapes		
Topic	Video	Resource
Naming and Properties of 3D shapes	Watch this And this	Complete this Check your work
Surface area of cube/cuboid.	Watch this	Try this Check your work
Volume of cube/cuboid.	Watch this	Complete this Check your work
Volume of a prism	Watch this	Complete this Check your work
Cylinders	Watch this	Complete this Check your work

Surface area

Sketching nets first helps you visualise all the sides that will form the overall surface area

For cubes and cuboids you can also find one of each face and double it

For other shapes - not all the sides are the same, so calculate the individually

Surface area - cylinders

The area of the circle $\pi \times \text{radius}^2$

The width of this face is the same as the circumference $\pi \times \text{diameter} \times \text{height}$

$2 \times \pi \times \text{radius}^2 + \pi \times \text{diameter} \times \text{height}$

Volumes

Volume is the 3D space it takes up – also known as capacity if using liquids to fill the space

Counting cubes
Some 3D shape volumes can be calculated by counting the number of cubes that fit inside the shape.

Cubes/ Cuboids = base x width x height

Remember multiplication is commutative

Prisms and cylinders = area cross section x height

Height can also be described as depth

Areas – square units
Volumes – cube units

Areas and volumes can be left in terms of π

Name 2D & 3D shapes

Circle, Square, Rectangle, Triangle, Rhombus, Trapezium, Parallelogram, Hexagon, Cone, Cylinder, Sphere, Cube, Triangular Prism, Tetrahedron, Cuboid, Square based Pyramid

Recognise prisms

A solid object with two identical ends and flat sides

The cross section will also be identical to the end faces.

A cylinder although with very similar properties does not have flat faces so is not categorised as a prism

Knowledge Goals - Music



Foley Studio

Click this link to learn about Foley Sound

https://www.youtube.com/watch?v=U_tqB4IZvMk

5 ways to use music IN FILM

In 1940, American composer Aaron Copland suggested that music can serve films in the following five ways.

- PRESENT A CONVINCING PORTRAYAL OF TIME AND SPACE.**
Pick a music genre that fits your story's time or setting. This will help suspend disbelief, making your film more compelling.
- REPRESENT UNSPOKEN THOUGHTS OR UNSEEN IMPLICATIONS.**
The anxiety-inducing buildup before an attack in *Jaws*, the unsettling Darth Vader march each time the villain appears—in these cases, music acts as a cue that something bad is coming.
- FILL AWKWARD SILENCES.**
To avoid unnatural silences, fill gaps in dialog and similar situations with neutral music. This type of music should complement the scene, but generally go unnoticed.
- CREATE A SENSE OF CONTINUITY.**
Music can help connect a series of scenes. Consider the montage, which strings together several seemingly unrelated scenes with a single song.
- BUILD AND ULTIMATELY END A SCENE, GRAND FINALE-STYLE.**
Virtually every movie ends with an epic score. This music helps provide a sense of closure and finality.

MusicForMakers.com

Key term	Definition	Example
Diegetic	Diegetic sound is any sound that the character or characters on screen can hear.	Dialogue, live music in the film, sound effects e.g., rain, banging a drum etc
Non-diegetic	Non-diegetic sound is any sound that the character or characters on screen cannot hear but the audience can.	Narration, background music etc
Dissonance	A combination of two (or more) tones/notes of different pitches that clash or sound jarring. Chromaticism creates dissonance.	Middle C and the C sharp above (a minor second).
Consonance	A combination of two (or more) tones of different pitches that results in a musically pleasing sound.	Playing a major C chord would sound consonant as the notes fit together to make a nice sound.
Soundtrack	A soundtrack is recorded music accompanying and synchronised to the images of a motion picture	Any music that accompanies a film or image on screen is a soundtrack
Underscore	An underscore is a soft soundtrack theme that accompanies the action in a performance.	Any music that is in the background of a film, generally non-diegetic music to create atmosphere.
Mickey-mousing	A technique that synchronises the accompanying music with the actions on screen. Matching movement to music.	Tom & Jerry actions and sound synchronised.
Leitmotif	A short, recurring musical phrase associated with a particular character, place, or idea.	<i>Jaws'</i> leitmotif plays when the shark is nearby.
Atonal	Atonality is simply the absence of tonality or key signature. The opposite of tonal music that has a key	Sci-fi films often use atonal music for outer-space scenes or magical scenes.
Montage	Different scenes or images put together in quick succession to portray a story or scene changes in a film or to look back on the past.	Scene from the film <i>Up</i> where clips are shown of Ellie and Carl's life together https://youtu.be/F2bk_9T482g

Knowledge Goals: Music







How are the elements of music used in the clips below?

[Indiana Jones – The Rope Bridge](#)

[Star Wars – Imperial March](#)

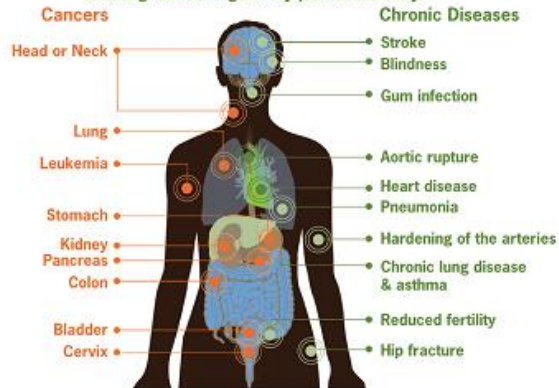
How Music Affects a Film

[How does the music change how we perceive each of the clips?](#)

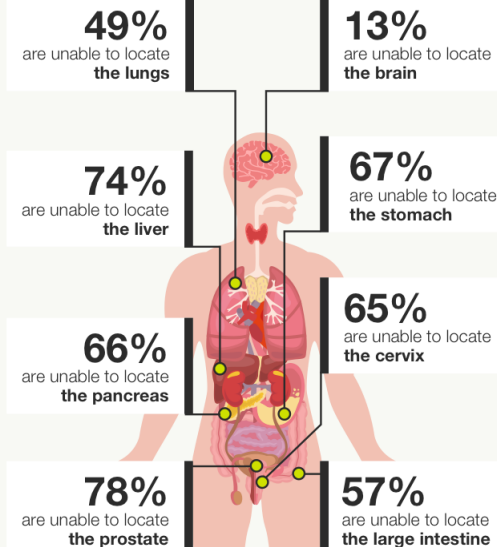
Year 8 Spring term Knowledge Organiser for Music		Film Music Composers	
How the Elements of Music are used in Film Music			
Key Term	Definition		
Melody/Pitch	<ul style="list-style-type: none"> Rising or ascending melodies/pitches are often used for <u>increasing tension</u>. Falling or descending melodies/pitches for <u>defeat</u>. Westerns often feature a big theme. Question and answer phrases can represent <u>good versus evil</u>. The interval of a fifth is often used to <u>represent outer space with its sparse sound</u>. 		John Williams <i>Star Wars</i> <i>Jaws</i> <i>Harry Potter</i>
Articulation	<ul style="list-style-type: none"> Legato (smooth) for <u>flowing or happy scenes</u>. Staccato (detached) for <u>'frozen' or 'icy' wintery scenes</u>. Accents (>) for <u>violence or shock</u>. 		Hans Zimmer <i>The Lion King</i> <i>Gladiator</i> <i>Dunkirk</i>
Dynamics	<ul style="list-style-type: none"> Forte to represent <u>power</u> Piano to represent <u>weakness/calm/resolve</u>. Crescendos used for <u>increasing threat, triumph or proximity</u> Diminuendos used for <u>things going away into the distance</u>. Horror Film soundtracks often use extreme dynamics or sudden dynamic changes to <u>shock the listener</u>. 		Danny Elfman <i>Mission Impossible</i> <i>Men In Black</i> <i>Spiderman</i>
Texture	<ul style="list-style-type: none"> Thin/sparse textures for <u>bleak, lonely scenes</u>. Thick/full textures for <u>active scenes of battles</u>. 		James Horner <i>Titanic</i> <i>Star Trek II</i> <i>Apollo 13</i>
Harmony	<ul style="list-style-type: none"> Major to represent <u>happiness</u>. Minor to represent <u>sadness</u>. Consonant harmony for <u>good</u>. Dissonant harmony for <u>evil</u>. 		Alan Silvestri <i>Back to the Future</i> <i>Forrest Gump</i> <i>Castaway</i>
Rhythm/Metre	<ul style="list-style-type: none"> 2/4 or 4/4 for Marches (battles) 3/4 for Waltzes, 4/4 for "Big Themes" in Westerns. Irregular Time Signatures used for tension. Ostinato (repeated pattern) rhythms for repeated sounds e.g. horses. 		Michael Giacchino <i>The Incredibles</i> <i>Star Trek (2009)</i> <i>Up!</i>

Risks from Smoking

Smoking can damage every part of the body



On average, **6 in 10 Brits (59%)** can't identify the body parts associated with major cancers.



Knowledge Goals: PDev

Public Health England Healthmatters

1/3 of births in Britain are unplanned or ambivalent

Impact on women:

- obstetric complications
- later for antenatal care
- antenatal and postnatal depression

Impact on children:

- birthweight
- mental and physical health
- do less well in cognitive tests

CONTRACEPTION

Contraception refers to the methods used to prevent pregnancy. There are around 14 methods, but only condoms and female condoms will protect you from sexually transmitted infections (STIs) as well.

WHERE CAN YOU GET IT?

Brook runs free, confidential sexual health and wellbeing services for under 25s. These services provide:

- contraception
- emergency contraception
- STI testing & treatment
- pregnancy tests & advice

Our service finder will help you find your nearest service, including Brook: brook.org.uk/find-a-service

EMERGENCY CONTRACEPTION

This can be used after unprotected sex, to prevent pregnancy. There are two types:

Emergency contraceptive pill (ECP) (AKA the 'morning after pill'): can be taken up to 5 days later. Available from a range of services and some pharmacies.

Intrauterine device (IUD): fitted by a doctor or nurse within 5 days. IUD is also a method of regular contraception.

Remember: if you've had unprotected sex you need to have an STI test too!

ABOUT BROOK SERVICES

- They're fully confidential (even if you're under 16)
- They're free of charge
- 'Drop in' and appointment booking available
- Bring someone with you if it helps
- No judgement - we've seen it all and simply care about your health

DID YOU KNOW?

Methods of LARC (long acting reversible contraception) are the most effective you can get. They are fitted or prescribed by a doctor or nurse, and can last for months or even years. See overleaf for the different types.

Find out more about contraception at: brook.org.uk/contraception

4 ways Pregnancy can change a Teenager's life

Education

21% of female NEETs in the UK are teenage mothers (1)

Housing

Teenage mothers and fathers are more likely to live in poor quality housing (2)

Children in Poverty

Children born to women under 20 have a 63% higher risk of being born into poverty (1)

Employment

Men who were young fathers are twice as likely to be unemployed at 30 (1)

Did you know? - 10 cancer facts

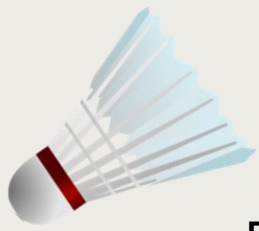
- There's no single food that can prevent or fight cancer. But to help lower your risk of cancer, start consuming a balanced plant-based diet. Ensure you're eating a variety of vegetables, fruits, soy, nuts, whole grains, and beans.
- Maintaining a healthy weight through regular physical activity can reduce your risk of cancer. But there is also evidence that physical activity reduces risk of bowel cancer, breast cancer, and endometrial cancer.
- Research shows that regular exercise helps to keep your hormone levels at a healthy balance. Whereas having high levels of some hormones can increase your risk of cancer.
- According to the NHS, lung cancer is responsible for roughly a quarter of cancer deaths in the UK. 90% of lung cancer cases are related to smoking. So if you smoke, quit smoking!
- Prostate cancer features among the top three most commonly diagnosed cancers in men. Dietary supplements that can decrease its risks include: Selenium, Vitamin E, Lycopene.
- Based on research, avoiding synthetic chemicals in cosmetics, cleaning and personal care products can reduce your chance of getting breast cancer. Many synthetic chemicals have been linked to health problems. Some of these are endocrine disrupting chemicals (EDCs), which can interfere with hormones to increase risk of breast cancer.
- Cancer doesn't just affect the old. Leukaemia, Lymphoma, and Central Nervous System Tumours are among the three most common forms of childhood cancer. Set an example for your kids. Avoiding stress, eating well and getting regular exercise can save a child's life.
- When it comes to cancer prevention, breast is best for mum and baby. Breastfeeding longer will give your child a stronger immune system for life and protect you from breast cancer.
- Over 2 million cases of skin cancer are diagnosed every year. Many of these are preventable through simple precautions. Avoiding indoor tanning and protecting skin from over exposure to the sun can prevent skin cancer.
- Early detection is key! Know your body. Know what's normal for you. And if something isn't right, consult your GP or doctor.

vaping myths & facts

- myth: vapes contain low or no nicotine**
fact: nicotine in 1 vape can = 50 cigarettes
- myth: vapes help you quit smoking**
fact: vaping makes you 3x more likely to take up smoking cigarettes
- myth: vapes aren't addictive**
fact: nicotine is both a stimulant and depressant - which is very pleasurable for your brain, making vapes very addictive
- myth: vaping aerosol is just flavoured water**
fact: vapes contain harmful chemicals
- myth: vaping isn't bad for health**
fact: vaping has been linked to serious lung disease

HARMFUL EFFECTS OF VAPING

- BRAIN**
 - Nicotine addiction
 - Headaches
 - Dizziness
 - Seizures
 - Tremors
 - Anxiety
 - Restlessness
 - Confusion
 - Attention problem
 - Learning and mood disorders
- EYES**
 - Irritation
 - Blurry
 - Vision
- MOUTH**
 - Irritation
 - Can cause gum disease
- THROAT**
 - Sore throat
- LUNGS**
 - Rapid, shallow breathing
 - Coughing
 - Wheezing
 - Permanent lung damage from diacetyl, a flavouring chemical, which scars tiny air sacs making airways thick and narrow
- HEART**
 - Increased risk of heart attack and stroke
 - Chest pain
- STOMACH & INTESTINES**
 - Vomiting
 - Nausea
 - Abdominal pain
- IMMUNE SYSTEM**
 - Can harm your immune system increasing your risk of illnesses
- ARTERIES**
 - Increases blood pressure and risk of heart attack and stroke



Badminton

- Serving** – I know the rules concerning service areas .I can perform both the Backhand and Forehand serves over a modified net.
- The Clears** – I can hit the shuttle high and with power over a modified net.
- The Drop Shot** – I can land the shuttle towards the front of the court, over a modified net.
- The Smash** – I can perform the smash using good technique and clear the modified net.
- Net Play**– I show good technique and land the shuttle close to the net.
- Game Play** – I am able to score correctly during a game



Hockey

- Ball Control** – I consistently use the stick to control the ball at increasing speeds and demonstrate changes of direction and pace in my work.
- Passing** – I can assess the technique of others and can offer assistance to improve technique. My reception position is low providing a "long bar" to stop the ball.
- Dribbling** – I can move with the ball in front of me either using short taps or rolling the ball with increasing speed.
- Tackling** – I can increasingly use the block tackle effectively in structured practice to breakdown another player's control of the ball.
- Game Situations** – I take advantage of taking free hits quickly to help my team gain ground up the pitch.

Knowledge Goals: PE

Football



- Ball Control** – I can control the ball comfortably with my feet and use other body parts but not always with control.
- Passing** – I can pass the ball accurately using my inside foot while not under pressure over a moderate distance.
- Defending** – I can *pressure* an opponent quickly and successfully tackle them in a 1v1.
- Dribbling** – I can dribble the ball with control when it is close to me and not under *pressure*.
- Shooting** – I can accurately shoot from a moderate distance using the inside of my foot.
- Game Situations** – I move into space in games and communicate with teammates and can maintain *possession* for short periods when the ball is at my feet.



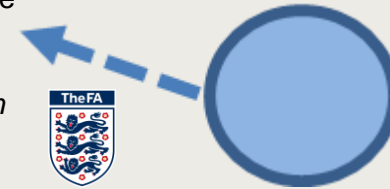
Netball

- Passing** – I am able to pass the ball accurately using a chest, shoulder and bounce pass and identify what pass should be selected for certain situations.
- Footwork** – I am able to demonstrate a good pivot technique when catching the ball and looking for my next pass.
- Attacking skills** – I can change direction to create a space to receive the ball.
- Defending skills** – I am able to mark a player with a ball demonstrating a knowledge of the rules; i.e. a 3 foot mark.
- Game Situations** – I can demonstrate an understanding of both an attacking and a defending position and where all positions can go on the court.

Gymnastics



- Floor** – I can perform an individual 6-8 action sequence including a variety of balances and linking movements, showing control and tension.
- Jumps** – I can perform flight movements (pike & straddle) from the springboard or trampette.
- Apparatus** – I can perform an astride, through vault and a neckspring off the end of the box.
- Performance** - I can perform simple movements and balances as part of a pair.



Rugby

- Evasion/Support Play** – I understand the 2nd 'principle of play' – support and can demonstrate this during drills.
- Passing & Catching** – I can catch a ball on the move that is passed accurately to me and then pass it to a team mate holding depth in attack and moving onto the ball at pace I can perform a 'loop' pass and manipulating defences
- Tackling/Defensive Strategies** – I can tackle an opponent using the side tackle and front tackle at speed
- Rucks & Mauls** – I can form a ruck and maul to successfully secure possession.
- Game Play** – I understand the different positions and the attributes needed to perform them. I understand the setup of 3-man uncontested scrums.

Knowledge Goals: PE

Half Term 4: Tier 3 Vocabulary

#	Key word	Definition
1	Long Bar	Method of stopping the ball with the stick low parallel to the ground
2	Free Hits	The “free hit” is awarded to a player when that person is fouled on the field of play by an opposing player.
3	Block Tackle	In this type of tackle, a player can dispossess an opposing player by stopping the ball with their stick parallel to the ground.
4	Flow	One movement flows seamlessly into the next
5	Drift Defence	The defence goes “up and out” as a defensive line to pressure the opponents
6	Magic Diamond	Lines of running for a "Diamond shape" attack system. The waves of players provide a number of different options.

Notes:

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Badminton



Football



Hockey



Netball



Rugby Union

Knowledge Goals: Physics - Work

Work done = force x distance moved in the direction of the force

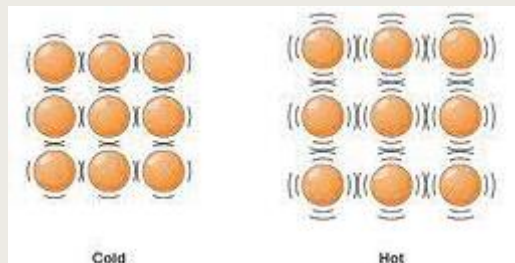
WORK AND ENERGY

- When a force causes a body to move (or deform), work is being done on the object by the force.
- The amount of work depends on the size of the force and the distance the object moves (displacement).
- Work done = energy transferred



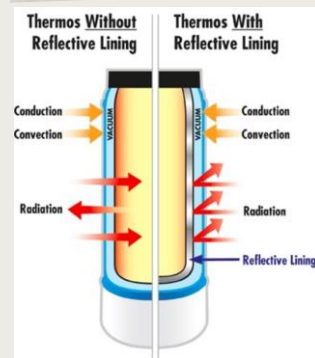
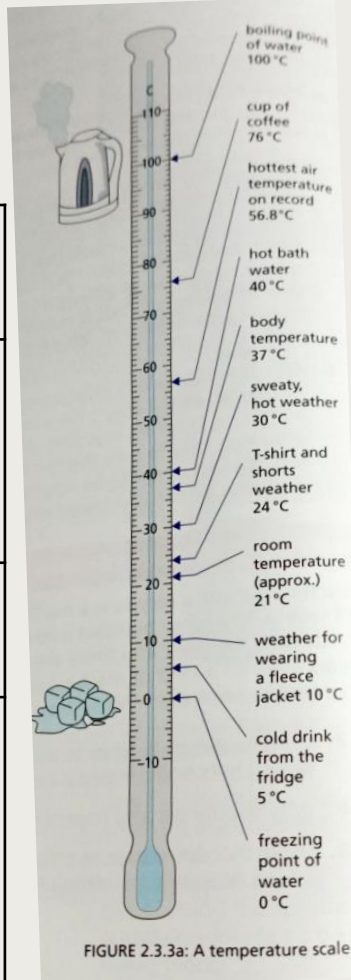
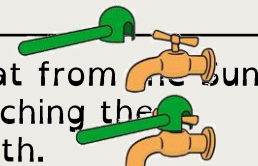
work done (J) = force (N) x distance moved (m)
 $= 10 \text{ N} \times 2 \text{ m} = 20 \text{ J}$

The reason why the lever makes the job easier is because the lever reduces the effort needed, since the distance through which the effort moves is larger.



	Conduction	Convection	Radiation
Diagram	 Conduction of Heat	 n	 Radiation
Needs particles?	yes	yes	no
How does it work?	Particles vibrate and collide.	Particles are heated and become less dense. Particles rise up. Particles become cooler and more dense.	Heat radiation is transferred as a wave from a hot object to a colder object.
Example	Metals teaspoon in a hot drink.	The air balloon. Hot air balloon.	Heat from the sun reaching the Earth.

Explain how the green lever makes it easier to turn the tap. The best answers will include the words: work force, distance, pivot.



Knowledge Goals: Year 8 Christianity

Christianity is one of the world's major religions. It is the world's largest religion, with about 2.4 billion followers.

Christians (like Jews and Muslims) believe in one God, who created the world and all that is in it.

Christians believe in the teachings of Jesus Christ, who was a middle-eastern preacher and healer who lived around 2,000 years ago.

Christians believe that Jesus Christ was sent down to earth to save people, by taking their punishment and dying on the cross.

The holy book in Christianity is called the Bible. A church is a building designed for Christian worship.



Christian Beliefs

God's Creation

- Christians believe that God created the Earth and everything in it in 6 days, resting on the 7th.
- The story of creation tells Christians that at first everything was dark, until God intervened and created matter.
- Details about this are found in the Bible in Genesis 1 and 2.

The Holy Trinity

- Christians believe that God can be seen in three ways, known as the Holy Trinity:
 - The Father – Creator of the world;
 - The Son – Who came to Earth as Jesus;
 - The Holy Spirit – God's power within Christians

The Ten Commandments

- In the Bible, ten 'commandments' are shared, which Christians should aim to live their lives by:
 1. You shall have no other Gods but me.
 2. You shall not make for yourself any idol.
 3. You shall not misuse the name of the Lord your God.
 4. You shall remember and keep the Sabbath day holy.
 5. Respect your father and mother.
 6. You must not commit murder.
 7. You must not commit adultery.
 8. You must not steal.
 9. You must not give false evidence against your neighbour.
 10. You must not be envious of your neighbour's goods.

The Life of Jesus Christ

- Christians believe that Jesus was the son of God. He was born to ordinary parents, Mary and Joseph, in Bethlehem. Christians celebrate the birth of Jesus on 25th December – Christmas Day.
- Jesus travelled around, teaching people about God and helping the sick. He chose 12 men to travel with him. They were his special companions and are known as the disciples.
- Jesus was sentenced to death for calling himself the son of God. He had a final meal with his disciples (known as 'The Last Supper') before being crucified. He is said to have died for the sins of man.

Answers to Important Questions

Where do Christians worship God?



- Christians can pray in any place, but the most common location is in a purpose-built building called a church. Churches can be very different – old, new, plain or highly decorated. Often, the floor plans of churches are shaped in a cross.
- Church services often include hymns, prayers, and readings from the Bible.
- Common church features include altar tables, lecturns, pulpits, fonts and stained glass windows

What is the Bible?



The Bible is the holy book of Christians. It contains the Old and New Testaments. The Old Testament is similar to the Jewish Bible and was written before Jesus' birth. The New Testament contains stories about Jesus, written by those who knew him.

How do Christians believe that people should live their lives



- Christians believe that people should be compassionate to one another, and show respect to God, themselves and one another.
- Christians believe that praying to God helps them to say sorry for the things that they have done wrong, and thank them for the blessings given to them.
- Christians believe that God wants them to carry on the good work that Jesus did in the world.

How many different types of Christians are there?



There are many different denominations (types) of Christians. All Christians were once Catholics, but other groups branched off many years ago.

- The biggest Christian denomination is still Catholicism. To Catholics, the Pope is Christ's representative on earth. Other major groups include Protestants (including Anglican/ Church of England faiths) and Orthodox.

Top 10 Facts

1. Christians believe that God is everywhere, and sees and knows everything.
2. About 1/3 of the world's population are Christian.
3. The word Christ comes from the Greek word meaning Messiah – God's chosen one.
4. Although Christmas is celebrated on December 25th, no one knows exactly what date Jesus was born on.
5. Sunday is the holiest day in Christianity – many people meet to worship on Sunday.
6. There is very little written about Jesus before the age of about 30, when he began preaching
7. Jesus knew that he was going to be betrayed, and that he would die. He tried to warn his disciples of this at the Last Supper.
8. Jesus was buried in a tomb, but the tomb was found later. He then appeared to the disciples.
9. Jesus eventually went back up to heaven to be with God – this is called the ascension.
10. The cross is the symbol of Christianity – a reminder that Jesus was crucified.

Knowledge Goals: Spanish

Mis vacaciones	My holidays
Generalmente ...	Usually ...
Normalmente ...	Normally ...
me quedo en casa	I stay at home
salgo con mis amigos por la noche	I go out at night with friends
vamos a la cafetería	we go to the café
voy a España	I go to Spain
Pero el año pasado ...	But last year ...
fui a Cuba	I went to Cuba
fuimos en avión	we went by plane
fuimos a un restaurante italiano	we went to an Italian restaurant
hice excursiones muy interesantes	I went on very interesting outings
jugué al fútbol	I played football
pinté	I painted

¿Adónde fuiste?	Where did you go (to)?
el año pasado	last year
Fui a ...	I went to ...
Alemania	Germany
Argentina	Argentina
Cuba	Cuba
Escocia	Scotland
España	Spain
Francia	France
Gales	Wales
Grecia	Greece
India	India
Inglaterra	England
Irlanda	Ireland
Italia	Italy
México	Mexico
Pakistán	Pakistan
Portugal	Portugal
República Dominicana	the Dominican Republic

¿Cómo fue?	What was it like?
Fue ...	It was ...
estupendo	fantastic
genial	brilliant
guay	great, cool
aburrido	boring
horrible	awful
un desastre	a disaster

Palabras muy útiles	Very useful words
a	to
con	with
en	in, by
¿cómo?	how?, what ... like?
¿adónde?	(to) where?
¿quién?	who?, whom?
¿qué?	what?

¡Buen viaje!	Have a good trip!
¿Adónde fuiste de vacaciones?	Where did you go (to) on holiday?
Fui a Madrid.	I went to Madrid.
¿Cómo fuiste?	How did you go?
Fui ...	I went ...
a pie	on foot
en autocar	by bus
en avión	by plane
en barco	by boat
en bicicleta	by bike
en coche	by car
en monopatín	by skateboard
en tren	by train
El invierno pasado ...	Last winter ...
El verano pasado ...	Last summer ...

¿Con quién fuiste?	Who did you go with?
Fui ...	I went ...
con mi familia	with my family
con mis padres	with my parents
con mis amigos	with my friends

¿Cuánto tiempo pasaste allí?	How much time did you spend there?
Pasé ...	I spent ...
diez días	ten days
una semana	a week
dos semanas	two weeks
un mes	a month

¿Qué hiciste?	What did you do?
Bailé.	I danced.
Descansé.	I had a rest/break.
Escuché música.	I listened to music.
Fui de excursión.	I went on an outing.
Jugué al voleibol en la playa.	I played volleyball on the beach.
Mandé mensajes.	I sent messages.
Monté en bicicleta.	I rode my bike.
Saqué fotos.	I took photos.
Tomé el sol.	I sunbathed.
Visité monumentos.	I visited monuments.
¿Qué tal lo pasaste?	What sort of time did you have?
¡Lo pasé bomba!	I had a fantastic time!
¡Lo pasé fenomenal!	I had a wonderful time!
¡Lo pasé guay!	I had a great time!
¡Lo pasé bien!	I had a good time!
¡Lo pasé mal!	I had a bad time!

Estrategia

Mnemonics

A mnemonic helps you to remember a difficult word or expression. A common type of mnemonic is a made-up phrase consisting of words whose first letters spell the word you want to remember. For example, to remind you how to spell **Inglaterra**, you could try using this mnemonic:

I
Never
Get
Long
At
Teatime
Eating
Ripe
Red
Apples

Choose a word from Module 3 that you want to learn to spell and make up a mnemonic for it.

Frayer Model Template

Definition	Characteristics
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
Examples	Non-examples

Framer Model Template

The diagram illustrates the Framer Model Template, which is a structured way to define and analyze a concept. It consists of a large rounded rectangle divided into four quadrants by a vertical and a horizontal line. In the center, where the lines intersect, there is a smaller, horizontally-oriented rounded rectangle. Each of the four quadrants is filled with horizontal lines for writing. The quadrants are labeled as follows:

- Definition** (Top-left quadrant)
- Characteristics** (Top-right quadrant)
- Examples** (Bottom-left quadrant)
- Non-examples** (Bottom-right quadrant)

The central box is intended for a key term or definition. The four quadrants are used to provide a formal definition, list characteristics, provide examples, and list non-examples.

Frayer Model Template

Definition	Characteristics
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
Examples	Non-examples

A central box is positioned in the middle of the table, overlapping the four quadrants.

Frayer Model Template

Definition	Characteristics
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Examples	Non-examples