



Bottisham Village College

KNOWLEDGE ORGANISER

YEAR 9 **TERM 2**



Bottisham Village College

At Bottisham Village College, we are striving to create a five-year curriculum plan that builds effective revision strategies into homework and lessons, to ensure that students are able to place powerful knowledge into their long-term memories. Additionally, we hope that this will help build effective learning strategies from early in their time here at the college.

Based on evidence, we know that regular recall activities are the best way of achieving this goal and committing powerful knowledge into the students' memories.

At the start of each term, we shall publish all the knowledge organisers that students will require for their studies in each curriculum area. These will cover a range of aspects: facts, dates, characters, quotes, precise definitions and important vocabulary. We are clear: if this fundamental knowledge is secured, students can then develop their higher-level skills of analysis and critical understanding with greater depth.

They will be given an electronic A4 Knowledge Organiser (KO) booklet for each term containing all of the knowledge required. In lessons, Bottisham staff will be regularly testing this fundamental knowledge, using short-quizzes or even more formal "Faculty Knowledge Tests".

The best way to use these organisers at home, is to follow a simple mantra:



1. Look at a certain aspects of a particular knowledge organiser
2. Cover up part of their knowledge organiser
3. Write it out from memory
4. Check and correct any spelling mistakes, missing bits or mistakes

So simple but so effective.

Body Adornment & Clay Sculpture

You will learn about what Body Adornment means, where it originated from and how it has changed through time.



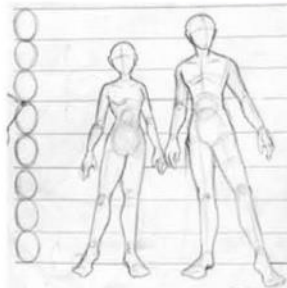
Contemporary Headress Adornment



You will create a double page of research on an aspect of body adornment



You will learn how to draw the figure and adorn it with inspiration from sculptures.



TOP TIPS

- Keep inside the lines to make a sharper image
- Keep your pencil sharp for more accurate lines
- Avoid scratchy shading by holding your pencil at roughly a 45° angle
- Avoid smudging your drawing by putting a piece of paper under your hand.



Key words;
Score & slip
Refine
Manipulate



You will learn how to sculpt a clay figure. You will also learn how to adorn it with different forms of mark making on clay & you will learn to refine your work appropriately.



Depending on which Technology rotation students are on, they may be working in Computing, D&T or Food Technology

Digital Literacy

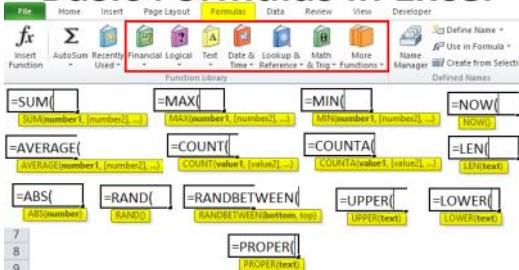
Excel tools: (Spreadsheet)

COUNTIF—counts a particular item within a range to tell you how many times it appears.

VLOOKUP—finds a value and tells you what it is.

IF Statement—an action is carried out depending on a value in a cell. For example, if the value >50, it will say you passed the exam, if <50, it will say you failed.

Basic Formulas in Excel



Dreamweaver tools: (website making)

Hotspot Image—an image on a site which had a hyperlink.

Rollover Image—an image which changes to another image when you hover your cursor over it.

Target Audience—who the site is aimed at.

Site map—how the site links together. Also called the navigation.

WYSIWYG—What You See Is What You Get.

Unit Topics:

Spreadsheets
Computer Systems recap
Programming
Website making

Programs use:

GoogleSlides, GoogleDocs
Microsoft Office
Python
Dreamweaver

E-safety

Digital Footprint—the trail of data you create while using the Internet.

Privacy Settings—the settings which can be applied so that you choose who sees your content.

Fake News—content which has been manipulated or incorrectly reported.

Photoshopping—editing images.

Age Restriction—an age limit in place to help protect users from seeing inappropriate content.



Need help? Search for:

Childline, internetmatters, ceop or thinkuknow for information and advice.

Computer Science

Python 3 cheatsheet (the basics)

Interact with the user (input and output)

```
Print a message:
print('Hello, world!')

Print multiple values (of different types):
ndays = 365
print('There are', ndays, 'in a year!')

Asking the user for a string
name = input('What is your name? ')

Asking the user for a whole number (an integer)
num = int(input('Enter a number: '))
```

Text (strings)

```
Single quoted:
'perfect!'

Double quoted:
"crash!"

Multi-line:
'''Hello,
World!'''

Add (concatenate) strings:
'Hello' + 'World!'

Multiply string by integer:
'Echo...' * 4

Length of a string:
len('Hello!')

Convert string to integer:
int('365')
```

Variables

```
Creating a variable:
celsius = 25

Using a variable:
celsius*9/5 + 32

Whole numbers (integers):
Addition and subtraction:
365 + 1 = 2
Multiplication and division:
25*9/5 + 32
Powers (2 to the power of 8):
2**8
Convert integer to string:
str(365)
```

Decide between options

```
Decide to run a block (or not):
x = 3
if x == 3:
    print('x is 3!')

Decide between two blocks:
mark = 80
if mark >= 50:
    print('pass')
else:
    print('fail!')

Decide between many blocks:
mark = 80
if mark >= 85:
    print('crash!')
elif mark >= 50:
    print('pass')
else:
    print('fail!')

elif can be used without else
elif can be used many times

Are two values equal?
x == 3
Are two values not equal?
x != 3
Less than another?
x < 3
Greater than another?
x > 3
Less than or equal to?
x <= 3
Greater than or equal to?
x >= 3
The answer is a Boolean:
True or False
```

String manipulation

```
Compare two strings:
msg = 'hello'
if msg == 'hello':
    print('hello!')

Less than another string?
if msg < 'n!':
    print('am')
else:
    print('am2')

Are strings compared character
at a time (lexicographic order)
Is a character in a string?
'!' in msg

Convert to uppercase:
msg.upper()
also lower and title

Count a character in a string:
msg.count('l')

Replace a character or string:
msg.replace('l', 'x')

Delete a character or string:
msg.replace('l', '')

Is the string all lowercase?
msg.islower()

Is a string in another string?
'ell' in msg
also isupper and istitle
```

Repeat a block (a fixed number of times)

```
Repeat a block 10 times:
for i in range(10):
    print(i)

Sum the numbers 0 to 9:
total = 0
for i in range(10):
    total = total + i
print(total)

Repeat a block over a string:
for c in 'hello!':
    print(c)

Keep printing on one line:
for c in 'hello!':
    print(c, end=' ')

Repeat a block over list (or string) indices:
msg = 'I grok Python!'
for i in range(len(msg)):
    print(i, msg[i])
```

Putting it together: Celsius to Fahrenheit converter

```
Ask the user for a temperature in degrees Celsius:
celsius = int(input('Temp. in Celsius: '))

Calculate the conversion:
fahrenheit = celsius*9/5 + 32

Output the result:
print(fahrenheit, 'fahrenheit')
```

Learn more in Intro. to Programming @ groklearning.com

Practitioners in Dance and Drama

Choreographic Process - Activities involved in creating dance.



Artistic intention— The decisions, made by theatre makers, to communicate deeper meaning through their work.

Dance Practitioners:

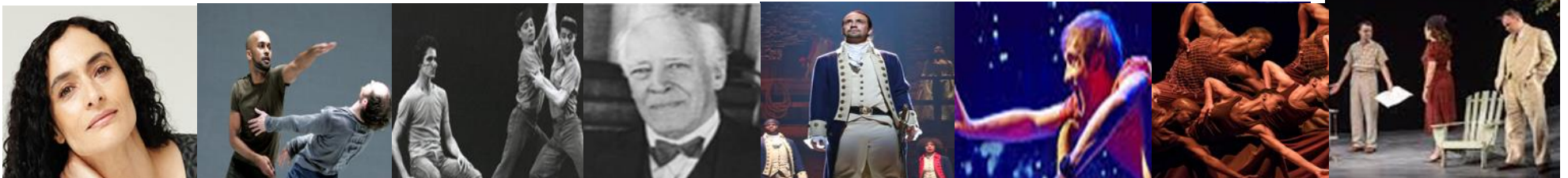
- **Andy Blankenbueler**
- **Jasmin Vardimon**
- **Akram Khan**
- **Christopher Bruce**
- **Alvin Ailey**

Useful Youtube Links

- Hamilton—https://www.youtube.com/watch?v=r1izVfVpBwE&ab_channel=LucijaBrnat
- Jasmin Vardimon— https://www.youtube.com/watch?v=6iunk83-TNk&ab_channel=JasminVardimon
- Stanislavski—https://www.youtube.com/watch?v=iB1fPZX5Zgk&ab_channel=Lux
- Frantic Assembly—https://www.youtube.com/watch?v=H_M7t-kdVLw&ab_channel=franticassembly
- Alvin Ailey—https://www.youtube.com/watch?v=Uj_qoMzTgpY&ab_channel=BrutAmerica

Drama Practitioners:

- **Konstantin Stanislavski**
- **Frantic Assembly**
- **Antonin Artaud**
- **Bertolt Brecht**
- **Lin Manuel Miranda**
- **Gecko**



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Knowledge organiser for the Year 9 Automaton Project



The fretsaw is a general workshop machine. It is used to cut and shape light materials such as acrylic, MDF and plywood. The materials cut more easily if they are quite thin, for instance, any material thicker than 10mm would be difficult to shape. The general rule is that the thicker the material, the slower the machine operator pushes the work against the blade.



CHAIN AND SPROCKET SYSTEM



LINKAGES



LEVERS



SPUR GEARS



PULLEY SYSTEM



DROP CAM



SCREW THREAD

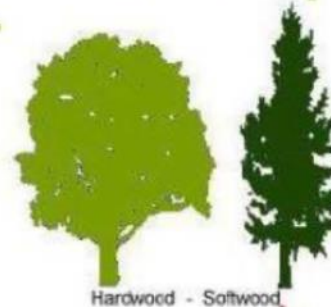


RACK AND PINION



SPRING

There are two types of Wood: **softwood** and **hardwood**. These names do not refer to the properties of the wood: some softwoods can be hard and some hardwoods can be soft. Softwoods, such as pine, come from **coniferous** trees. These keep their leaves all year round. They can be grown in renewable managed forests. This means that more wood can be grown to replace what's used.



Hardwood - Softwood

LINEAR MOTION



ROTARY MOTION



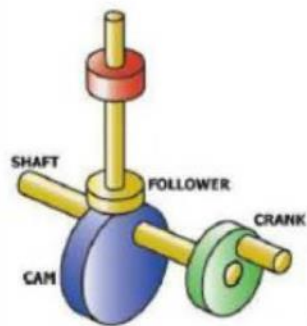
RECIPROCATING MOTION



OSCILLATING MOTION



PENDULUM CLOCK

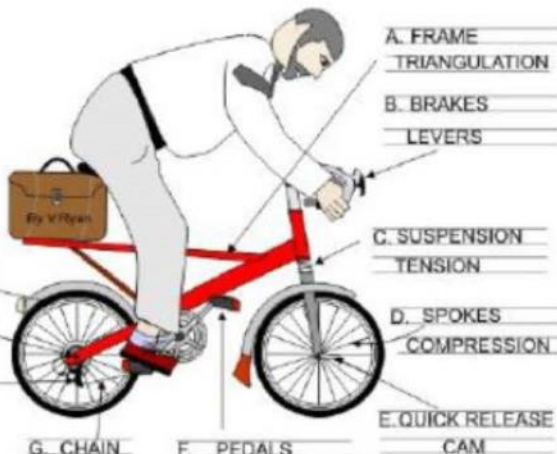


J. WHEELS

ROTARY MOTION

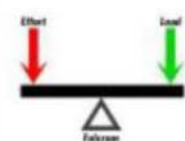
K. BEARINGS

H. GEARS

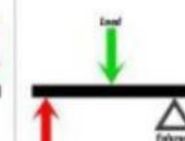


Key word Focus; Mechanism, ratchet, reciprocating, circumference, diameter, radius

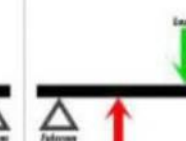
1st Class Lever



2nd Class Lever



3rd Class Lever



Gothic Writing

Definition of 'Gothic' writing:

Typical genre features:	Typical characters:	Typical settings:
1. Death and darkness	1. Mysterious characters with high social status e.g. Princes, counts	1. Wild landscapes
2. Supernatural (magic, ghosts, vampires, curses)	2. Female or feminine characters that are threatened by powerful men	2. Medieval style castles, churches or abbeys
3. Curses or prophecies	3. Threatening women who are monsters or vampires	3. Gloomy, decayed and ruined environments
4. Madness and intense emotions/paranoia	4. Powerful, tyrannical male figures	4. Remote, uninhabited places (older gothic) or monsters intermingling in every day life (newer gothic)
5. Mystery, terror and suspense	5. Villains, vampires, ghosts, werewolves, giants	5. Volatile and threatening weather (symbolism)

Social and Historical Context

- The term 'gothic' comes from the Germanic tribe 'the Goths', who played a part in the fall of the Roman Empire. The Goths are sometimes called barbarians. They destroyed a lot of Roman architecture in around C3 and replaced it with buildings in the gothic style.
- **Medieval Europe (C3-14)** is sometimes referred to as the '**Dark Ages**' (although this can be contested for a number of reasons.) Some believe that people lived in fear due to superstition and ignorance and that not much learning took place in this time. Castles with gargoyles were built to ward off evil spirits, this architecture is known as 'gothic' e.g. Notre Dame.
- Figures from **The Age of Enlightenment (C18-19)** believed that scientific progress was the only way to advance society, and great discoveries were made in this time. They tried to rid Europe of superstition and ignorance through promoting reason and logic.
- A group of poets, artists and thinkers called the Romantics challenged this because they believed that not everything can be explained by science, and too much reason rids the world of beauty and mystery.
- The gothic genre first emerged from the **Romantic movement**. It used art and ideas from the Dark Ages, wild emotion and nature to contrast modern ideas about science and logic.
- Gothic writing transformed into the format of the extremely popular **Victorian ghost story**.
- Today, we use the term 'gothic' widely to describe art, style, clothing (e.g. Alexander McQueen couture) music and film (e.g. Tim Burton films). The style and genre is very much still alive.

Values and ideas held by gothic writers

- Gothic writers are preoccupied with the supernatural because they believe that not everything has a scientific explanation.
- They believed that nature is 'sublime': it has the power to simultaneously inspire awe and terror in people.
- They challenged society's expectations about propriety and emotion. To show wild emotion was seen as crass and uncouth, but not to the gothic writers, who often depicted passion and rage.
- They explored the role of the female characters: often in gothic texts, there are powerful female roles, which contrasted the contemporary society.
- They were very interested in the psychological exploration of characters, particularly in relation to themes of madness.
- Big question: why is a genre that is so frightening so popular?

Notable Gothic texts (in chronological order)

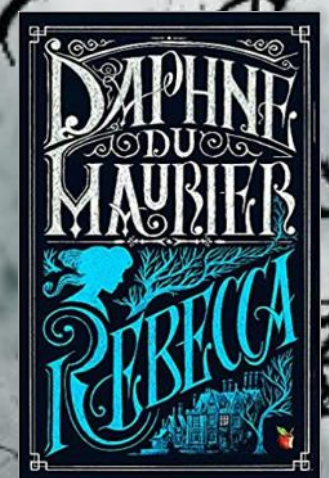
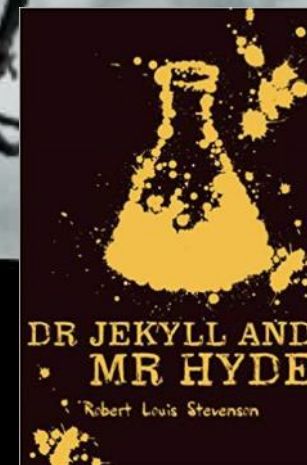
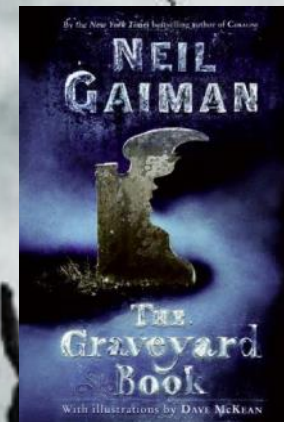
The Castle of Otranto – Horace Walpole, 1765	Vathek – William Beckford, 1786	Frankenstein – Mary Shelley, 1818	The Hunchback of Notre Dame – Victor Hugo, 1831	The Raven – Edgar Allen Poe, 1845	Wuthering Heights – Emily Bronte, 1847
The Strange Case of Dr Jekyll and Mr Hyde – R.L. Stevenson, 1887	The Picture of Dorian Gray - Oscar Wilde, 1890	Dracula - Bram Stoker 1897	Rebecca – Daphne Du Maurier, 1931	The woman in black - Susan Hill 1983	The Graveyard Book, Neil Gaiman 2008

Key vocabulary

Abstruse	Entrapment
Afflicted	Forbidding
Alienate	Grotesque
Anguish	Hopeless
Annihilate	Lamentable
Apprehensions	Lifeless
Beguile	Mournfully
Claustrophobia	Obscured
Decomposing	Sinister
Despair	Torturous
Dilapidated	Unleashed
Discomforted	Vengeful
Disfigured	Withered
Enigma	Wretched

Key techniques

Narrative voice	Semantic field
Sibilance	Assonance
Pathetic fallacy	alliteration
Contrast	Figurative
Imagery	Juxtaposition
Verb	Personification
Adjective	Symbolism



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Recipes to learn:

- Stir fry noodles
- Macaroni cheese
- Chicken, chorizo and
- chickpea stew
- Swiss roll
- Spanish tortilla
- Ratatouille
- Hob nob biscuit
- Shortbread
- Savoury rice
- scone

Scientific processes to learn

- Rubbing in – fat coats starch to limit the amount of gluten released
- Dextrinisation – starch turns brown in dry heat
- Denaturation – proteins change their structure when heated, whisked or mixed with acid
- Coagulation – proteins set when heated
- Aerating – adding air to a mixture to help it rise
- Caramelisation – sugar turns brown when heated.
- Convection heat – where heat is transferred through a liquid or gas.
- Conduction heat – where heat is transferred through solid materials.
- Gelatinisation – how starch thickens sauces



Skills to learn

- Chopping safely using the 'bridge and claw'
- How to 'rub in' butter and flour
- Sauce making (roux)
- Mixing
- Whisking
- Sautéing



Other topics to learn:

- Healthy eating
- Religion and diet
- Nutritional needs of different groups

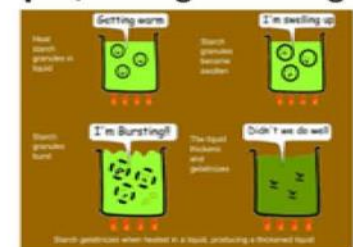
GELATINISE

starch grains swell and then burst open when heated with liquid, causing thickening

for example:

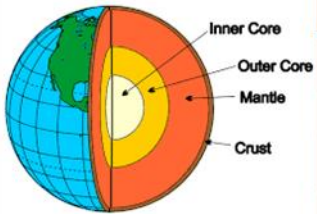
potatoes, rice and pasta soften

bechamel or cornflour sauces thicken



YEAR 9 GEOGRAPHY: Plate Tectonics, Earthquakes and Volcanoes

Key idea 1: There are a range of different tectonic processes



Structure of the Earth

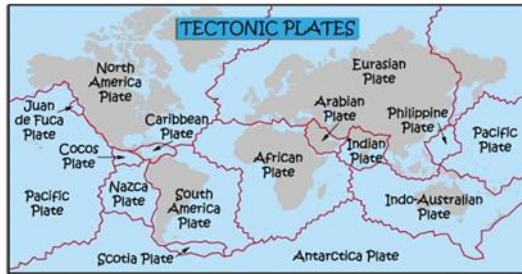
Inner Core	Made of solid iron, the hottest layer over 5000°C
Outer core	Made of liquid metals
Mantle	The largest layer. Made of semi-solid molten rock called Magma.
Crust	Made of huge plates of rock. These move and float on the mantle. There are oceanic plates and continental plates.

Tectonic Plates:

The crust is split into huge Plates. Tectonic plates are floating and slowly moving on the mantle. They collide at the plate boundaries (edges) which cause earthquakes and volcanoes.

Why do Tectonic plates move?

The core heats the bottom of the mantle. This rises to the crust, where it spreads sideways, and drags the crust along through friction.



Why is the UK safe?

Earthquakes and Volcanoes usually occur on the plate boundary which is where 2 plates meet. Countries such as the UK which are in the middle of a plate do not suffer large earthquakes and volcanoes.

Key term

Definition

Tectonic Plate

A large segment of the Earth's crust which can float and move on the semi-molten rock below.

Convection currents

The circular movement of magma, within the Earth's mantle, driven by heat from the core.

Oceanic crust

The denser, thinner part of the Earth's crust. Made of basalt rocks.

Continental crust

The less dense, thicker part of the Earth's crust. Made of granite rocks.

Primary impacts

Problems that occur immediately as a hazard strikes e.g. strong shaking, buildings collapse and roads and railways buckle.

Secondary impacts

The subsequent effects of the hazard – tsunamis, landslides, diseases and fires.

Key term

Definition

High Income Countries (HICs)

Rich and well developed. Good services and infrastructure.

Low Income Countries (LICs)

Poorer and less well developed. Services need developing.

Infrastructure

Key technology and services e.g. sewers, roads, electricity, water.

Prediction

Attempts to forecast where and when a hazard will strike.

Protection

Constructing buildings so that they are safe to live in and will not collapse.

Preparation

Plans and resources developed to be safe and ready in a hazard.

Key idea 3: The impacts of, and responses to, tectonic hazards vary between locations

Natural disaster risk hazards

Not all natural disasters have the same impact.. The scale of damage down will vary due to these factors:

HIC v LIC
Urban v Rural
Small size v Large
Local v Far away

LICs are less well prepared.
More people affected in cities.
More powerful hazards cause more impacts.
Hazards become less powerful the further you are from them.

Impacts of Natural disasters

Earthquakes

Volcanoes

Primary Impacts

Violent shaking
Ground liquefaction
Building collapse
Infrastructure damaged
Death and injury

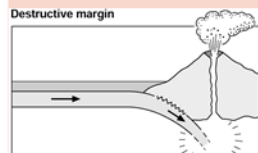
Pyroclastic flow
Lava Flows
Ash clouds
Volcanic bombs
Infrastructure damaged
Death and injury

Secondary impacts

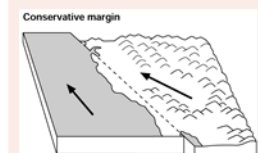
Healthcare overwhelmed
Roads, ports and airports closed
Homelessness
Emotional damage/grief
Businesses closed
Cost of rebuilding

Key idea 2: Tectonic processes result in different types of hazards

Types of plate boundary

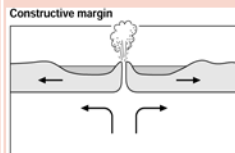


Dense, heavy oceanic crust subducts below a continental plate. Here it melts and forms a magma chamber.
Hazards: violent volcanoes and EQs.



Two plates slide past each other, folding the land but leaving no gap for magma (lava) to escape.
Hazards: violent EQs (no volcanoes)

Types of plate boundary

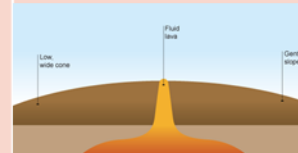


Two tectonic plates pull away from each other, causing friction and leaving a space for magma in the mantle to escape
Hazards: Volcanoes and EQs.

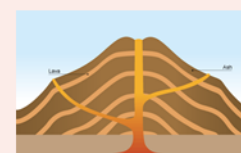
What process causes earthquakes?

Two plates rub against each other. This builds up pressure due to friction. Eventually, the pressure is released in huge shockwaves. This shakes the ground as an earthquake

Types of volcano



Shield: A wide, low volcano made of runny lava. Found at constructive boundaries. They are quite predictable.



Composite: A steep sided volcano found at destructive plate boundaries. Violent eruptions.

Managing Earthquakes

Prediction

Using maps and seismometers to say where earthquakes will happen. It is nearly impossible to predict when.

Protection

Rubber shock absorbers in the foundations. Steel frames that can sway without cracking. Shatter proof glass. Strong regulations for building design and quality.

Preparation

Emergency services and hospitals practice drills. Stockpiles of tents, medicines, food and water. Home safety plans and earthquake kits.

Year 9 GEOGRAPHY: How important is China?

Key term	Definition
Urban	Built up areas – cities
Rural	The countryside
Inequality	The unequal distribution of resources such as wealth, power and income

Key idea 1: China is a country of contrasts

There are huge variations in China, both in terms of its physical geography and its human geography, including levels of development. China is also a radically different country to the one it was in recent decades

Province	GDP/capita	Life expectancy	Adult literacy (%)	HDI
China (whole)	\$9,770	76	97	0.758
Shanghai (A)	\$22,799	84	97.5	0.867
Guizhou (B)	\$6,731	71	89.9	0.680



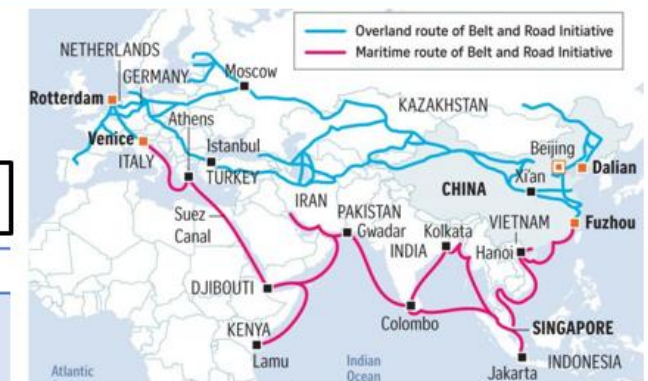
Key idea 3: China is having an increasingly important global role

The World's Factory

27% of China's overall economic output is from manufacturing, which also accounts for 20% of the world's manufacturing output. Factors like lower wages and less strict regulations for companies encourages investment.

China's Belt and Road Initiative

China is increasing it's reach around the world through this project, which is actually many separate investment and infrastructure construction projects in over 60 countries around the world.



Key term	Definition
Sustainability	Whether or not something will last into the future
Hydro-electric power (HEP)	Renewable electricity produced by turbines in a dam
Economy	The processes of the production and consumption of goods and services, and the supply of money

Key idea 2: Projects have tried to improve China's development

The Three Gorges Dam, on the Yangtze river

This has been constructed on the Yangtze river in central China. It is the third longest river in the world. The population of the Yangtze basin is over 358 million people. Purpose: : Flood control, power generation, improved navigation. Estimated construction cost: US\$ 25 billion

Impacts of the Three Gorges Dam	Positive	Negative
Social	<ul style="list-style-type: none"> Flood control Job creation Increased energy supplies 	<ul style="list-style-type: none"> Forced relocation of 1.2 million Flooding of over 1200 historical sites
Economic	<ul style="list-style-type: none"> Increased river navigation Increased energy supplies Job creation in construction 	<ul style="list-style-type: none"> Flooding of fertile farmland Huge cost Jobs are short term
Environmental	<ul style="list-style-type: none"> Reduced air pollution Renewable energy 	<ul style="list-style-type: none"> Increased water pollution Ecosystems damage

World War 1

What was it?

- A war that lasted four years, from 1914 to 1918.
- It was a war between the countries of Europe: The Triple Entente (Britain, France and Russia) against the Triple Alliance (Germany, Austria-Hungary and Italy) Due to some of these countries having large empires, other parts of the world were dragged into the conflict.
- Over 50 million people died, including 900 000 soldiers from Britain and her Empire. About 10% of the British soldiers who fought in the war were killed.
- The tension/anger left by the war was one of the main reasons from World War Two breaking out in 1939.

Key People

Franz Ferdinand: Heir to the throne of Austria Hungary. His assassination on 28 June 1918 was the event that triggered the war.

Gavrilo Princip: A member of the Serbian terrorist group, The Black Hand, who planned to assassinate Franz Ferdinand. Princip shot and killed Ferdinand when he was visiting Sarajevo, Bosnia.

General Sir Douglas Haig The commander of the British army from 1915 onwards. Historians have disagreed about whether or not he was a good commander.

General Ludendorff In 1918 he planned and led the German offensives that were designed to win the war for the Germans.

Wilson, Lloyd George and Clemenceau When the war ended, these were the leaders of the USA, the UK and France. They decided what would be in the Treaty of Versailles, a peace agreement signed in 1919 which outlined the punishments/ rewards from the war.

What caused it?

- Europe in 1914 was a tense place: France and Germany were enemies. Germany had defeated France in a war in 1871; France wanted revenge for that defeat. Following the war, Germany had taken part of France, called Alsace-Lorraine. The French wanted it back.
- Meanwhile, in the Balkans, Serbia wanted a coast, which meant taking land from Austria Hungary. This made the Austro Hungarians feel very threatened. Russia was very friendly with Serbia.
- Britain was worried about Germany becoming too powerful and taking Britain's empire. They were bothered that Germany was trying to build a navy which was as large as the Royal Navy.
- Austria-Hungary and Germany were in an alliance; Russia, Britain and France were also allies. On 28 June 1914 Franz Ferdinand, the heir to the throne of Austria Hungary, was assassinated by some terrorists who had been given weapons by members of the Serbian government. This set off a chain of events that led to the war breaking out.
- Austria-Hungary blamed Serbia for the death of Franz Ferdinand and threatened them; Russia objected to this as they were friendly with Serbia. Russia threatened Austria Hungary.
- Austria Hungary's ally was Germany, so when Austria Hungary was threatened by Russia, Germany threatened to go to war with Russia. But the Germans knew that if they went to war with Russia, France might attack them, because it was allied with Russia, and it wanted Alsace Lorraine back. So, to stop this happening, they went to attack France.
- They attacked France through Belgium, as part of the Schlieffen plan. Britain had promised to defend the Belgians in a treaty that they had signed in 1839. Also, Britain didn't want Germany to be the most powerful country in Europe, which she would have been if she had defeated France and Russia. Britain wanted to maintain the balance of power in Europe so Britain decided to join the war on 4 Aug 1914.
- Most people thought the war would be over quickly: it ended up lasting for 4 years.



Fighting in World War 1

The Trenches

- On the Western Front, the war took place in trenches. These were ditches that the soldiers dug into the ground to protect themselves from enemy fire.
- The line of trenches ran from the English Channel to the mountains of Switzerland. The British controlled the trenches in Belgium and Northern France up to the Somme. The French controlled the rest.
- Trenches varied, but a typical one would be ten feet deep, with a firing step. Barbed wire would be in front of it, and it would be protected by sandbags. The soldiers would sleep in dugouts: underground rooms that gave them some protection from shells. Usually there would be two or three lines of trenches, linked by communication trenches.
- It was very difficult to break through the trenches. This is because the defensive weapons used in the war were much better than the offensive weapons.
- **Machine Guns:** One machine gun could fire a thousand bullets in a minute. This made it very difficult to attack an enemy trench: your troops would be mown down.
- **Artillery:** Big guns that fired shells at the enemy. They were used to attack and to defend positions. Some the artillery had a long range, and could be fired from up to 5 miles away from the enemy. Most of the combat deaths in the war were caused by artillery.
- **A shell:** An explosive fired from an artillery gun. A big bullet!
- **Shrapnel:** These shells were packed with tiny metal balls. They exploded over the heads of attacking soldiers, raining down red hot metal on them.
- **Gas:** Poisonous gas was first used by the Germans in 1915. It was a scary weapon but was not that effective, as it could be countered by soldiers putting on gas masks. Later on, gas shells that could be fired from artillery were developed.
- **Tanks:** The first tanks were used by the British during the battle of the Somme. They were slow, and kept breaking down. Because they were a new weapon, the generals did not know how to use them. But they were the weapon of the future.
- **Aeroplanes:** These were a new weapon. They were very fragile and could not carry much weight. They were mostly used for reconnaissance—trying to work out what the enemy were doing by spotting them from the air.

End of WW1

- The USA joined the war in April of 1917. In the short term, this did not help the British and French because America had a small army, which needed to be transported across the Atlantic. They wouldn't start arriving until May 1918.
- Russia dropped out of the war in Nov 1917. This helped the Germans in the short term, because they could move their experienced troops to the Western Front. They had a chance to win the war before the Americans came. They needed to do so quickly, because they were running out of food and supplies due to the blockade.
- The Germans launched a massive attack in 1918. At first this was really successful, but by August 8th the attack had run out of steam, and the Germans were starting to run out of troops.
- The British and French counterattacked and pushed the Germans back. By Oct 1918 the Germans knew they had lost. The Armistice was signed on 11th November, ending the war.

Key topic terms

Allies Two or more countries who agree to work together in an alliance. The two alliances in WW1 were the Triple Entente and the Triple Alliance

Civilian Someone who is not a soldier

Armistice Where countries agree to stop fighting, usually because one side has defeated the other

Offensive A large, organised attack by one army on another army.

The Balkans Part of Europe to the North of Greece. Austria-Hungary & Russia both wanted to control the Balkans

Two front war Fighting a war in two separate places e.g. Germany fighting in France & Russia

Blockade When a country stops supplies from reaching another country. Britain used her navy to stop supply ship reaching Germany

Stalemate When neither side is able to defeat the other in a battle.

The Western Front Where the British and French did most of their fighting against the Germans. It was in Belgium and Northern France. Where the Germans fought the Russians was called the Eastern Front.

Key history terms

Cause: A reason why something happened e.g. the reasons why WW1 started

Inevitable: Definitely going to happen/unavoidable.

Evolve: Change/develop over time e.g. the tactics used in WW1 developed over time



Standard Form

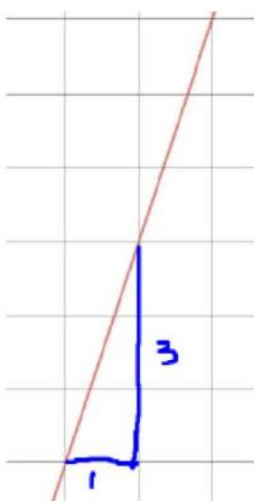
First significant figure must always be in the ones column.

$$1,200,000 = 1.2 \times 10^6$$

$$0.0034 = 3.4 \times 10^{-3}$$

Gradient of a line

How much the goes up/down for every one step across



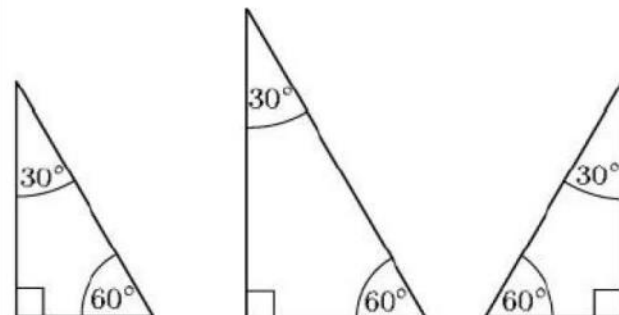
Similar Shapes

When a shape is enlarged:

The sides change length

Angles stay the same

The ratio of the sides stay the same



Maths – Year 9

Expanding pairs of brackets

$$(x + 3)(x + 5)$$

	x	3
x	x^2	3x
5	5x	15

$$x^2 + 3x + 5x + 15$$

$$x^2 + 8x + 15$$

Prime Numbers

Numbers with only themselves and 1 as a factor:

2, 3, 5, 7, 11, 13, 17, 19, ...

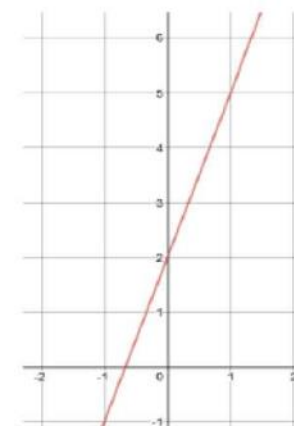
Linear Graphs

$$y = mx + c$$

m is the gradient

c is the y-intercept

$$y = 3x + 2$$



Nth Term of a linear sequence

How much is the sequence changing by each time? This is the times table it is similar to.

How much is the first term different from the timestable. This is what you add/subtract at the end.

2, 5, 8, 11, 14, 17, ... goes up in 3s. The first term is 1 less than 3 so the nth term is $3n - 1$

Indices

$a^m \times a^n$	a^{m+n}
$a^m \div a^n$	a^{m-n}
$(a^m)^n$	a^{mn}
a^0	1

Band Skills

Guitar Tab

What is Guitar/Ukulele/Bass Tab?

- Tab or tablature is a way of notating or writing down music.
- It shows a graphic representation of the strings and frets on the guitar fretboard.
- Each note is indicated by placing a number, which indicates the fret to play, on the appropriate string.

The Lines

- When reading guitar tab you will see six lines.
- The thickest string on the guitar or bass is the one nearest your chin, with the thinnest string being the closest to the floor.

The Numbers

- The numbers show which **fret** to play – where the number is written will show which string is to be played.
- Frets are the metal strips that run across the fretboard.

Drum Tab

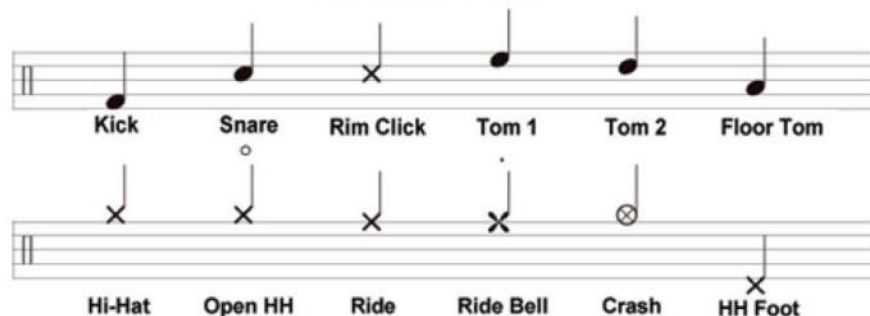
What is Drum Tab?

- When reading drum tab you will see five lines (like the normal stave).
- Instead of having different notes on the stave, each place is a different part of the drum kit.

The note heads

- The head of the note changes to tell the drummer how to hit the drum or cymbal, for example whether it is a click, a rim shot, or an accent

NOTATION KEY



KEYWORDS

1- Melody – The main tune of a song, often sung.

2- Chord – 2 or more notes played simultaneously.

3- Bassline – the bottom part of a song, played in the left hand of the piano or on the bass guitar.

4- Riff – a repeated pattern

5- Hook – a musical idea, often a short riff, passage, or phrase, that is used in popular music to make a song appealing and to "catch the ear of the listener".

6- Arrangement – the order/structure you choose to play a piece of music

7- Balance – ensuring each part and instrument can be heard, with the main parts playing out.

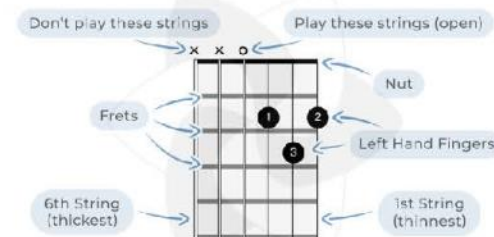
8- Rhythm – a) the combination of different note durations in a piece.
b) The instruments that keep the pulse of a song.

9- Verse – the parts of a song that change lyrics, telling the story, that precedes a chorus.

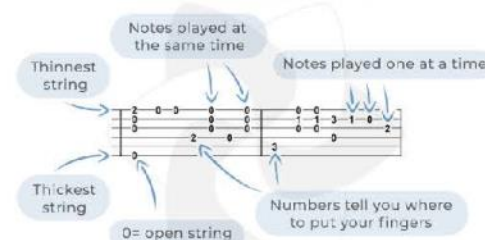
10- Chorus – the repeating section of a song, usually following a verse, which sums up the theme of the song.



READING CHORD BOXES



READING TAB



Year 9 Music – Composing - Songwriting

KEYWORDS

- 1- **Chord**: 2 or more notes played simultaneously.
- 2- **Chord Sequence**: A set order of chords that usually repeats during a song.
- 3- **Cadence**: the two chords at the end of a musical phrase.
- 4- **Riff**: short repeated phrase in popular music.
- 5- **Melody**: the main tune of a song, made up of several phrases
- 6- **Phrase**: a short musical passage; a musical sentence.
- 7- **Motif**: a short musical idea, a musical word, part of a phrase
- 8- **Bass**: the lowest part of a piece, often providing harmonic support.
- 9- **Modulation**: Change from one key to another.
- 10- **Sequence**: the repetition of a musical phrase at a higher or lower pitch than the original.
- 11- **Imitation**: Repeating a line with some changes
- 12- **Harmony**: chords, parts that play together simultaneously create chords, such as backing vocals or a countermelody

COMPOSING BASS LINES

ROOTS AND STEPS CAN MAKE THE BASS LINE MORE INTERESTING



Oh Suzana in C major pentatonic



MAJOR CHORD PROGRESSIONS

I	ii	iii	IV	V	vi	vii°
Major	Minor	Minor	Major	Major	Minor	Diminished
A	B	C#	D	E	F#	G#
B	C#	D#	E	F#	G#	A#
C	D	E	F	G	A	B
D	E	F#	G	A	B	C#
E	F#	G#	A	B	C#	D#
F	G	A	Bb	C	D	E
G	A	B	C	D	E	F#

4 Rules for Chord Progressions

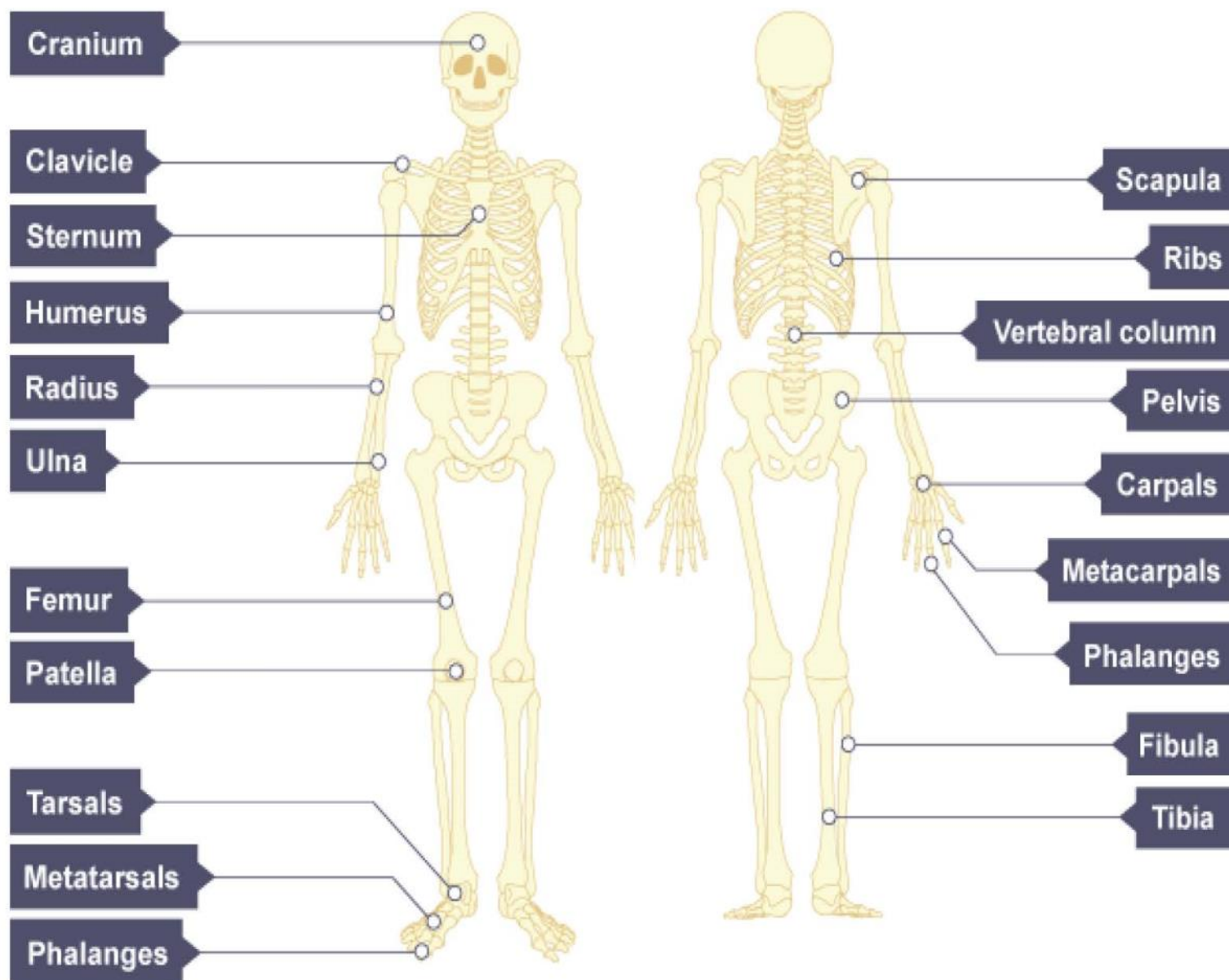
1. Start and end on chord I
2. The primary/major chords are strong (I, IV & V)
3. The minor chords add some interest and variety (but avoid using iii)
4. NEVER use chord vii (diminished)

3 hints for Basslines

1. Bass them around the root (bottom) note of the chord
2. Use other notes of the chords for interest
3. Add some rhythm for character
4. Add passing notes (the notes between the chord notes)

5 characteristics of a good melody

1. Starts and ends on the same note (C)
2. Moves mainly by step
3. Has a smooth contour/shape (join the dots and see what shape it makes!)
4. Has 2 or 4 bar phrases
5. Uses similar short motifs (ideas) to give it a clear character (see how the top and bottom lines look similar?)



Functions of the skeleton:

- ∞ Provides support and posture for the body.
- ∞ Protects vital organs.
- ∞ Allows movements
- ∞ Contains marrow, which produces blood cells.
- ∞ Stores minerals.

Challenge

Can you think of sporting examples for the functions of the skeleton?

Key Term	Definition
Media	Mass form of communication
Examples of Media	TV, Radio, Films, Youtube, Social Media, Newspaper, Vlogging and Books
Blasphemy	the action or offence of speaking disrespectfully about God or sacred things.
Freedom of Speech	the power or right to express one's opinions without censorship.
Censorship	is the practice of limiting access to information, ideas or books in order to prevent knowledge.

Unit 1: Is the media helpful to religion?



Media with religious themes	Themes
Prince of Egypt, Bruce Almighty, Evan Almighty, Life of Brian, Joseph and his Amazing Technicolour Dream coat, Chronicles of Narnia – The Lion, the Witch and the Wardrobe. TV: Vicar of Dibley, Simpsons Episodes	Forgiveness, bravery, history, characteristics of God, compassion, charity, ideas of life after death, enlightenment/Knowledge/Wisdom.
<u>Controversy:</u> Concepts and ideas surrounding the Da Vinci Code and the claims made about Jesus Christ and Mary Magdalene.	<u>Symbolism in Art</u> Use of religious icons – dove – represents peace and the idea of Holy Spirit.

Skills in REP

Debate

Empathy

Enquiry

Discussion

Analysis

Key words
Believe / Belief
Faith
Moral
Religion



Advantages of Social Media

- Connects the global community.
- People prefer to use technology than face to face.
- Can help in an educational setting – i.e film clips, videos, articles...
- Appealing to the younger generation.

Disadvantages of Social Media

- Not everyone has access to the right technology.
- People mis-use religion to scare people.
- Distract people and lose meaning.
- Can be lonely – take away community/social ideas.
- Distract people and lose meaning.

