

A central graphic featuring a star shape formed by the tips of several hands. The hands are in various colors: light blue, light orange, light pink, and light purple. The text is overlaid on this graphic.

# **Year 8 Knowledge Organiser**

## **Spring Term 2024/25**

**Name:**

**Form:**

## Week 1/A

	Tutor Time	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	After School
Time							
Monday							
Tuesday							
Wednesday							
Thursday							
Friday							

## Week 2/B

	Tutor Time	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	After School
Time							
Monday							
Tuesday							
Wednesday							
Thursday							
Friday							

## Contents Page

Page	Content
1	Policies, Pastoral Contact & Term Dates
2	Personal Details
3 – 4	Calendar
5 – 6	Homework Log and Parental Check
7 – 8	Reading Log
9 – 10	Reading Passport
11 – 12	Instructions and Revision Strategies
13 – 14	Art
15 – 16	Citizenship
17 – 18	Computing
19 – 20	Drama
21 – 22	English
23 – 24	Food Preparation and Nutrition
25 – 26	French
27 – 28	Geography
29 – 30	German
31 – 32	History
33 – 34	Mathematics
35 – 36	Music
37 – 38	PE
39 – 40	Religious Studies
41 – 42	Science – Chemistry
43 – 44	Science – Physics
45 – 46	Spanish
47 – 51	Technology

# Spring Term

## **Attendance and Absence**

In cases of absence, parents are asked to contact the relevant year office as early as possible, giving details. The only acceptable reasons for absence are unavoidable ones such as illness. Appointments of all kinds should be made out of school time whenever possible.

## **Punctuality**

While some delays are unavoidable, pupils should be punctual to lessons. Anyone arriving late to school must report to the relevant year office and use the late system in order to get a mark. Late registration is an **unauthorised absence**.

## **Pastoral Support Contacts**

Telephone Number:

Email Address:

## Term Dates Summary

<b>Autumn Term 2024</b>		
Wednesday 4 Sept - Thursday 24 Oct 2024	Half-term: Monday 28 Oct – Friday 1 Nov 2024	Monday 4 Nov – Friday 20 Dec 2023
<b>Spring Term 2025</b>		
Thursday 7 Jan - Friday 14 Feb 2025	Half-term: Monday 17 – Friday 21 Feb 2025	Monday 24 Feb – Friday 4 Apr 2025
<b>Summer Term 2025</b>		
Monday 23 Apr – Friday 23 May 2025	Half-term: Monday 26 – Friday 30 May 2025	Monday 2 Jun - Tuesday 22 Jul 2025

My best subject is:

What I want to achieve this term:

School Login Details:

My extra curriculars this term:

# Spring Term Calendar

January 2025		
1	Wed	Xmas &
2	Thu	New Year
3	Fri	Break
4	Sat	
5	Sun	
6	Mon	Training Day
7	Tue	
8	Wed	
9	Thu	
10	Fri	
11	Sat	
12	Sun	
13	Mon	
14	Tue	
15	Wed	
16	Thu	
17	Fri	
18	Sat	
19	Sun	
20	Mon	
21	Tue	
22	Wed	
23	Thu	
24	Fri	
25	Sat	
26	Sun	
27	Mon	
28	Tue	
29	Wed	
30	Thurs	
31	Fri	

February 2025		
1	Sat	
2	Sun	
3	Mon	
4	Tue	
5	Wed	
6	Thu	
7	Fri	
8	Sat	
9	Sun	
10	Mon	
11	Tue	
12	Wed	
13	Thu	
14	Fri	
15	Sat	
16	Sun	
17	Mon	Half Term
18	Tue	Half Term
19	Wed	Half Term
20	Thu	Half Term
21	Fri	Half Term
22	Sat	
23	Sun	
24	Mon	
25	Tue	
26	Wed	
27	Thurs	
28	Fri	

# Spring Term Calendar

March 2025		
1	Sat	
2	Sun	
3	Mon	
4	Tue	
5	Wed	
6	Thu	
7	Fri	
8	Sat	
9	Sun	
10	Mon	
11	Tue	
12	Wed	
13	Thu	
14	Fri	
15	Sat	
16	Sun	
17	Mon	
18	Tue	
19	Wed	
20	Thu	
21	Fri	
22	Sat	
23	Sun	
24	Mon	
25	Tue	
26	Wed	
27	Thu	
28	Fri	
29	Sat	
30	Sun	
31	Mon	

April 2025		
1	Tue	
2	Wed	
3	Thu	
4	Fri	
5	Sat	
6	Sun	
7	Mon	Easter Break
8	Tue	Easter Break
9	Wed	Easter Break
10	Thu	Easter Break
11	Fri	Easter Break
12	Sat	
13	Sun	
14	Mon	Easter Break
15	Tue	Easter Break
16	Wed	Easter Break
17	Thu	Easter Break
18	Fri	Easter Break
19	Sat	
20	Sun	
21	Mon	Easter Break
22	Tue	
23	Wed	
24	Thu	
25	Fri	
26	Sat	
27	Sun	
28	Mon	
29	Tue	
30	Wed	

# Homework Log and Parental Check

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



# Homework Log and Parental Check

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

# Reading Log

Use this reading log to keep a record of the books you read during the year. You should also use this reading log to record the books from the Reading Passport that you have read but make sure your tutor records them too.

Title and Author	Date	Starting Page	Last Page	Review and Test Score	Reading Log
					Teacher Initials
Title and Author	Date	Starting Page	Last Page	Review and Test Score	Reading Log
					Teacher Initials
Title and Author	Date	Starting Page	Last Page	Review and Test Score	Reading Log
					Teacher Initials

Title and Author	Date	Starting Page	Last Page	Review and Test Score	Reading Log
					Teacher Initials
Title and Author	Date	Starting Page	Last Page	Review and Test Score	Reading Log
					Teacher Initials
Title and Author	Date	Starting Page	Last Page	Review and Test Score	Reading Log
					Teacher Initials

# Year 8 Reading Passport

We have created a Reading Passport to inspire students to read some of the best literature available to them. Over the course of the year, we expect students to read as many of the texts included in the passport as possible.

---

If students manage to read seven or more books from this passport by the end of the year, they will receive a certificate. They can read other books and texts throughout the year and we encourage and support wider reading. Students can track which texts they have read using the tick boxes on the next page.

---

The books selected are fantastic examples of modern and classical literature, representing the best the world has to offer. Students can read these texts independently or they could listen to them as audiobooks. The important thing is to experience a variety of genres, authors and stories! We hope that all students will finish Year 11 having read at least thirty-five incredible books.

---

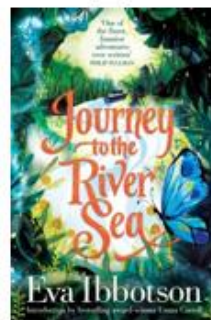
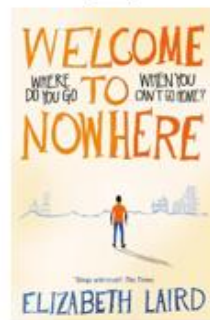
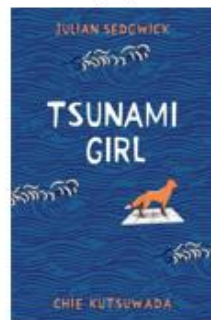
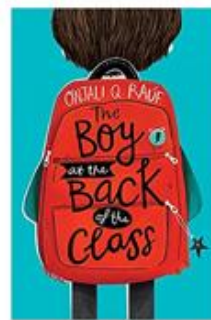
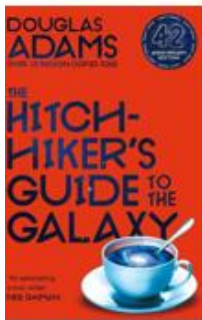
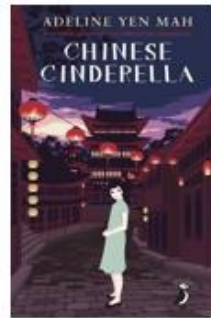
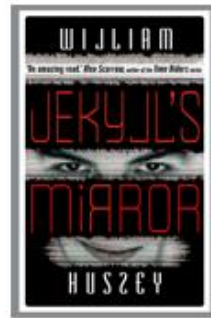
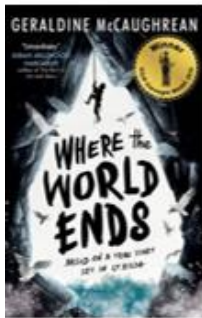
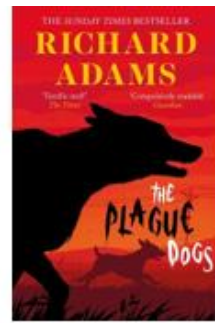
The easiest way to get hold of these books is from our school library where students can take them home to read. These texts can also be purchased from Amazon or from many local bookstores.

---

Whilst every care has been taken to check the suitability of the books included in our Reading Passport, we are aware that children mature at different rates. Therefore, we strongly recommend that parents discuss their child's reading choices to ensure they are appropriate for them.



# Year 8 Reading Passport



# Instructions for Using Your Knowledge Organiser

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

On pages 5 and 6 there is space for you to record the subjects you have studied to make sure you are giving equal time to all of them. Your parent should sign off your homework each evening on these pages.

Your parent should also sign your reading log on pages 7 and 8. You can use the note pages in this booklet to help with your studies.

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

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

## 8 Top Revision Tips

1

### Start Early

Last minute cramming is stressful and has limited success.



2

### Make a Plan

Work out how much time you have and how much of it you can spend on each subject.



3

### Pick a Good Spot

Find a quiet and comfortable spot away from distractions and keep all of your things in one place.



4

### Find a Good Method

Choose the best revision methods for you and try to use a mixture of methods for the best results.



5

### Takes Breaks

It is possible to work too hard! Your brain needs rest and time to process the information you've studied.



6

### Revise with Friends

Talking through what you've learned with a friend can help information stick.



7

### Use Past Papers

These are a great way to test yourself and a good way to get used to the exam format



8

### Eat Well

You need to maintain a healthy diet to be able to retain information and not lose energy or focus during study.



## LONG TERM MEMORY



## Retrieval Practice

Create your own quizzes based on topics.  
Create them, test yourself or get someone to test you, it works!



## Deliberate Practice

Apply your knowledge!  
Revise it, practice exam questions and then go over using your notes, adding or redrafting!

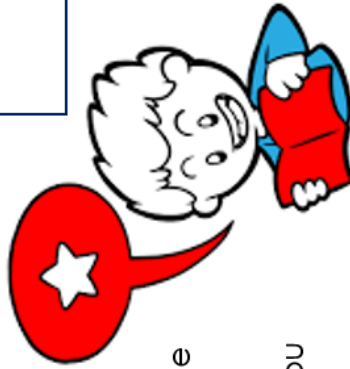
## Answer Planning

Practice planning exam question answers.  
Bullet point, speed plan and draft key paragraph questions.



## Read Aloud

Simply speak the facts and dates out loud as you're reading the Knowledge Organiser. Even try to act out some of the facts – it really helps you remember!



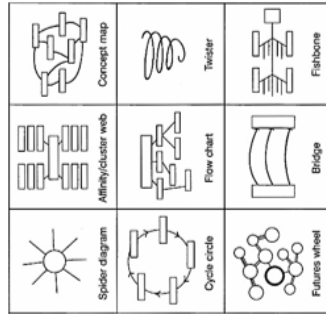
## Sketch it

Draw pictures to represent each of the facts or dates. It could be a simple drawing or something that reminds you of the answer.



## Graphic Organisers

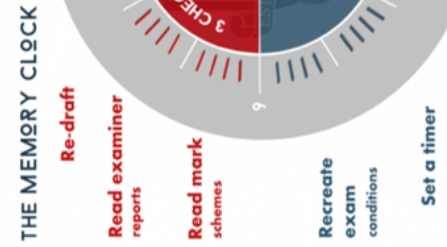
Transform the information into visual revision to create links, show a narrative, identify the causes, consequences and importance.



**PRACTICE**  
**MAKES**  
**PERFECT**

**Practice!**  
Some find they remember by simply writing the facts over and over again.

**Hide and Seek**  
Read through your knowledge organiser / book, put it down and try and write out as much as you can remember. Then keep adding to it until it's full!



## Flashcards



Create with questions on one side and answers on the other side. Colour code specific topics and quiz yourself.

## Record It

Record yourself on your phone or tablet reading out the information. These can be listened to as many times as you want!



## Post its

Using a pack of post-it notes, write out as many of the keywords or dates as you can remember in only 1 minute!

## Teach it!

Teach someone your key facts and then get them to test you, or even test them!

# Year 8 Spring Term Knowledge Organiser

## Art – Typography– Printmaking:

**Printmaking** is the process of creating artworks by printing, normally on paper. Printmaking normally covers only the process of creating prints that have an element of originality, rather than just being a photographic reproduction of a image or a painting.

Art Specific Language and Terms		
<b>Typography</b>	Typography is the art and technique of arranging type to make written language legible, readable, and appealing when displayed.	<b>Screen Printing</b>
<b>Lino-cut Printing</b>	Lino-cut printing is a form of printmaking where the printing plate is cut into lino. The lino-cut is then inked, a piece of paper placed over it and then run through a printing press or pressure applied by hand to transfer the ink to the paper.	<b>Graphic Designer</b>
		A printing technique where a mesh or screen is used to transfer ink onto a surface, except in areas made impermeable to the ink by a blocking stencil.
		Graphic designers create visual concepts, using computer software or by hand, to communicate ideas that inspire, inform and captivate consumers. They develop the overall layout and designs for advertisements, brochures, magazines and branding.

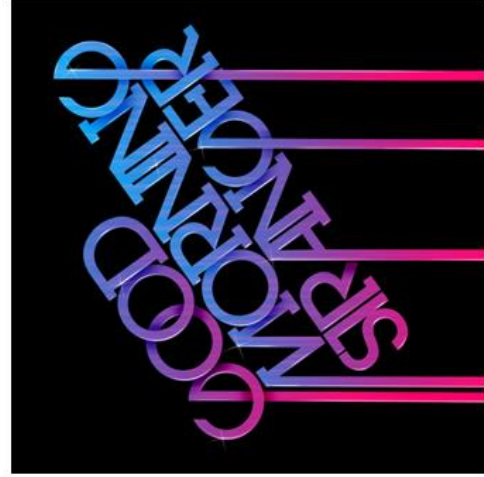
### Typographical Art:

BURNING! ALL BRIDGES SHE WON'T EVEN KNOW WHAT THAT MEANS, SHE IS SO BEAUTIFUL THOUGH. TWELVE FIFTY FOR MY FIFTY, IT PAINTING CAUGHT BETWEEN EGO AND TRUE SELF. THANK YOU FOR THIS DAY, YOU ISUALISING MY WORLDWIDE SUCCESS AS THE GREATEST ARTIST OF MY GENERATION, PRAYING TO GOD THAT HE SENDS ANGELS MEH Y SOULMATE PRETTY SOON, MUM USED TO DRIP ME AND LIL BRO AT SCHOOL AND SAY WE WERE BLESSED AND FAVOURED. WE GIL AND WE ARE WALKING MIRACLES MORE WILF SEEBEN, FEET AND A SUPER PLEASE FORGIVE ME FOR MY SIN, I DISCOVERED MY LIFE'S PURPOSE IS TO EX DRIVE TO AS I WANT TO DO THAT IS ALL THAT MATTERS. I GIVE THANKS BY JOEL OSTEN, HIS ADDRESSING THAT GOD HAS GREAT THING'S TO PLANED 4 US, THIS IS A TEMPORARY WORLD, A WAITING ROOM BEFORE PARADISE, HER FACE LOOKS LIKE PARADISE, HEART-SHAPED FACE AND LIPS MAKE ME GOOH JUST AND HER GODD VERATION PUT THAT SPITLIGHT ON ME, PLEASE DO NOT FORGET TO BRAG, WE KNOW THE FAMILY CAN LIVE UP TO HIS NAME, I'M NOT TAURUS & MATRONS EXHIBITION YESTERDAY, THANK YOU FOR THE INSPIRATION, PICASO. PERHAPS I JUST WANT TO BE FAVOURED MORE THAN AN OTHERS, I LOVE ME OH MY GODDESS, I'D GOWN GET HER, WE WOULD BE TOGETHER, I DON'T WANT YOU SPEND MORE TIME WITH ME & GIVE ME PAT GOODBYE TINA TURNER'S ALBUMS ARE THE SOUNDTRACK TO MY LIFE, I'M RECALIBRATED & REBORNED, SUPERHEROES X HOO, FEEL GOOD LOVE YOU, I LOVE YOUR STORY, LOL UP, CLOSE YOUR EYES AND SEE, END OF JUNE 2017, ALL THE BEST!

Lewis Durrant



Ronald Hunter



Nicolas Girard



Craig Ward



# Year 8 Spring Term Knowledge Organiser

## Art – Typography– The Art of Lettering:

Art Specific Language and Terms			
<b>Typography</b>	Typography is the art and technique of arranging type to make written language legible and appealing when displayed.	<b>Leading</b>	Leading is the space between individual lines of type.
<b>Typographer</b>	A Typographer is someone who designs a typeface or who arranges type.	<b>Display Typeface</b>	A display typeface is a typeface that is used for visual impact, rather than for extended passages of text.
<b>Kerning</b>	Kerning is the process of adjusting the spacing between letters.	<b>Script Typeface</b>	Script fonts can be formal scripts, derived from 17 <sup>th</sup> century formal writing or styles that look informal or handwritten as well as calligraphic scripts which emulate calligraphy.

### Types of Font:

**Sans-serif:**  
(without flicks)

**AaBbCc**

**Serif:**  
(with flicks)

**AaBbCc**

Changing the

**weight** or

**Sans** is the French word for without.

**Weight and Size:**

**SIZE**  
of type  
changes the emphasis



### Typography:

**David Carson** is an American graphic designer. He is best known for his innovative magazine design, and use of experimental typography. He was the art director for the magazine Ray Gun and was perhaps the most influential graphic designer of the 1990s.

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

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

**Debt**  
Something that is owed or that one is bound to pay to or perform for another.

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

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



### The Chancellor of the Exchequer

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

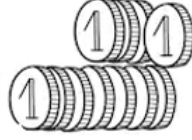


### Public Services



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

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



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

### How are people paid for jobs?

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



### Making Connections

How can you link different topics together?

- Government + Budget + Taxes
- Taxes + Public Services
- Public Services + Budget
- Debt + Budget
- Taxes + The Annual Budget + Economy
- The Chancellor + Cabinet + Public Services



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

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

# Money & Finance

# Y8 CITIZENSHIP KNOWLEDGE ORGANISER

Spring Term

<b>Constituency</b> The voters in a particular area who elect an MP to Parliament.
<b>Manifesto</b> A statement of policies and aims, usually released around the time of a general election.
<b>Government</b> The winning party in a General Election form the government. The Government is led by the Prime Minister. The Prime Minister belongs to the political party with the majority of the seats.
<b>MP</b> Member of Parliament - an elected representative who works in the House of Commons. There are 650 all together.
<b>Houses of Parliament</b> Parliament is the place where MPs and Peers meet to make decisions and pass laws. Parliament makes sure that the government are running the country properly.



## Fixed Term Parliament Act 2011

This is a piece of legislation (law) that means that a General Election must take place every five years.

**Home Secretary**

Responsible for running the police, prisons, law and order and the justice system.

Responsible for managing finances of the Government – how much is spent and how much is collected in taxes – and preparing for the budget.

**Chancellor**

**Defence Secretary**

Responsible for defence of the country, including armed forces and weapons.

**Voter Apathy**

A lack of interest in voting – usually because of a lack of political knowledge.

# Government, Politics & Elections

The Government are in charge of many aspects of our daily lives, such as...

- ✓ Education
- ✓ Healthcare
- ✓ Police
- ✓ Housing
- ✓ The economy



The **cabinet** is a group of MP's who are hand chosen by the Prime Minister to help make important decisions and run important departments... like health, education and the Treasury which is in charge of all the money raised through taxes!

Yay!

Who can and cannot vote?

Nay!

- ✓ Over 18
- ✓ On the electoral register
- ✓ British Citizen
- ✗ In the House of Lords
- ✗ In prison

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



## Making Connections

How can you link different topics together?

- Constituency + MP + Representation
- Cabinet + MP + Responsibility
- Democracy + MP + Cabinet + Prime Minister

## Computer Science – 8.3 Web Authoring Keywords

<b>Web Authoring</b>	Web Authoring is the process of using a graphical interface to create a web page or website. The advantage of using this method as opposed to straight HTML is that you can create the look of the finished product in an easier 'point and click' way. A disadvantage may be that the Web Authoring software generates more, unnecessary code that results in a bigger file size.
<b>Template</b>	A template is a pre-set layout that can be used instead of starting from scratch. This may take less time and look professional, however it may not meet your needs fully.
<b>Response Forms</b>	Interactive element. A way of allowing the user to input information through you website and have that information stored exactly as the user input it.
<b>Interactive menu</b>	Interactive element. Interactive menus can be used as an easy way to navigate a website without the need to remember command line instructions.
<b>Image roll over</b>	Interactive element. An image that allows the user to interact with the page. Usually this occurs when the user hovers the mouse over the image and the image changes in some way.
<b>Web links</b>	Interactive element. Shortcuts to places either within the website or sometimes external links that take the user to a linked website elsewhere.
<b>Site search</b>	Interactive element. A field that searches the site, usually, for keywords or phrases. The benefit of this is that the user is less likely to get 'lost' or frustrated and leave the site to access an alternative.
<b>Audience</b>	Which group of people is the Website being created for? The intended user of the website. This could be an age, gender, situation, religious group, occupation, ability or a mixture of them all.
<b>Purpose</b>	The purpose of a website relates to the reason that the site is in existence. This may be to sell, inform, teach, socially connect, promote, display information etc.
<b>Root Folder</b>	The folder that will contain all of the documents, files and folders that relate to the website.
<b>E-Safety</b>	E-safety is safe and responsible use of technology on the computer and the internet.
<b>Reliability</b>	Reliability of information often comes down to the source, where you have got the information from. Did you get your information about today's weather from the Met office or Bob down the road? Which is likely to be more reliable? Who/where gave me the information, do I trust it? Why do I trust it?
<b>Sitemap</b>	The underpinning structure and navigation of a website.
<b>Target Audience</b>	When creating a product we often have a target audience in mind. That is, WHO are we making this product for? A website aimed at children may look remarkably different for a website aimed at adults who are sight impaired.
<b>Target Audience needs</b>	Difference audiences will have different needs. For example, certain groups may need more or less colour, can handle different types and complexity of language, use bigger smaller text, need more or less interactive features etc.
<b>Accessibility features</b>	Can everybody access your website? For those who struggle with small text is there a magnifier or narration option? High or low contrast version for those with certain conditions, etc.

**What is a website?**

**A button that links to another page is a form of?**

- Direction
- Navigation
- Accessibility

**Give 2 factors to consider when designing a GOOD website?**

- 
- 

**Give 2 benefit of using a template**

- 
-

## Computer Science – Python Keywords

Comments	Comments are notes in programs that the compiler/interpreter ignore. In Python you write a comment by first typing a #
Variable	Is a space in memory to store some information, that we can be used later on in a program. This information can take on many forms it is therefore variable (it can change)
Data Types	Data Types are categories that define what a variable can store. Like in a child's game the square brick must go in the square hole, and a round brick in a round hole.
String	String is a type (category) of variable. Strings are combinations of letters and or numbers. Anything in quotes is a string For example: "a" "ABCD" "123" "Hello world 123"
Integer or int	Integer or int is a type (category) of variable. An integer or int is a whole number. For example 1, 123, 1234567
Float	Float is a type (category) of variable. A float is a decimal number. E.G 1.2, 1.234, 0.123
Boolean	Boolean is a type (category) of variable. A Boolean can be True or False.
List	A List is a type (category) of variable. It can store multiple pieces of information in one variable. Lists can store a mixture of strings, ints, floats, even other lists. Think of it like a shopping list.
Cast/Casting	Casting means to change a variables type (Category). For Example int ("123") becomes 123 str(123) becomes "123" str(1.23) becomes "1.23" and float(123) becomes 123.0
Input Command	A way to get information into the computer when programming. E.G. input("Enter your name")
Output Command	A way to get information out of the computer when programming. E.G. print("Hi Bart")
Concatenation	Concatenation means to link or join things together. In programming we use it to "glue" strings together. For example "Cat" + "Hat" would become "CatHat"
Mathematical Operators	Are mathematical functions that can be performed on integers and floats. For example add (+), subtract (-), multiply (*) divide (/), MOD (%), Integer Division (//), exponent (**)
Assignment Operators	Are used to assign values to variables. For example =, +=, -=, *=, /=
Conditional Statements	A conditional statement is an if statement. If statements can be true or false (like a Boolean variable)
if elif else	How we deal with a conditional statement/selections. For example: if HomeworkNearlyDone print("1 hour of Xbox") elif HomeworkComplete print("You can play Xbox"), else print("Do your homework!")
Comparison Operators	Used with conditional statements if, elif, and else as all can be resolved to true or false. For example: == 'equal to' != 'not equal to' > 'greater than' < 'less than' >= 'greater than or equal to' <= 'less than or equal to'
Logical Operators	Used to combine conditional statements so they resolve to a single true or false answer. I.E. 'and' 'or' and 'not' For example if HomeworkDone and BedroomTidy print(" You can play Xbox")
Iteration	Means to do the same process over and over again in a loop.
for	A type of loop used in programming when we know how many time we want to iterate.
while	A type of loop used in programming when we do not know how many time we want to iterate.
Syntax Error	An error in the written code. Like a spelling or grammatical error when writing a sentence.
Logic Error	When the code runs, but does not do what you expect. Logic errors are far harder to fix.

What is the variable used in this python code?

```
age = input("How old are you?")
```

Explain this piece of python code.

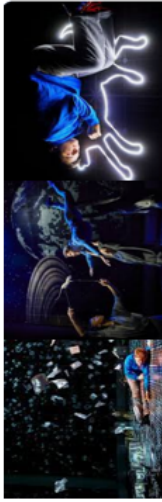
```
age = input("How old are you?")
Print (age)
```

Give 2 rules for naming variables.

- 1.
- 2.

What will the output be when this piece of python code is run.

```
numb1 = 5
numb2 = 9
Answer = numb1 + numb2
Print (answer)
```



# Drama - Script Exploration



## Structure of a Script

- A play script is a piece of writing written for the stage.
- A play script will include a list of characters (at the very beginning).
- It may be divided into acts which are then divided into scenes.
- Sometimes each scene will have a description of the setting at the start and then the characters' dialogue.
- Dialogue is set out with the character's name on the left then the dialogue (without speech marks), some will also have colons or full stop separating the name and the speech.

## Key Vocabulary

### Definitions

Act/Scene	An act is a division or unit of a theatre work, including a play, film, opera and musical theatre. A scene is part of an act defined with the changing of characters.
Characters	People acting in a play/script.
Setting	Setting is the time and place (or when and where) of the story.
Narrator	Some scripts include a character called a narrator. These are characters which explain what is going on in the story for the benefit of the audience. They do not have to be a character in the story, but their lines are written in the same way as any other character's.
Audience	The people who watch the performance; those for whom the performance is intended.
Stage Directions	These are often written in italics within brackets and are instructions for the actors on stage – these should not be read aloud in performance. These instructions can also be for the technical team with ideas for lighting or sound effects.
Mood	The feeling created on stage during a performance.
Blocking	The stage positions and movement.
Status	The position of importance, power or control in performance.
Adaptation	This is where a text is adapted (changed) for stage, television or film.
Ensemble	This is where all cast members work together in a unified way rather than focusing on individual performances.
Proxemics	This is a term to describe the use of space on stage and how this can suggest relationships between characters for example a couple in love would be very close together.
Atmosphere	Creating the sense of the location.

## Main Characters

Christopher Boone- Protagonist and autistic  
 Ed Boone- Christopher's father  
 Judy Boone- Christopher's mother



## Secondary Characters

Siobhan- Christopher's teacher at school  
 Roger Shears- The man his mother had an affair with



Mrs Alexander- Elderly neighbour

## Minor Character

Mrs Shears - Neighbour his father has a relationship with

## Practice Tasks

1. Can you learn lines ready for a class performance?
2. Could you plan a rehearsal with rehearsal techniques /exercises to enhance the work?
3. Create a character profile for one of the characters from the play.

## Key questions

1. Do you know how to lay out a script when writing your own?
2. What is meant by the term subtext?
3. How can we show relationships between characters on stage?
4. What is meant by the term directorial interpretation?
5. What is a rehearsal technique and why do we use these?

We will be exploring the stage play, Curious Incident of the Dog in the Night time. It is a whodunnit play and looks at the relationship of a family. Christopher is a 15 year old who is autistic. He makes it his mission to discover who killed Wellington, the dog. During his investigation he uncovers a family secret and things will never be the same again.





# Drama - Verbatim Theatre



## Verbatim Theatre

- Verbatim theatre takes the words of real people and puts them into the context of a play.
- Sometimes the interviewer's questions are included to create dialogue.
- Sometimes the questions are removed to create a monologue.
- The words are usually gathered by interviewing people and recording their responses.
- The words can also be gathered from interviews that have been broadcast on the television or radio.

## Technical Terminology

<b>Prop</b>	Objects used on stage by actors during a performance.
<b>Costume</b>	A set of clothes worn by an actor in a particular role.
<b>Set</b>	Scenery used to identify the location of a scene / play.
<b>Lighting</b>	The arrangement of theatre lights to achieve dramatic effects.
<b>Sound</b>	The sound used to create atmosphere, emphasise what is happening on stage, set the scene, and indicate time or location.

## Verbatim theatre performances

For the record - Based on the Hillsborough disaster  
<https://www.youtube.com/watch?v=64C16TSedqM&t=9s>  
 London's burning - based on 2011 riots  
<https://www.youtube.com/watch?v=1089t09wyCA&list=PLqIPWdMvgTULAREGDYm53J8MADunWit>  
 Can we talk about this? - Based on forced Marriage  
<https://www.youtube.com/watch?v=vNVPumeIpuA>



Verbatim Theatre Companies  
 Paper Birds  
 Lung Theatre Company  
 Out of Joint  
 Écoute Theatre  
 Artemis Theatre Company

## Key Questions

- What makes a good verbatim performance?
- What are the similarities and differences between verbatim theatre and Brechtian theatre?
- What drama techniques would you add into a verbatim theatre piece?
- Can verbatim theatre be naturalistic? Is so how and why?

## Performance Skills

<b>Facial Expression</b>	The feelings expressed on a character's face.
<b>Body Language</b>	The way in which a character communicates using gestures, movements and mannerisms.
<b>Voice</b>	The way in which the voice is used to present emotion using Tone (Emotion) / Pitch (High or Low) / Pace (Speed) / Volume (Loud or Quiet) / Accent (Region).
<b>Space</b>	The area between and around the actors. The theatre space in which the drama takes place.
<b>Levels</b>	Characters being visually higher or lower on stage than other characters.
<b>Proxemics</b>	Communicating to the audience what the relationship of the characters is like through the use of space/distance.
<b>Tension</b>	When the character is tense. The concept of making the audience want to know what will happen next.
<b>Semiotics</b>	The signs and symbols created on stage, that an audience finds meaning from (visual and audible).
<b>Character</b>	A person represented by the actor.
<b>Dialogue</b>	Speech / conversation between two or more people.

## Practice Task

1. Collect some research on a topic that you feel would make a good verbatim theatre piece.
2. Watch one of the verbatim theatre performances. Why was it so effective?



# English

## Rhetoric

Core Text: extracts from *Animal Farm* by George Orwell

Rhetoric is the art of using language to influence an audience. The foundations for this are defined by Greek philosopher, Aristotle, as ethos, logos, and pathos; these are known as the three rhetorical appeals. Ethos relates to ethics (doing the right thing); logos relates to logic (thinking the right thing); pathos relates to sympathy (feeling the right thing). Writers will use a number of rhetorical techniques to influence the audience's response.

### Vocabulary

- anaphora
- audience
- hyperbole
- influence
- persuade
- purpose
- figurative language
- rhetoric
- logos
- ethos
- pathos
- antithesis
- response
- impact
- triadic structure

Practise spelling vocabulary words and matching definitions to words.



Test yourself - cover the vocabulary words. Can you recall each term using the **definitions?**

- A. a reaction to something
- B. a strong effect on someone or something
- C. also known as triple listing, the rule of three and the power of three: a writing principle that suggests that a trio of entities such as events or characters is more humorous, satisfying, or effective than other numbers
- D. an exaggerated statement or idea meant to be taken figuratively rather than literally, usually for comedic or dramatic effect
- E. language intended to create an image, association, or other effect in the mind of the listener or reader that goes beyond the literal meaning
- F. the art of using language effectively in order to influence an audience
- G. the direct opposite
- H. transferring emotional energy to an audience
- I. establishing the credibility and expertise of the speaker
- J. use of logic and reasoning
- K. the people who read, watch or listen to a work of art
- L. the reason for which something is done or created
- M. to affect or change how someone or something develops, behaves, or thinks
- N. to make someone do or believe something by giving them a good reason to do it
- O. when a certain word or phrase is repeated at the beginning of clauses or sentences that follow each other

Check your answers:

- Anaphora O; Antithesis G; Audience K; Ethos I; Figurative language E; Hyperbole D; Influence M;
- Logos J; Pathos H; Persuade N; Purpose L; Response A; Rhetoric F; Triadic structure C;



Extract from Old Major's speech  
*Animal Farm* by George Orwell

Now, comrades, what is the nature of this life of ours? Let us face it: our lives are miserable, laborious, and short. We are born, we are given just so much food as will keep the breath in our bodies, and those of us who are capable of it are forced to work to the last atom of our strength; and the very instant that our usefulness has come to an end we are slaughtered with hideous cruelty. No animal in England knows the meaning of happiness or leisure after he is a year old. No animal in England is free. The life of an animal is misery and slavery: that is the plain truth.

Logos comes from the Greek word meaning **word, reason** or **plan**. Logos is the logical appeal: using rational reasoning, examples and facts in a structured way to present an argument.

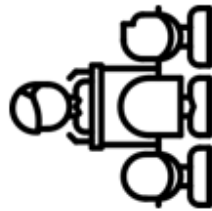
Task 1 - in each of the extracts above, identify examples of ethos, logos and pathos.



Task 2 - Write a speech for your peers in which you persuade them to use social media less or more. Plan to include the rhetorical appeals in your speech.



Ethos comes from the Greek word meaning **character**. As originally used by Aristotle, it referred to a man's character or personality, especially in its balance between passion and caution. Ethos is how a speaker / writer establishes credibility. Ethos = expert.

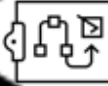


Ethos

Rhetorical Appeals

Logos

Pathos

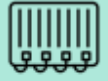


Pathos, Greek for **experience, misfortune, emotion, condition**, refers to emotions and experience, particularly suffering. Pathos usually refers to the element in an experience or in an artistic work that makes us feel compassion, pity, or sympathy.

**Word Power: Greek Roots**  
Task 4 - Pathos is a member of a larger word family.

Define the following words and discover the power of pathos:

- empathy
- sympathy
- apathy
- antipathy



Making connections: **Perspective**

Task 3 - Compare and contrast the perspectives that Old Major and Greta Thunberg present. For example, why does Old Major use first person plural (our, we) and words like comrades? Why does Thunberg speak using first person singular (I)? Who is the 'you' she is speaking to? Why does audience matter?



Extract from Greta Thunberg's speech, The U.N. Climate Action Summit 2019

This is all wrong. I shouldn't be up here. I should be back in school on the other side of the ocean. Yet you all come to us young people for hope. How dare you!

You have stolen my dreams and my childhood with your empty words. And yet I'm one of the lucky ones. People are suffering. People are dying. Entire ecosystems are collapsing. We are in the beginning of a mass extinction, and all you can talk about is money and fairy tales of eternal economic growth. How dare you!

## Year 8 KS3 Cooking and Nutrition: The Eatwell Guide Part 2 (Protein, Dairy and Fats & Oils)

### Prior Learning / Context:

Prior learning includes introduction to the Eatwell Guide and the principles of healthy eating. Basic cooking skills, including knife skills and cooker safety, also completed.

### Assessment:

- Retrieval Practice – quizzing, starter/plenary tasks
- Formal knowledge assessments – delivered in time with reporting
- Food preparation skills assessed after every practical (P, D, C, E)

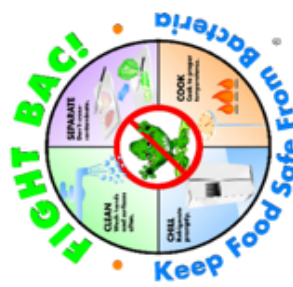
### Key Questions:

Why is it important to include fish into our diets? (2 marks)

Justify why protein is considered to be one of the nutrients essential for life (4 marks)

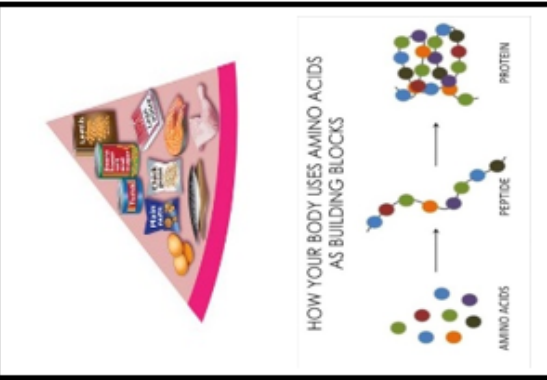
How do you know if milk has been produced to a high standard? (2 marks)

### Preventing Food Poisoning (the 4Cs)



### Key temperatures

Freeze -18C, Chill 0-5C,  
Danger Zone 5-63C, Cook 75C+



### Dairy and Alternatives

- Products made from cows milk
- Good sources of protein and calcium
- Alternatives include soya milk and oat milk

### Protein

- Products including meat, fish, egg & plant alternatives eg soya
- Needed for growth and repair.
- Some groups of people need more protein such as pregnant women.

### Themes:

- Nutrition and Health
- Food preparation
- Food safety
- Food provenance
- Food choice
- The science of cooking

### Science of Cooking

- **Plasticity and shortening** – prevent gluten formation when making pastry
- **Denaturing** of proteins by heat, acid or mechanical means
- **Coagulation** – heating protein to set a mixture
- **Aeration** – role of fats and eggs

### Food Preparation Outcomes:



### Future Learning:

- Year 9: Food Choice and cooking traditional dishes
- KS4: AGA GCSE in Food Preparation and Nutrition

### Key Vocabulary

Recipe, Nutrition, Cross-Contamination, Food Poisoning, Pathogenic Bacteria, Protein, Amino acids, Saturated and unsaturated fats, Coagulation, Aeration, Coronary Heart Disease.

Year 9 – Food  
Choice and  
cooking  
traditions



# French

## Y8 Spring Term Knowledge Organiser

Qu'est-ce que tu aimes à la télé	What do you like on TV
J'aime/J'adore...	I like/I love...
Je n'aime pas...	I don't like...
Je déteste...	I hate...
les comédies	comedies
les dessins animés	cartoons
les feuilletons	soaps
les séries (policières)	(police) series
les documentaires	documentaries
les infos	the news
les jeux (télévisés)	gameshows
les émissions de...	...programmes
... sport	sports...
...cuisine	cooking...
... télé-réalité	reality TV...
...musique	music...
... science-fiction	science fiction...
<b>Mon émission préférée c'est...</b>	<b>My favourite programme is...</b>

Qui es ta célébrité préférée ?	Who is your favourite celebrity?
Ma célébrité préférée est...	My favourite celebrity is...
parce qu'il/elle est...	because he/she is...
parce qu'il/elle n'est pas...	because he/she isn't...
intelligent(e)	intelligent
arrogant(e)	arrogant
égoïste	selfish
drôle	funny
modeste	modest
généreux/généreuse	generous
travailleur/travailleuse	hard-working
beau/belle	good-looking
gentil/gentille	kind
Remember to make the adjective ending agree for masculine/feminine.	

La télé	TV
Je regarde la télé...	I watch TV...
le matin	in the morning
le soir	in the evening
le weekend	at the weekend
à la maison	at home
dans le bus	on the bus
chez mes amis	at my friends' house
seul(e)	alone
avec ma famille	with my family
avec mes copains	with my friends
sur ma tablette/mon smartphone	on my tablet/smartphone
à la demande	on demand
<b>C'est facile</b>	<b>It's easy</b>
<b>Ce n'est pas cher</b>	<b>It's not expensive</b>

Question words
You can form a range of questions by using a <b>question word</b> + <b>est-ce que</b> and the <b>tu</b> form of the verb :
<b>Quand</b> est-ce que tu regardes la télé ?
<b>Où</b> est-ce que tu regardes la télé ?
<b>Avec qui</b> est-ce que tu regardes la télé ?
<b>Qu'est-ce que</b> tu regardes ?
<b>Comment</b> est-ce que tu regardes la télé ?

Quels sont tes loisirs ?	What are your hobbies?
J'ai un smartphone	I have a smartphone
Je surfe/Je blogue/Je chatte	I surf/blog/chat
Je fais des achats en ligne	I shop online
Je crée des playlists	I create playlists
Je joue au foot	I play football
Je télécharge des chansons	I download songs
J'écoute de la musique	I listen to music
Je joue sur ma Xbox	I play on my Xbox
Je fais du vélo	I go cycling
Je lis des BD	I read comics
Je ne regarde jamais la télé	I never watch TV

Use time phrases such as: **souvent (often), parfois (sometimes), d'habitude (usually), tout le temps (all the time)** to make your work more interesting.

On va au ciné ?	Shall we go to the cinema?
Je vais au cinéma ce soir.	I'm going to the cinema this evening
Je vais voir...	I'm going to see...
une comédie	a comedy
un film d'animation	an animated film
un film romantique	a romantic film
un film d'action	an action film
un film de science-fiction	a sci-fi film
un film de super-héros	a superhero film
un film d'horreur	a horror film
Tu viens ?	Are you coming?
Oui, je veux bien !	Yes, I'd like to!
Désolé(e), je ne peux pas.	Sorry, I can't
Rendez-vous à quelle heure ?	When shall we meet?
Rendez-vous chez moi à 19h	Meet at my house at 7pm

Negatives	
To make a sentence negative, wrap negative expressions around the verb:	
<b>ne/n' + pas (not) jamais (never) rien (nothing/notanything)</b>	
Je n'ai pas d'ordinateur	I do not have a computer
Je ne fais pas de sport	I do not do sport
Je ne joue jamais à des jeux vidéo	I never play video games
Je ne lis rien	I do not read anything
Je ne fais rien en ligne	I do nothing online

# French

## Y8 Spring Term Knowledge Organiser

Où habites-tu ?	Where do you live?
J'habite...	I live...
dans un (petit) village	in a (small) village
dans une (grande) ville	in a (large) town
à la campagne	in the countryside
à la montagne	in the mountains
au bord de la mer	by the seaside
en Angleterre	in England
en Suisse	in Switzerland
au Maroc	in Morocco
aux Antilles	in the French Caribbean

C'est comment ?	What's it like?
J'aime mon village	I like my village
Je n'aime pas ma ville	I don't like my town
C'est...	It is...
Ce n'est pas...	It isn't...
animé	lively
calme/tranquille	quiet/peaceful
ennuyeux	boring
joli	pretty
nul	rubbish
historique	historic
touristique	touristic
moche	ugly

Quel temps fait-il ?	What's the weather like?
Il fait beau	The weather's good
Il fait mauvais	The weather's bad
Il fait chaud	It's hot
Il fait froid	It's cold
Il y a du soleil	It's sunny
Il y a du vent	It's windy
Il y a du brouillard	It's foggy
Il y a des orages	It's stormy
Il neige	It snows/it's snowing
Il pleut	It rains/it's raining
En été	In summer
En hiver	In winter
En automne	In autumn
Au printemps	In spring

Qu'est-ce qu'on peut faire dans ta région ?	What can you do in your area?
Dans ma région on peut...	In my area you can...
manger des crêpes	eat crêpes/
Manger du fastfood	eat fast food
visiter les monuments	visit monuments
visiter des grottes	visit some caves
aller au marché	go to the market
aller au cinéma	go to the cinema
aller en ville	go into town
aller à la plage	go to the beach
faire les magasins	go shopping
faire les randonnées	go walking
faire du canoë-kayak	go canoeing
faire du ski	go skiing

Elle est comment, ta région ?	What's your area like?
Dans ma région...	In my region...
il y a des..	There are some...
il y a beaucoup de...	There's lots of...
il y a trop de...	There's too many...
il y a plein de...	There's plenty of...
il y a peu de...	There's not many of...
il n'y a pas de...	There isn't any...
lacs	lakes
touristes	tourists
champs	fields
plages	beaches
voitures	cars
montagnes	mountains
bâtiments	buildings
rivières	rivers
jardins publics	parks
distractions pour les jeunes	things for young people to do
magasins	shops
forêts	forests

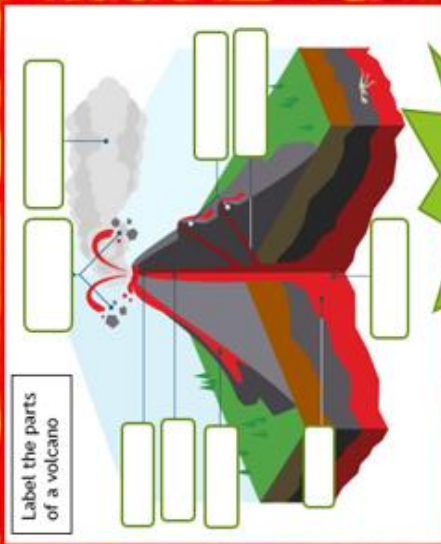
## Unit 4: Ma région – My area

The verb POUVOIR (To be able to)	
The verb POUVOIR is an irregular modal verb. It is usually followed by an <b>infinitive</b> : <i>On peut aller au cinéma</i> – You can <b>go</b> to the cinema	
<b>Je peux</b> I can	
<b>Tu peux</b> You can	
<b>Il/Elle/On peut</b> He/She/We can	
<b>Nous pouvons</b> We can	
<b>Vous pouvez</b> You (pl). can	
<b>Ils/Elles peuvent</b> They can	
The verb DEVOIR (To have to/must)	
The verb DEVOIR is an irregular modal verb. It is usually followed by an <b>infinitive</b> : <i>Je dois laver la voiture</i> – I have to <b>wash</b> the car	
<b>Je dois</b> I have to	
<b>Tu dois</b> You have to	
<b>Il/Elle/On doit</b> He/She/We have to	
<b>Nous devons</b> We have to	
<b>Vous devez</b> You (pl). have to	
<b>Ils/Elles doivent</b> They have to	
Qu'est-ce que tu dois faire à la maison	What do you have to do at home?
<b>Je dois...</b> <b>Ma sœur/Mon frère doit...</b>	<b>I have to...</b> <b>My sister/brother has to...</b>
laver la voiture	wash the car
ranger ma chambre	tidy my room
nourrir les animaux	feed the animals
faire la cuisine	do the cooking
faire la vaisselle	wash the dishes
garder le bébé	look after the baby
faire la lessive	do the washing
sortir la poubelle	take the rubbish out
passer l'aspirateur	do the vacuuming
promener le chien	walk the dog

# Year 8 Geography: Plate Tectonics

Why is Alfred Wegener a geography legend?

In this space draw a labelled diagram to revise: The Structure of the Earth



Volcanic Hazards	Definition
Lahars	Volcanic mudslide
Pyroclastic Flow	Super-heated explosion
Flooding	Glacier melt or river overflow
Ash Clouds	Dense ash plumes
Volcanic Bombs	Flying molten rock
Lava Flow	Vast river of hot lava

What are convection currents?

Types of volcano



Fissure (vent)



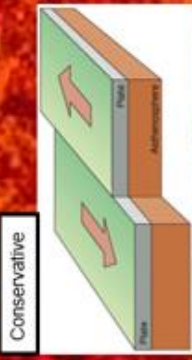
Shield



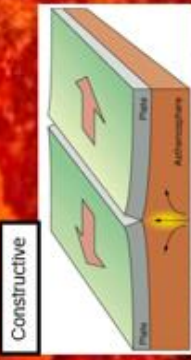
Composite (layers)

What is plate tectonic theory?

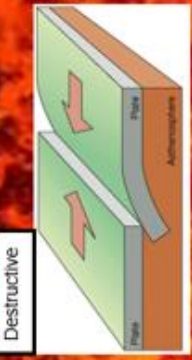
Types of plate margin



Conservative



Constructive



Destructive

## Key ideas

Earthquakes and volcanoes are primarily found at **plate boundaries**. The plates are like giant rafts that **slowly move** around. At the constructive and destructive margins, **molten magma** is able to force its way to the surface and escape as **lava**.

An **earthquake** is a **sudden shockwave** caused by rocks being under stress from the movements of plates at plate boundaries. Eventually the stress in the rock builds up enough to deform and reach breaking point. At that point, the stored up energy is released in the form of **shockwaves**.

Unlike earthquakes, volcanoes can also have a positive impact on an area. Examples include income from **tourism**, **geothermal energy** and **fertile soil for agriculture**.

What is a tsunami? How is it linked to tectonic hazards?

## Year 8 Geography: Population

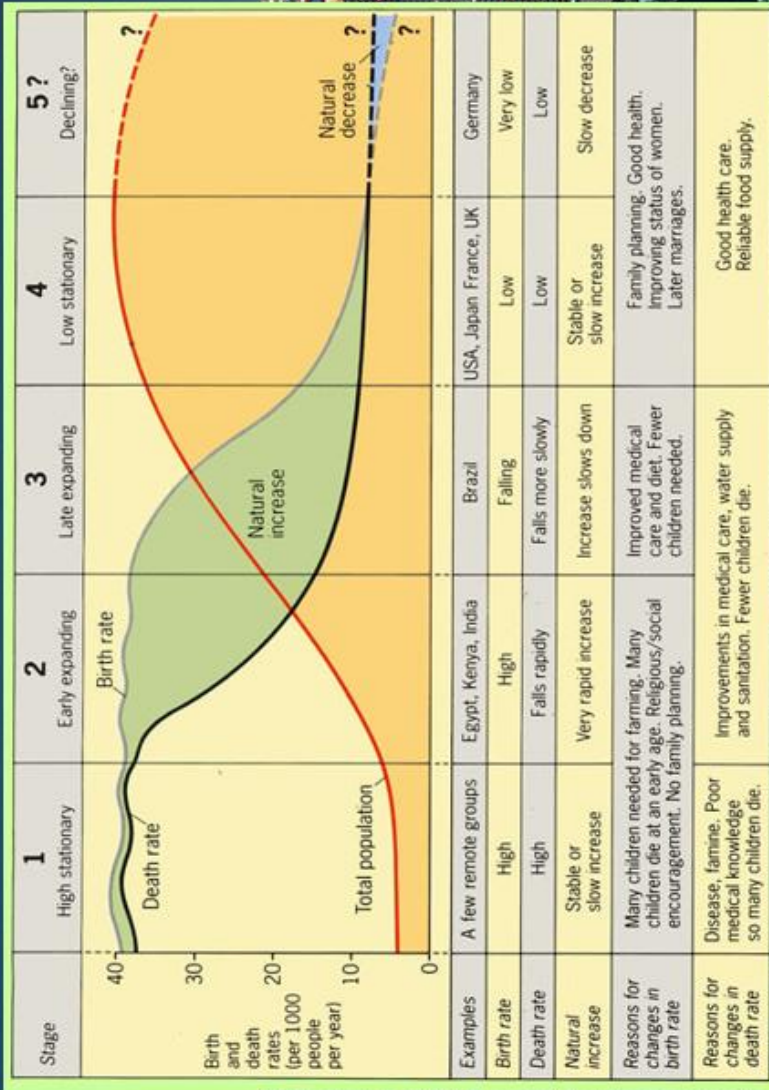
<b>Key Term</b>	<b>Definition</b>
Population	The number of people in a specific area - China has the highest population in the world
Megacity	A city with a population over 10 million - Tokyo has close to 40 million people, London is <u>NOT</u> a megacity
Population pyramid	A bar graph showing the number of people in each age bracket
Birth rate	The number of babies born every year per 1000 people in a population.
Death rate	The number of deaths that occur every year per 1000 people in a population.
Rural to urban migration	People move from villages (rural areas) to cities (urban areas) to live and work there
Pull factors	Something that attracts people to a city such as cinemas or jobs
Push factors	Something that makes villages unattractive for people, such as flooding
Quality of life	How happy people are about their lives, related to people's wellbeing
Ageing population	A population of an area where the % of older people increases comparing to other age groups

### Prior learning:

1. Define migration and population density. (Term 1 in Year 7)
2. What is the difference between sparsely and densely populated areas? (Term 1 in Year 7)
3. What is used on a choropleth map to show information? (Term 1 in Year 7)

### Key tasks:

1. Mark the countries from the DTM model (top right corner of this page) onto the outline map (bottom left corner).
2. Describe the location of Japan in the world. (Remember to use compass directions and write the continent, nearby ocean and neighbouring countries)



World map



# Y8 German – Spring Term 1

<b>Das Frühstück</b>	<b>Breakfast</b>
der/das Joghurt	yoghurt
der Käse	cheese
der Schinken	ham
der Speck	bacon
der Toast	toast
der Kaffee	coffee
der Tee	tea
der Orangensaft	orange juice
das Butter	butter
die Marmelade	jam
die Orangenmarmelade	marmalade
die Milch	milk
die heiÙe Schokolade	hot chocolate
das Brötchen	roll
das Obst	fruit
das Ei/Eier	egg(s)
die Frühstücksflocken	cereal

<b>Was isst du zum Frühstück?</b>	<b>What do you eat for breakfast?</b>
Ich esse einen Joghurt	I eat a yoghurt
ein Brötchen mit Butter und Marmelade	a roll with butter and jam
Ich esse kein Frühstück	I don't eat any breakfast

<b>Die Speisekarte</b>	<b>Menu</b>
(der) Fisch mit Reis und Erbsen	fish with rice and peas
(der) Flammkuchen mit Sauerkraut	Flammkuchen with pickled cabbage
(die) Bratwurst mit Eiern	fried sausage with eggs
(die) Gemüsesuppe mit Brötchen	vegetable soup with a roll
(das) Hähnchen mit Pommes und Karotten	chicken with chips and carrots
(das) Schnitzel mit Kartoffeln	pork fillet in breadcrumbs with potatoes

<b>Die Mahlzeiten</b>	<b>Mealtimes</b>
die Vorspeise	the starter
die Hauptspeise	the main
die Nachspeise	dessert

<b>Wie ist das?</b>	<b>What is it like?</b>		
süÙ	sweet	lecker	delicious
sauer	sour	köstlich	tasty
salzig	salty	gesund	healthy
scharf	spicy	ungesund	unhealthy
vegetarisch	vegetarian		
ekelhaft	disgusting		

<b>Im Restaurant</b>	<b>In the restaurant</b>
Was nimmst du?	What are you having?
Ich nehme...	I'll take / I'm having...
den Fisch	the fish
die Gemüsesuppe	the vegetable soup
das Hähnchen	the chicken

<b>Mein Lieblings sandwich</b>	<b>My favourite sandwich</b>
das Ketchup	ketchup
der Senf	mustard
der Thunfisch	tuna fish
die Erdnussbutter	peanut butter
die Gurke(n)	gherkin(s)
die Mayo	mayonnaise
die Olive(n)	olive(s)
der Käse	cheese

<b>Gesund bleiben</b>	<b>Staying healthy</b>
man muss...	One / you / people must...
acht Stunden schlafen	sleep for eight hours
wenig Fett und Zucker essen	eat little fat and sugar
viel Obst und Gemüse essen	eat lots of fruit and vegetables
mehr Wasser trinken	drink more water
früh ins Bett gehen	go to bed early
drei Stunden trainieren	exercise for three hours

The present tense – Irregular verbs		
essen – to eat e - i		
ich	esse	I eat
du	isst	you eat (singular)
er/sie/es	isst	he/she/it eats
wir	essen	we eat
ihr	esst	you eat (plural)
sie	essen	they eat
Sie	essen	you eat (polite)
nehmen – to take (to have) e - i		
ich nehme		I take
du nimmst		You take (singular)
er/sie/es nimmt		He/she/it takes
Wir nehmen		We take
ihr nehmt		You take (plural)
sie nehmen		They take
Sie nehmen		You take (polite)

Independent Task: Design your own menu for a German Restaurant.



## Y8 German – Spring Term 2

### In der Jugendherberge

die Hausordnung

Man muss vor 22:00 Uhr ins Bett gehen.

Man muss das Bett machen.

Man muss das Zimmer sauber halten.

Man muss vor acht Uhr aufstehen.

Man muss abwaschen.

Man darf nicht rauchen.

Man darf nicht im Zimmer essen.

Man darf keine laute Musik hören.

### In the youth hostel

rules of the house

You have to go to bed before ten o'clock.

You have to make the bed.

You have to keep the room clean.

You have to get up before eight o'clock.

You have to wash up.

You must not smoke.

You must not eat in the room.

### Der Tagesablauf

### Daily routine

Ich stehe auf.

*I get up.*

Ich wasche

*I get washed*

Ich dusche mich.

*I shower*

Ich ziehe mich an.

*I get dressed.*

Ich frühstücke.

*I have breakfast.*

Ich gehe aus.

*I go out.*

Ich komme zurück.

*I come back.*

Ich esse zu Abend.

*I have dinner.*

Ich gehe ins Bett.

*I go to bed.*

### Um wie viel Uhr?

### At what time?

um ... Uhr

*at ... o'clock*

um fünf / zehn / zwanzig / nach...

*at five / ten / twenty past...*

um fünfundzwanzig vor...

*at twenty-five to...*

um Viertel nach ...

*at quarter past*

um Viertel vor...

*at quarter to*

um halb acht

*at half past seven*

### Wie komme ich zum / zur ...?

### How do I get to the ...?

Geh / Geht / Gehen Sie ...!

*Go ...!*

(nach) links

*(to the) left*

(nach) rechts

*(to the) right*

geradeaus

*straight on*

Nimm / Nehmt / Nehmen Sie ...!

*Take ...!*

die erste Straße links

*the first street on the left*

die zweite Straße rechts

*the second street on the right*

Geh an der Ampel links!

*Go left at the traffic lights.*

Geh an der Kreuzung rechts!

*Go right at the crossroads.*

der Bahnhof

*station*

der Park

*park*

die Bushaltestelle

*bus stop*

die Kirche

*church*

das Schwimmbad

*swimming pool*

das Hallenbad

*indoor swimming pool*

das Museum

*museum*

der Markt

*market (place)*

der Lehrer

*teacher (male)*

die Lehrerin

*teacher (female)*

das Souvenirgeschäft

*souvenir shop*

die Imbissstube

*snack bar*

das Eiscafé

*ice cream parlour*

vor dem / der...

*in front of the ...*

Entschuldigung / Bitte, ...

*Excuse me, ...*

Independent Task:  
Make a comic strip  
of your daily routine

# History

## Chronology

1750	Considered to be the start of the Industrial Revolution.
1769	Spinning frame was invented. They were too big to use at home and factories were created.
1781	James Watt developed a new steam engine that could turn a wheel.
1804	Richard Trevithick shows his new invention the steam train.
1830	Liverpool to Manchester railway opened.
1833	Factory Act- Stopped children under 9 working in factories.
1833	Brunel opened the Great Western Railway.
1876	Alexander Graham Bell invented the telephone.

## Key Words

Enclosure	Areas of land were divided up into fields owned by one person.
Revolution	A great change.
Domestic System	Families working at home producing goods together.
Selective Breeding	Allowing the best animals to breed, so only the best characteristics of animals are passed on.
Mechanised	Machines are used rather than just people.
Pauper Apprentice	Children, often orphans that were sent to work in factories by local authorities.
Coal	A hard black rock that burns for much longer than wood.
Canal	Long, man made channels filled with water that could be used to transport heavy and fragile goods.
British Empire	A collection of countries and colonies (areas) that Britain controls around the world.
Entrepreneurs	People that could turn new ideas and inventions into money.

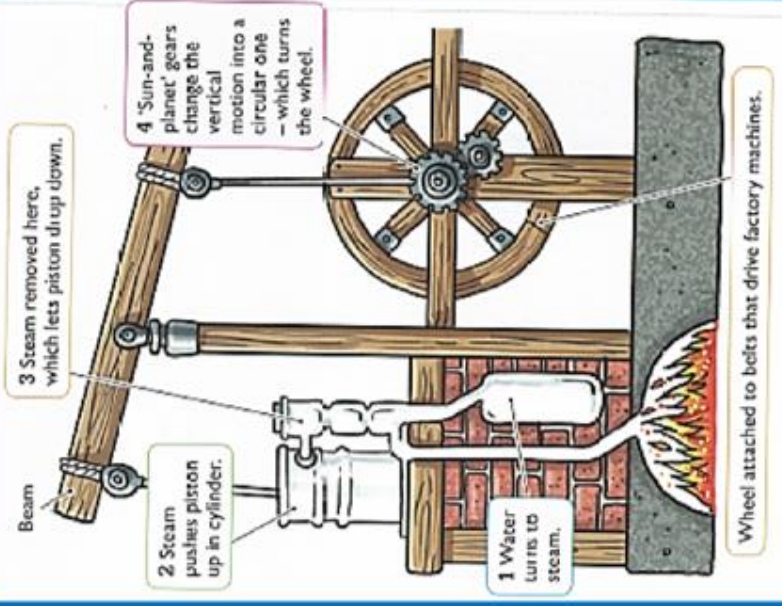
## Reasons for the industrial revolution, factories, transport and inventions.

## Key People

Key People	Role
James Watt	Developed the steam engine so it could turn wheels and power machines.
Richard Trevithick	Credited with inventing the steam train.
George Stephenson	Inventor, who developed steam trains including the Rocket.
Ada Lovelace	Programmer of an adding machine. Viewed as the world's first computer programmer.
Isambard Kingdom Brunel	Inventor, designed railways, bridges, ships and communication cables from Britain to America.

## Questions

- What was the industrial revolution?
- Why did the industrial revolution start in the UK?
- How did the invention of the steam engine change people's lives?



# History

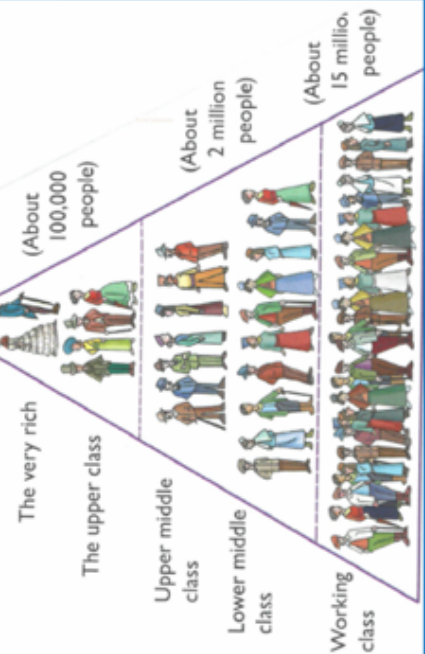
## Chronology

1749	The Bow Street Runners set up.
1823	Prison Reform Act. Jailers were paid by the government not the prisoners. Male and female prisoners were kept separately.
1829	The Metropolitan Police Force set up.
1831	First major Cholera outbreak in Britain.
1842	Chadwick's report into conditions in towns and cities.
1848	The Public Health Act allowed councils to spend public money on cleaning up towns and cities.
1854	John Snow finds that Cholera was caused by contaminated drinking water.
1888	Jack the Ripper kills at least 5 women in Whitechapel London.

## Definition

<b>Key Words</b>	A housing system that was built around a courtyard where houses were built back to back.
Back to Back Houses	Disease caused by contaminated water. Gives headaches, fever and diarrhoea.
Typhoid	Disease of the lungs, causes shortness of breath and chest pains.
Tuberculosis	Caused by contaminated water. Gives diarrhoea, makes people turn black and blue.
Cholera	Divisions in society based on income, housing, family tradition and social life.
Classes	People in bigger towns that were paid to patrol the streets at night.
The Watch	Volunteers that could question suspects in court and punish people for minor crimes. They would send more serious crimes to professional courts.
Magistrates	Unpaid volunteers who would organise the watch and help magistrates by catching criminals.
Constables	Crime that you could be executed for committing. Often by public hanging.
Capital Offence	Being sent overseas often to the USA or Australia after being convicted of committing a crime.
Transportation	Police force set up in London.
The Metropolitan Police	

## ▼ ▲ The 'social pyramid'.



## Books

- Hard Times by Charles Dickens
- Street Child by Berlie Doherty
- The Adventures of the New Cut Gang by Phillip Pullman

## Industrial revolution:

### Living and working conditions, disease, crime and punishment

Key People	Role
Edwin Chadwick	Wrote a report about poor conditions in towns and cities, thought diseases were caused by bad air and deaths happen where there is polluted water.
John Snow	Made the link between contaminated water and Cholera.
Florence Nightingale	Led a team of nurses during the Crimean War, improved conditions for soldiers and then revolutionised nursing in Britain.
Robert Peel	Set up the Metropolitan Police Force.
Elizabeth Fry	Prison reformer. She taught women and children in prison and campaigned for better conditions in prisons.
Jack the Ripper	Serial killer in Whitechapel who was never convicted.

## Questions

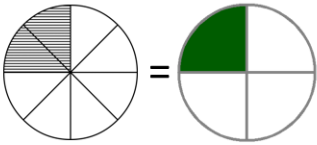
- What effect did the changes in living conditions have on people's health during the industrial revolution?
- Why did Britain need a police force during the industrial revolution?
- What can we learn from how disease was dealt with during the industrial revolution?

# Year 8 Knowledge Organiser

## RATIO

### Key Concept

$$\begin{array}{ccc} & \swarrow & \nwarrow \\ 2 \text{ parts} & 2:6 & 6 \text{ parts} \\ & = & \\ & 1:3 & \end{array}$$



$$\frac{2}{8} = \frac{1}{4}$$

### Key Words

**Ratio:** Relationship between two numbers.

**Part:** This is the numeric value '1' of, would be equivalent to.

**Simplify:** Divide both parts of a ratio by the same number.

**Equivalent:** Equal in value.

**Convert:** Change from one form to another.

### Examples

Simplify 60 : 40 : 100

$$\begin{array}{l} \div 10 \\ 60 : 40 : 100 \\ \div 20 \\ 6 : 4 : 10 \\ \div 2 \\ 3 : 2 : 5 \end{array}$$

This could have been done in one step by dividing by 20.

Write 2 : 5 in the form 1 : n

$$\begin{array}{c} 2 : 5 \\ \div 2 \quad \left( \right) \quad \div 2 \\ 1 : 2.5 \end{array}$$

Share £45 in the ratio 2 : 7

$$45 \div 9 = 5$$

$$\pounds 10 : \pounds 35$$

$$\begin{array}{cc} 2 : 7 \\ \begin{array}{|c|c|} \hline 5 & 5 \\ \hline 5 & 5 \\ \hline \end{array} \\ =10 \\ \begin{array}{|c|} \hline 5 \\ \hline 5 \\ \hline 5 \\ \hline 5 \\ \hline \end{array} \\ =35 \end{array}$$

Joy and Martin share money in the ratio 2 : 5. Martin gets £18 more than Joy. How much do they each get?

$$\begin{array}{cc} 2 : 5 \\ \begin{array}{|c|c|} \hline 6 & 6 \\ \hline 6 & 6 \\ \hline \end{array} \\ 18 \div 3 = 6 \\ \begin{array}{|c|} \hline 6 \\ \hline 6 \\ \hline 6 \\ \hline 6 \\ \hline \end{array} \\ =12 \quad =30 \end{array}$$

### Sparx Maths

#### Clip Numbers

M885, M543, M525, M801

### Tip

It's often useful to write the letters above the ratio. This helps you keep the order the correct way round.

### Questions

- Simplify a) 45 : 63 b) 66 : 44 c) 320 : 440
- Write in the form 1 : n a) 5 : 10 b) 4 : 6 c)  $x : x^2 + x$
- Share 64 in the ratio 3 : 5 4) Write the ratio 1 : 4 as a fraction.

ANSWERS: 1) a) 5 : 7 b) 3 : 2 c) 8 : 11 2) a) 1 : 2 b) 1 : 1.5 c)  $1 : x + 1$   
3) 24 : 40 4)  $\frac{1}{5}$

# Year 8 Knowledge Organiser

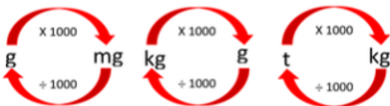
## UNIT CONVERSION

### Key Concepts

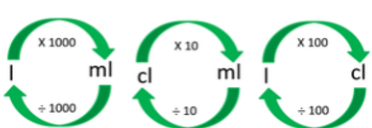
Length:



Mass:



Volume:



$$\text{Speed} = \text{Distance} \div \text{Time}$$

$$\text{Distance} = \text{Speed} \times \text{Time}$$

$$\text{Time} = \text{Distance} \div \text{Speed}$$



### Key Words

**Metric** – mm, cm, m, km etc.

**Imperial** – pounds, stone, pints etc.

**Length**

**Weight / Mass**

**Capacity**

### Examples

Convert 30cm to mm

$$30 \times 10 = 300\text{mm}$$

Convert 400mm to cm

$$400 \div 10 = 40\text{cm}$$

Convert 10 miles to km

$$\begin{array}{l} 5 \text{ miles} = 8\text{km} \\ \times 2 \left( \right) \times 2 \\ 10 \text{ miles} = 16\text{km} \end{array}$$

Speed = 4 mph

Time = 2 hours

Find the Distance.

$$\begin{array}{l} D = S \times T \\ = 4 \times 2 \\ = 8 \text{ miles} \end{array}$$

### Sparx Maths

#### Clip

#### Numbers

M515, M530, M761, M774

### Questions

- Convert a) 50cm to mm b) 3kg to g c) 3000m to km
- Convert a) 5 gallons to litres b) 8.8 pounds to kg
- The distance travelled on a journey is 60 miles and it took 2 hours. How fast were they travelling?

ANSWERS: 1) a) 500mm b) 3000g c) 3km 2) a) 22.5litres b) 4kg 3) 30mph

# Year 8 Knowledge Organiser

## FOUR OPERATIONS WITH FRACTIONS

### Key Concept

#### Mixed numbers

These are made up of a whole number and a fraction.





$$4\frac{3}{5}$$

$$= \frac{20}{5} + \frac{3}{5}$$

$$= \frac{23}{5}$$

An improper fraction is when the numerator is larger than the denominator.

### Key Words

 Add Sum Total All together Plus In all	 Multiply Product Times Twice Total Multiplied by
 Subtract Remain Difference Less than Fewer How many more Minus	 Divide Quotient Goes into Split Equally Each

A **reciprocal** is the value that when multiplied by another gives the answer of 1.

Eg.  $\frac{1}{8}$  is the reciprocal of 8.  
 $\frac{2}{5}$  is the reciprocal of  $\frac{5}{2}$

### Examples

$$+\quad \frac{3}{5} + \frac{2}{7}$$

Make the denominators the same

$$\begin{array}{r} \frac{3}{5} + \frac{2}{7} \\ \times 7 \quad \times 5 \\ \hline \frac{21}{35} + \frac{10}{35} = \frac{31}{35} \end{array}$$

$$-\quad \frac{3}{5} - \frac{2}{7}$$

$$\begin{array}{r} \frac{3}{5} - \frac{2}{7} \\ \times 7 \quad \times 5 \\ \hline \frac{21}{35} - \frac{10}{35} = \frac{11}{35} \end{array}$$



$$\times \quad \frac{3}{5} \times \frac{2}{7}$$

Just multiply the tops and bottoms

$$= \frac{3 \times 2}{5 \times 7} = \frac{6}{35}$$

$$\div \quad \frac{3}{5} \div \frac{2}{7}$$

Flip the second fraction and change to a times

$$\frac{3}{5} \times \frac{7}{2} = \frac{21}{10}$$

K  
F  
C

### Sparx Maths

Clip Numbers

M157, M197, M110, M265

### Tip

- To find equivalent fractions multiply/divide the numerator and denominator by the same number.

### Questions

1)  $\frac{2}{7} + \frac{5}{8}$  2)  $\frac{7}{9} - \frac{2}{5}$  3)  $\frac{3}{7} \times \frac{4}{9}$  4)  $\frac{3}{11} \div \frac{14}{22}$

What is the reciprocal of: 5)  $\frac{2}{3}$  6) 9 7) 0.75

ANSWERS: 1)  $\frac{51}{56}$  2)  $\frac{17}{45}$  3)  $\frac{4}{21}$  4)  $\frac{3}{7}$  5)  $\frac{3}{2}$  6)  $\frac{1}{9}$  7)  $\frac{4}{3}$

# Year 8 Knowledge Organiser

## 4 OPERATIONS WITH MIXED NUMBERS

### Key Concepts

An **improper fraction** is when the numerator is larger than the denominator e.g.  $\frac{20}{12}$

Converting from a mixed number into an improper fraction:

$$2\frac{3}{5} = \frac{10}{5} + \frac{3}{5} = \frac{13}{5}$$

An **integer** is a whole number.

$$3 \times \frac{2}{7} = \frac{2}{7} + \frac{2}{7} + \frac{2}{7} = \frac{6}{7}$$

OR

$$3 \times \frac{2}{7} = \frac{3 \times 2}{7} = \frac{6}{7}$$

$$\frac{3}{5} \div 6 = \frac{3}{5} \times \frac{1}{6} = \frac{3}{30} = \frac{1}{10}$$

$$1\frac{2}{3} + 2\frac{1}{4}$$

$$= \frac{5}{3} + \frac{9}{4}$$

$$= \frac{20}{12} + \frac{27}{12}$$

$$= \frac{47}{12}$$

$$= 3\frac{11}{12}$$

$$2\frac{2}{3} - 1\frac{1}{4}$$

$$= \frac{8}{3} - \frac{5}{4}$$

$$= \frac{32}{12} - \frac{15}{12}$$

$$= \frac{17}{12}$$

$$= 1\frac{5}{12}$$

$$1\frac{1}{3} \times 2\frac{3}{4}$$

$$= \frac{4}{3} \times \frac{11}{4}$$

$$= \frac{44}{12}$$

$$= 3\frac{8}{12}$$

$$2\frac{1}{3} \div 1\frac{3}{5}$$

$$= \frac{7}{3} \div \frac{8}{5}$$

$$= \frac{7}{3} \times \frac{5}{8}$$

$$= \frac{35}{24}$$

$$= 1\frac{11}{24}$$

Examples

### Key Words

Fraction  
Equivalent  
Reciprocal  
Numerator  
Denominator  
Improper/Top Heavy  
Mixed Number

Calculate:

1)  $1\frac{2}{3} + 2\frac{3}{4}$  3)  $3\frac{1}{5} \times 1\frac{2}{3}$  5)  $\frac{2}{5} \times 7$

2)  $3\frac{3}{4} - 1\frac{1}{3}$  4)  $1\frac{3}{5} \div 2\frac{7}{10}$  6)  $\frac{3}{5} \div 9$

ANSWERS A 1)  $4\frac{5}{12}$  2)  $2\frac{5}{12}$  3)  $5\frac{1}{3}$  4)  $\frac{16}{27}$  5)  $\frac{14}{5} = 2\frac{4}{5}$  6)  $\frac{3}{45} = \frac{1}{15}$

### Sparx Maths

Clip Numbers

M157, M197, M110, M265



# MUSIC: YEAR 8 – UNIT 3 THE BLUES

## Prominent Blues Artists



'Blind' Lemon Jefferson  
1893-1929



Robert Johnson  
1911-1938



Bessie Smith  
1894-1937



Howlin' Wolf  
1910-1976



John Lee Hooker  
1917-2001

### The 12-bar Blues

The Blues have a very distinctive chord pattern consisting of a repeating 12-bar chord sequence.

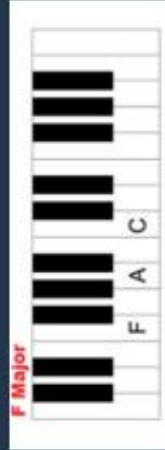
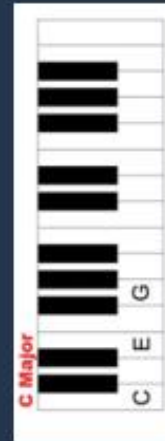
This sequence only uses the chords I, IV and V and lasts 12 musical bars, hence the term "The 12-Bar Blues"

C <sub>(I)</sub>	C <sub>(I)</sub>	C <sub>(I)</sub>	C <sub>(I)</sub>
F <sub>(IV)</sub>	F <sub>(IV)</sub>	F <sub>(IV)</sub>	F <sub>(IV)</sub>
G <sub>(V)</sub>	F <sub>(IV)</sub>	C <sub>(I)</sub>	C <sub>(I)</sub>

### Walking Bass

Under the 12-Bar Blues Pattern the bass line often keeps a steady 'walking-pace' beat with the melodic pattern rising and falling almost symmetrically.

This constant speed gives the meaning and style to what is known as a "Walking Bass"

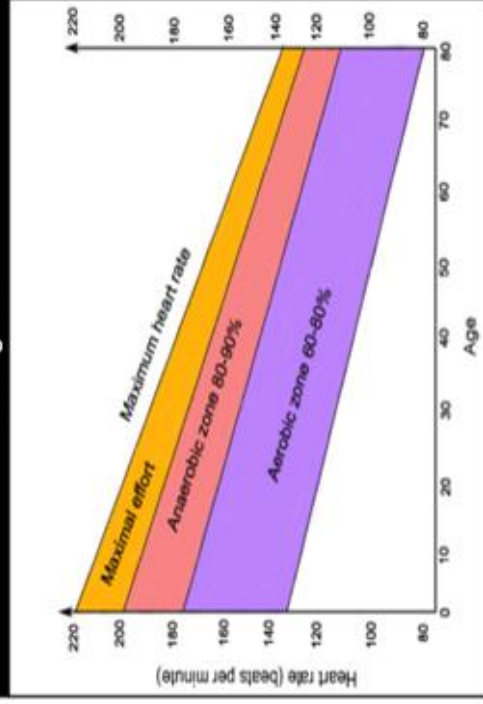


## 8.3 KS3 Core PE Knowledge Organiser: Exercise Intensity

### Key Terms

Key Term	Definition
<b>Heart Rate (HR)</b>	The number of heart beats per minute, measured in beats per minute.
<b>Resting Heart Rate (RHR)</b>	The number of heart beats per minute (at rest), measured in beats per minute.
<b>Maximum Heart Rate (MHR)</b>	The maximum number of beats your heart can beat per minute. This is measured in beats per minute. This is calculated as $220 - \text{age}$ .
<b>Recovery Heart Rate</b>	The fitter you are, the faster the recovery of your heart rate. Your heart rate drops most sharply in the first minute after you stop exercising; it should then fall about 20 beats a minute—a drop of less than 12 beats a minute is considered abnormal.

### Training Zones



### Training Thresholds

Key Term	Definition
<b>Aerobic Training</b>	60-80% of your maximum heart rate.
<b>Anaerobic Training</b>	80-90% of your maximum heart rate.
<b>Muscular Endurance</b>	Low Weight Vs High Repetitions & Sets
<b>Muscular Strength</b>	High Weight Vs Low Repetitions & Sets

**Worked example:** Calculate the aerobic target zone for a 20 year old athlete.

First you need to calculate the athletes maximum heart rate which would be  $220 - 20 = 200\text{bpm}$  (1). The aerobic target zone is 60-80% of the MHR (1). 60% of 200 is 120, 80% is 160. (1). So the athletes aerobic target zone would be between 120 and 160bpm. If they were in this range they would be working aerobically (1) working on their endurance (1).

Calculate - Requires computation in relation to fitness data

### Misconceptions

- Heart rate zones need to be calculated using maximum HR (220-age).
- Aerobic involves using oxygen and is used for longer duration events working on endurance.
- Anaerobic is without oxygen and is used for shorter duration higher intensity using strength and power.
- Co-ordination can be more than just hand-eye, can be foot-eye or moving arm and legs at the same time.
- Speed can also refer to moving a body part – e.g. moving the arm to play a shot in table tennis.

### Key Vocabulary

Aerobic, Anaerobic, Heart Rate, Resting, Recovery, Weight, Repetitions, Maximum, Maximal, Component, Stimulus, Voluntary, Joints, Static

Your Turn: Try these questions

- 1) Define the term heart rate. 2) How would you develop muscular strength? 3) How would you determine that an athlete had stopped exercising? What is this called?



## 8.4 KS3 Core PE Knowledge Organiser: Components of Fitness

State – Generally involves the recall of a fact

Components of Fitness		Worked Examples – For each component state an athlete that would use it and explain why.
Component	Definition	
<b>Body Composition</b>	A measure of the percentage of fat, muscle, bone, water and vital organs that make up your body weight.	Athletes require a suitable body composition for their sport. E.g.; a <b>rugby player</b> requires a larger <b>proportion of muscle</b> than a <b>dancer</b> as they need <b>strength to make tackles</b> .
<b>Coordination</b>	The ability to move two or more body parts together, accurately and smoothly.	<b>Tennis</b> players require excellent levels of <b>coordination</b> to be able to make <b>contact with the ball and racket</b> at the same time to <b>perform accurate shots</b> .
<b>Power</b>	The ability to combine strength with speed to perform a strong muscular contraction very quickly.	<b>Long jumpers</b> require great amounts of <b>power</b> to be able to <b>push off the ground</b> to propel themselves into the air in order to <b>travel a long distance</b> in their jump.
<b>Reaction Time</b>	The amount of time it takes you to respond to a stimulus.	<b>Sprinters</b> require a quick <b>reaction time</b> to be able to <b>get out of their starting blocks as quickly as possible</b> at the beginning of a race to <b>give them a better chance of winning</b> .
<b>Speed</b>	The rate at which your body, or part of your body, is able to perform a movement.	<b>Rugby players</b> , particularly <b>wingers</b> , require high levels of <b>speed</b> to be able to <b>travel down the wing at a fast pace to be able to score a try</b> .
<b>Balance</b>	Your ability to keep your body steady, both when in a static position and when moving.	<b>Dancers</b> require large amounts of <b>balance</b> to ensure that they <b>maintain control</b> when in a <b>static position</b> , such as <b>standing on one leg</b> . This will give them a <b>better aesthetic score</b> .
<b>Agility</b>	A measure of how quickly you can change the position of your body, while keeping your entire body under control.	<b>Footballers</b> require high levels of <b>agility</b> to be able to <b>change direction</b> at speed when <b>running with the ball</b> to get <b>around their opponents</b> to attack with a bigger threat.
<b>Flexibility</b>	The ability of your joints to move through their full range of movement.	<b>Gymnasts</b> require large amounts of <b>flexibility</b> to be able to move their <b>joints through their full range of motion</b> when performing moves and routines to a <b>higher standard</b> .
<b>Muscular Endurance</b>	A measure of the length of time your voluntary muscles can contract without getting tired. This can be repeated muscle contractions, or one contraction held for a long period of time.	<b>Boxers</b> require good <b>muscular endurance</b> to be able to <b>repeatedly contract</b> their muscles when <b>throwing punches</b> many times without getting tired to try <b>enforce a knockout</b>
<b>Strength</b>	The amount of force a muscle can generate when it contracts to overcome resistance.	<b>Powerlifters</b> require excellent <b>muscular strength</b> to be able to generate <b>large amounts of force</b> when <b>lifting heavy weights</b> .
<b>Cardiovascular Fitness</b>	A measure of how efficiently your body can deliver oxygen and nutrients, such as glucose, to your working muscles during exercise, and also carry away waste products.	<b>Marathon runners</b> require excellent <b>cardiovascular fitness</b> to be able to use the whole body to run for the <b>entire duration of the race</b> without getting tired.

Your Turn: Try these questions

- 1) Define the term flexibility. 2) State 2 sports that would require power. 3) Explain the importance of agility and speed for a 100m sprinter.

Explain – Requires a justification/exemplification of a point. The answer must contain some linked reasoning.

# Religious Studies: War and Peace

Key Word	Definition
War	Fighting between groups to resolve issues.
Civil War	War within a country.
Peace	An absence of conflict.
Pacifism	Refusing to take part in war/violence.
Just War	A war that is seen as justified, necessary and fair.
Holy War	Fighting for a religious cause.
Jihad	Striving against evil for the sake of Allah.
Greater Jihad	A personal, internal struggle against the devil.
Lesser Jihad	An outward struggle to defend Islam/Muslims.
Thomas Aquinas	Christian thinker, drew up Just War principles.
Terrorism	Unlawful use of violence to achieve a political goal.
Ahimsa	Non-violence/respect for life.

## Key Quotes

In the Bible Jesus said 'Put away your sword' when he was arrested and one of his disciples tried to defend him. Jesus also said 'Blessed are the Peacemakers, they are children of God' but when he visited the Temple in Jerusalem he was angry at the money changers reacting with some violence.

In the Qur'an it says "Fight in the way of Allah against those who fight against you, but begin not hostilities. Lo! Allah loveth not aggressors."

Gandhi is said to have stated 'An eye for an eye makes the whole world blind.'

## Key Questions

When do you think it is right to fight? In defence? To gain more power/land?

To make people listen to you? Is it ever right to kill?

## Practice Task

'Religious people should just pray for change – they shouldn't be involved in actions.' Write a speech arguing for or against this statement.

# Religious Studies: War and Peace

## What are the causes of conflict?

Humans can always find something to argue over, arguments can develop into violence and, when you have different countries involved, into armed conflicts and war. Jealousy, fear, greed, a struggle for land are all causes of conflict – religion can be a cause but it is not the cause of all wars.



## Just War and Christianity

In the early years of Christianity most Christians were probably pacifists, but as time passed and rulers became Christians there were times when fighting was seen as necessary, the lesser of two evils. Thomas Aquinas drew up a series of conditions for Just War, for example war should only be fought to promote the good and avoid evil and the methods used must be proportional to success. Many Christians still consider World War 2 to be an example of a Just War.



## The Islamic Concept of Jihad

This is much misunderstood! Muslims talk about Greater Jihad and Lesser Jihad. The more important Greater Jihad does not involve weapons, it is a conflict every Muslim is involved in as they fight the devil within. If they are tempted to eat during Ramadan – fighting that temptation is Jihad. Lesser Jihad may involve weapons in a fight to defend Islam/Muslims but there are strict conditions which need to be met, for example it must be a last resort. Despite the claims of some, a terrorist attack does not meet the conditions for Jihad.

## Pacifism

Some say violence is always wrong, no matter what the circumstances. Many Christians suggest Jesus was probably a pacifist. In the twentieth century Mohandas Gandhi, a Hindu, was one of the best known pacifists who showed that it is possible to change the world without resorting to violence. He campaigned against racism in South Africa and helped achieve Indian independence using non-violent protests methods and following the principle of ahimsa. Martin Luther King followed his example.

## Terrorism

The twenty-first century has made us all aware of the evils of terrorism. September 11<sup>th</sup> 2001 was when planes were flown into the World Trade Centre causing the Twin Towers to collapse. In Europe London was targeted in 2007, and again in 2017. Paris suffered in 2015 and Brussels in 2016. Innocent people lost lives, and those of all faiths and of none have spoken out against terrorism.

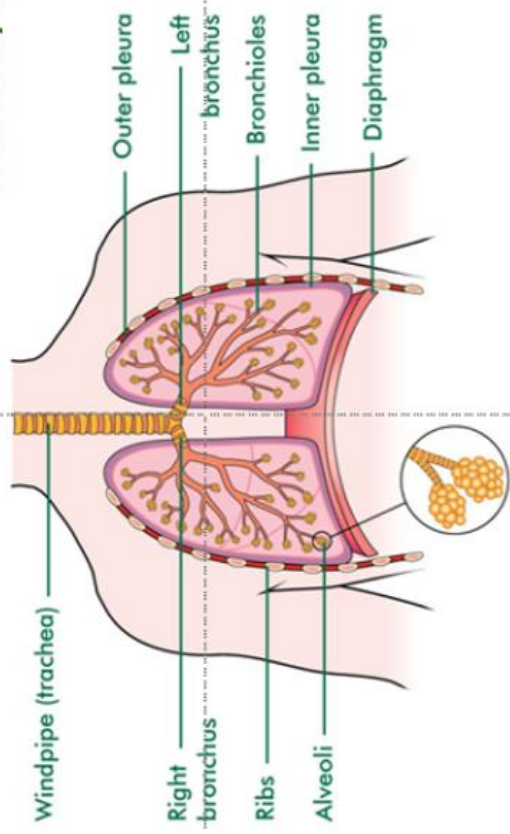


## Sikhism

Sikhism is a religion that stresses the idea of equality, they believe that God the creator has made one humanity, no one is born better than anyone else and all religious traditions are valid. Sikhs have sometimes suffered violence from others, they value pacifism but most see war as sometimes justified.

## The Lungs

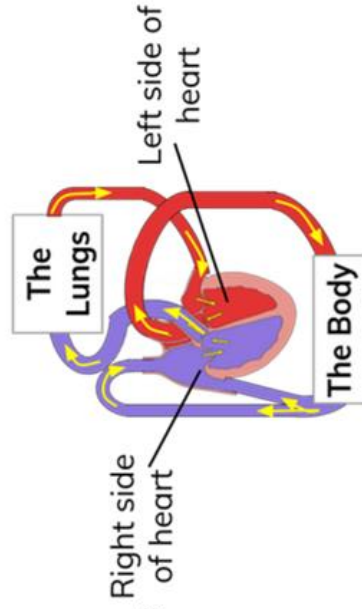
Task: Explain what happens to the body during exercise.



## Year 8 Organ Systems Knowledge Organiser

### DOUBLE CIRCULATORY SYSTEM

Blood passes through the heart twice.  
 The right side pumps deoxygenated blood to the lungs.  
 The left side pumps oxygenated blood to the body.



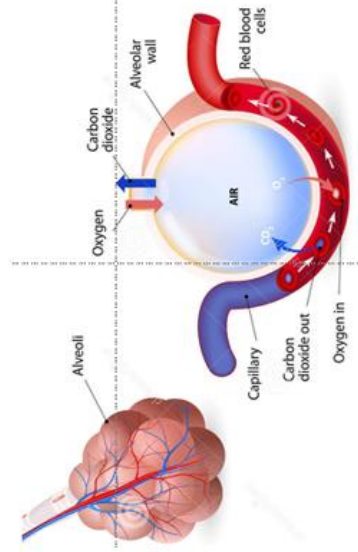
### Gaseous Exchange

This is the movement of oxygen from the alveoli into the blood and carbon dioxide out of the blood and into the alveoli.

Alveoli:

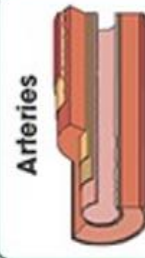
- Have a large surface area
- Have a good blood supply
- Have very thin walls

This helps the gases move quickly by **diffusion**.



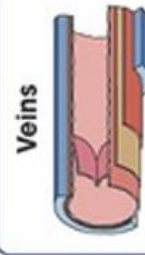
### CIRCULATORY SYSTEM

The circulatory system includes the heart, blood vessels and blood. The heart has a left & right atrium and a left & right ventricle.



#### Arteries

Carries blood away from the heart.  
 Tough, flexible and thick walls.  
 The largest blood vessels.



#### Veins

Thin walls due to less blood pressure.  
 Carries blood back to the heart.  
 Medium-sized blood vessels.



#### Capillaries

Exchanges oxygen and waste with the blood.  
 The smallest blood vessels.  
 Walls are only one-cell thick.

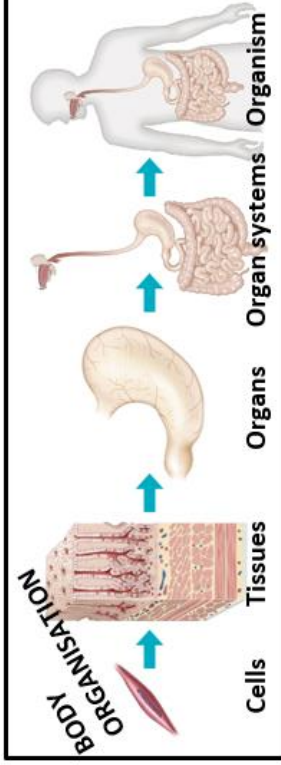
### Respiration Happens in Every Cell in the Body

Aerobic respiration:

**Oxygen + Glucose → Carbon Dioxide + Water (energy released)**

Anaerobic respiration happens when oxygen isn't available;

**Glucose → Lactic Acid (energy released)**



**Digestion** is the process by which food is broken down to be absorbed into the bloodstream and distributed around the body.

**Mouth** - Physical breakdown of food (mechanical digestion)

**Oesophagus** - Takes food to the stomach

**Stomach** - Digestion of protein (chemical digestion)

The stomach also contains acid to help kill bacteria.

**Liver** - Produces bile

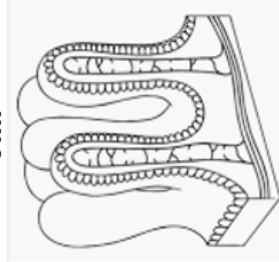
**Pancreas** - Produces enzymes and insulin

**Small intestine** - Digestion of carbohydrates, fats and proteins (chemical digestion)

absorption of nutrients via villi

**Large intestine** - Absorption of water

Villi



Villi are finger-like projections with a **large surface area** to aid absorption of nutrients into the blood.

## Food tests

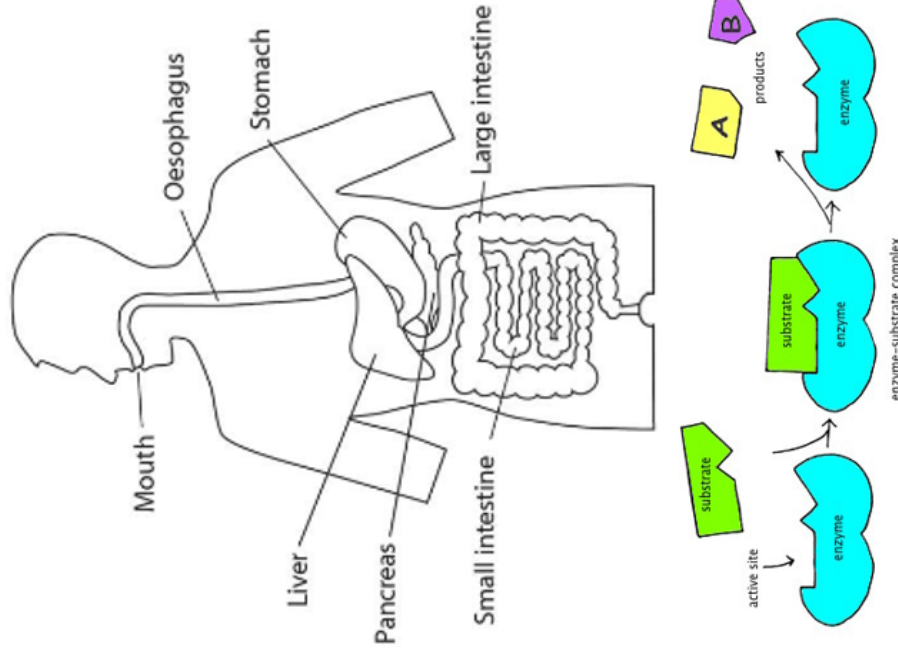
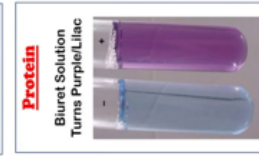
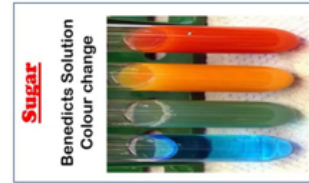
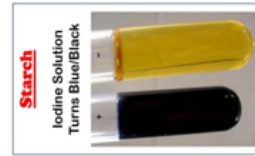
Starch; Iodine solution turns black

Glucose; Benedicts, blue to orange

Protein; Biurets, blue to purple

Fats; Ethanol, clear to cloudy

**Task: Write a method for one of the food tests.**



## Enzymes

An enzyme breaks down large food molecules into smaller molecules.

**Lipases** break down lipids and fats.

**Proteases** break down proteins.

**Carbohydrases** break down carbohydrates.

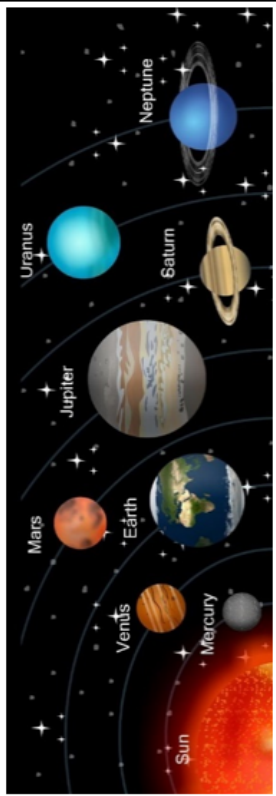
## Tier 2

Digestion  
Saliva  
Absorbed  
Stomach  
Rectum Anus  
Bacteria  
Microorganism  
Model  
Diffusion  
Glucose  
Aerobic  
Respiration  
Combustion  
Breathing  
Ventilation  
Red Blood Cells  
Blood Vessels

## Tier 3

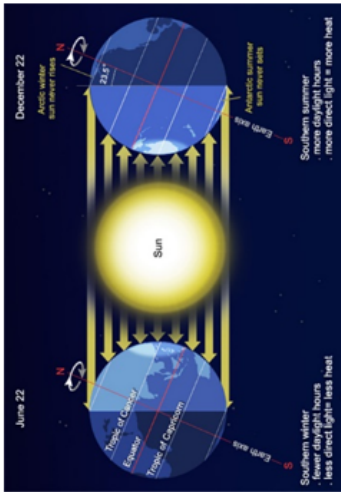
Salivary glands  
Liver  
Ingestion  
Small Intestines  
Oesophagus  
Faeces  
Large Intestine  
Egestion  
Enzyme  
Catalyst  
Plasma  
Villi  
Anaerobic  
Capillaries  
Lactic Acid  
Carbohydrates

## Solar System



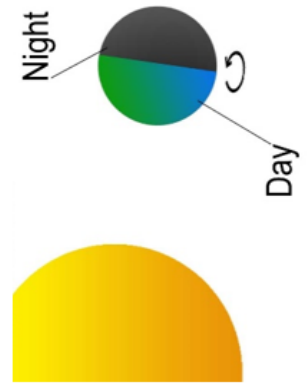
## Seasons

We live in the Northern Hemisphere. In summer the Northern Hemisphere is tilted towards the sun. In winter it is tilted away from the sun. As shown in the diagram.



## Day and Night

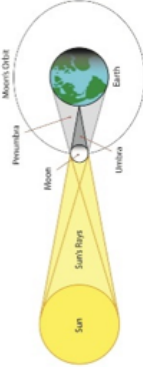
It takes 24 hours for the Earth to complete one rotation on its axis. As a result there are times that the UK is facing away from the sun (night) and there are times when the UK is facing towards the sun (day).



## Satellites

A satellite is a body that orbits the earth or another planet. They can be artificial or natural. An artificial satellite is a man-made object in orbit, used for communication, media or navigation. The Moon is a natural satellite.

## Solar eclipse



A solar eclipse occurs when a portion of the Earth is engulfed in a shadow cast by the Moon which fully or partially blocks sunlight. The part of the Earth in the umbra experiences a total eclipse and those in the penumbra see a partial eclipse.

## The Sun

The star at the centre of the Solar System.

## Heliocentric Model

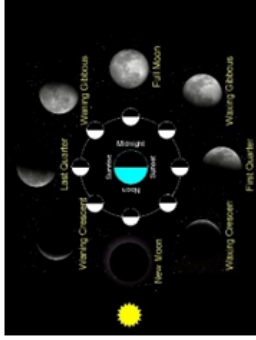
Model of the universe with the Sun at the centre. First proposed by Aristarchus of Samos in the 2<sup>nd</sup> century BC and later by Copernicus in the 16<sup>th</sup> century.



# Year 8 Topic 2 Physics Knowledge Organiser

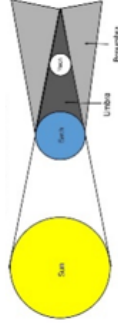
## Phases of the moon

The moon takes 28 days to orbit the Earth. The moon is a natural satellite.



## Lunar eclipse

A lunar eclipse occurs when the Moon passes directly behind Earth and into its shadow.



## Tier 2 Vocabulary

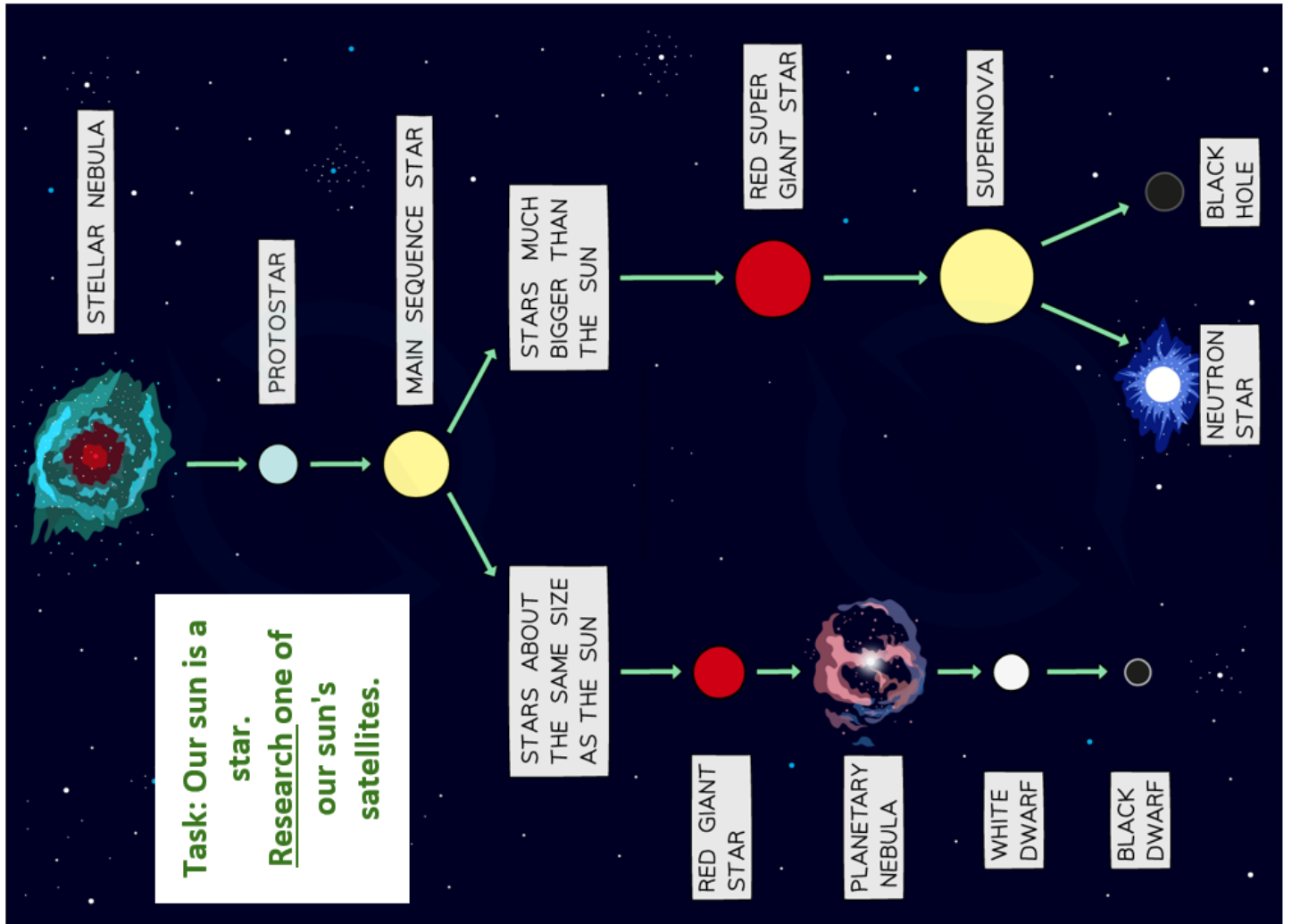
Sun  
Star  
Orbit  
Planet  
Earth  
Moon  
Seasons  
Mass  
Weight  
Ellipse  
Luminous  
Universe

## Tier 3 Vocabulary

Solar System  
Satellite  
Solar Eclipse  
Lunar Eclipse  
Asteroid  
Comet  
Meteor  
Gravity  
Constellation  
Asterism  
Exoplanet  
Galaxy

## Life cycle of a Star

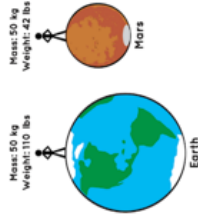
**Task: Our sun is a star.**  
**Research one of our sun's satellites.**



## Mass vs Weight

**Mass** – The amount of stuff you are made out of (Kg).

**Weight** – The force of gravity acting on that mass (weight = mass x gravity).



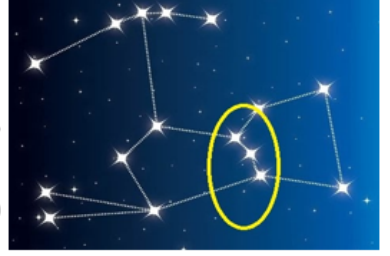
The man has the same mass because he is made of the same stuff. He has a different weight because gravity is much lower on the moon.

## Exoplanets

Planets that orbit stars other than our Sun are called exoplanets. There are presently 5,246 confirmed exoplanets in 3,875 planetary systems.

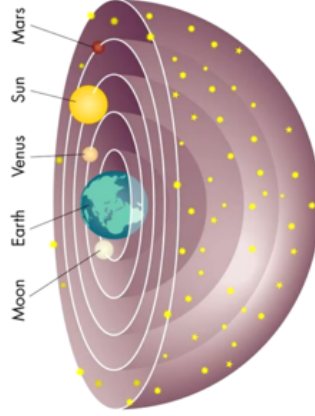
## Constellations and Asterisms

A constellation is an officially designated area of the night sky. There are 88 constellations. An asterism is a group of stars that forms a recognisable pattern in the night sky.



## Geocentric Model

Model of the universe with the Earth at the centre and the planets, Sun and stars moving around it. This model was proposed from around the 4<sup>th</sup> century BC by Ancient Greek philosophers including Plato and Aristotle.



## Galaxy

A collection of dust, gas and stars. Galaxies can contain hundreds of billions of stars. Our Sun is in the Milky Way galaxy. The nearest galaxy to ours is Andromeda.

# Spanish

## Y8 Spring term Knowledge Organiser

## Unit 3: La comida - Food

Key spellings	
Learn these spellings, they will be really useful for this unit and you will be tested on them.	
1. desayuno	for breakfast I eat...
2. cenar	for dinner I eat...
3. voy a tomar	I'm going to have...
4. voy a beber	I'm going to drink...
5. voy a comprar	I'm going to buy...

### Key vocabulary and questions

¿Qué te gusta comer y beber?	What do you like to eat and drink?
Me gusta/No me gusta...	I like/don't like...
el agua	water
el arroz	rice
la carne	meat
la fruta	fruit
la leche	milk
el marisco	seafood
el pescado	fish
el queso	cheese
Me gustan/No me gustan...	I like/don't like (plural)
las verduras	vegetables
los caramelos	sweets
las hamburguesas	hamburgers
los huevos	eggs
porque es/son	because it is/they are
delicioso/a(s)	delicious
asqueroso/a(s)	disgusting
Can you use a dictionary to look up more of your favourite foods?	

¿Qué desayunas/comes/cenas? Desayuno...	What do you have for breakfast/lunch/dinner? For breakfast I have...
Como/Almuerzo...	For lunch I have...
Ceno...	For dinner I have...
cereales	cereal
tostadas	toast
café	coffee
yogur	yoghurt
té	tea
zumos (de naranja)	(orange) juice
un bocadillo	a sandwich
pollo con ensalada	chicken with salad
sopa	soup
patatas fritas	chips
helado de fresa	strawberry ice cream

Can you describe these Spanish foods and name some others? *churros, paella, tortilla española, Cola Cao.*

En el restaurante – Role play	At the restaurant – Role play
¿Qué va a tomar	What are you going to have?
de primer plato	to start
de segundo plato	for a main course
de postre	for dessert
Voy a tomar...	I'm going to have...
¿Y para beber?	and to drink?
Voy a beber...	I'm going to drink...
¿Algo más?	Anything else?
No, nada más	No, nothing else
La cuenta, por favor	The bill, please
Tengo hambre	I'm hungry
Tengo sed	I'm thirsty
Look back at the example menu we saw in class, what would you order?	

En el mercado – Role play	At the market – Role play
¿Qué quiere?	It was...
Quiero comprar...	I want to buy...
cientos gramos de tomates	100g tomatoes
doscientos gramos de uvas	200g grapes
trescientos gramos de pan	300g bread
medio kilo de pimientos rojos	0.5kg red peppers
un kilo de cebollas	1kg onions
dos kilos de manzanas	2kg apples
una botella de limonada	a bottle of lemonade
un paquete de tortillas	a packet of tortilla wraps
una lechuga	a lettuce
¿Cuánto es?	How much is it?
Son diez euros con veinte	It's 10€20

Can you remember all your numbers, including how to form numbers past 100? Practise them at home.

### Key grammar – The near future

Use the near future to talk about what is going to happen (I am going to eat, he is going to buy, we are going to dance)

This tense is formed by 3 parts, make sure you have all of them to use it correctly.

1. The present tense of IR (the verb to go)
2. 'a'
3. An infinitive verb (ending in -ar/-er/-ir)

1. The present tense of IR	2. 'a'	3. An infinitive verb
Voy	a	comer
Vas		bailar
Va		llevar
Vamos		cantar
Vais		comprar
Van	beber	beber

I am going to eat  
You are going to dance  
(S)he is going to wear  
We are going to sing  
You (pl.) are going to buy  
They are going to drink



# Spanish

## Y8 Spring term Knowledge Organiser

Key spellings	
Learn these spellings, they will be really useful for this unit and you will be tested on them.	
1. llevo	I wear
2. ¿Te gustaría?	Would you like to?
3. Me gustaría	I would like to
4. no puedo	I can't
5. tengo que	I have to

Key vocabulary and questions	
¿Quieres salir?	Do you want to go out?
¿Te gustaría ir...?	Would you like to go...?
al cine	to the cinema
al polideportivo	to the sports centre
al parque	to the park
al museo	to the museum
al centro comercial	to the shopping centre
a la bolera	to the bowling alley
a la playa	to the beach
a la pista de hielo	to the ice rink
a la cafetería	to the café
a mi casa	to my house
<b>How do you know whether to use <i>a</i> or <i>la</i> with the places above?</b>	

¿Cómo responderás?	How will you answer?
De acuerdo/Vale	All right/Okay
Muy bien	Very good
¡Genial!	Great!
Sí, me gustaría mucho	Yes, I would really like to
¡Ni hablar!	No way!
¡Ni en sueños!	In your dreams!
No tengo ganas	I don't want to
¡Qué aburrido!	How boring
Lo siento, no puedo	Sorry, I can't
<b>Don't forget to use one of the excuses if you say you can't go.</b>	

Excusas	Excuses
Tengo que...	I have to...
lavarme el pelo	wash my hair
cuidar a mi hermano	look after my brother
hacer los deberes	do homework
ordenar mi dormitorio	tidy my room
pasear al perro	walk the dog
salir con mis padres	go out with my parents
No quiero	I don't want to
No tengo tiempo	I don't have time
No tengo dinero	I haven't any money

¿A qué hora?	At what time?
A las seis	At 6:00
A las ocho y diez	At 8:10
A las cinco y cuarto	At 5:15
A las tres y media	At 3:30
A las nueve menos cuarto	At 8:45
A las once menos veinte	At 10:40
A mediodía	At midday
A la una	At 1:00
<b>You'll also need to say on what day. Can you remember all the days of the week?</b>	

¿Cómo te preparas?	How do you get ready?
Me baño	I bathe
Me ducho	I shower
Me lavo la cara	I wash my face
Me lavo los dientes	I brush my teeth
Me visto	I get dressed
Me maquillo	I put my makeup on
Me peino	I brush my hair
Me aliso el pelo	I straighten my hair
Me pongo gomina	I put gel in my hair
<b>Use sequencers to talk about your routine: primero, luego, después, finalmente...</b>	





## Unit 4: Las salidas - Outings




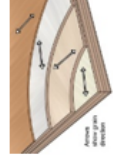
¿Dónde quedamos?	Where shall we meet?
delante de la cafetería	in front of the café
al lado del museo	next to the museum
enfrente de la bolera	in front of the bowling alley
detrás del polideportivo	behind the sports centre
en tu casa	at your house
<b>Can you spot the rule for using <i>del</i> or <i>de la</i> here?</b>	

¿Qué vas a llevar?	What are you going to wear?
Normalmente llevo...	Normally I wear...
Voy a llevar...	I'm going to wear...
una camiseta blanca	a white shirt
una camiseta naranja	an orange T-shirt
un jersey amarillo	a yellow jumper
una sudadera verde	a green hoodie
una falda rosa	a pink skirt
un vestido morado	a purple dress
una gorra gris	a grey cap
unos pantalones negros	some black trousers
unas botas marrones	some brown boots
unos vaqueros azules	some blue jeans
unos zapatos de muchos colores	some multicoloured shoes
unas zapatillas de deporte	some trainers
<b>Remember that the adjective comes after the noun in Spanish and needs to have the correct ending (masc/fem/plural)</b>	

Key grammar – Reflexive verbs	
Reflexive verbs are often used to describe an action you do to yourself. They work in the same way as other verbs, but have an extra <b>reflexive pronoun</b> that must be added. Don't forget to change the <b>ending of the verb</b> accordingly.	
<b>Lavarse</b>	<b>To wash oneself</b>
<b>Me lavo</b>	I wash myself
<b>Te lavas</b>	You wash yourself
<b>Se lava</b>	S(he) washes her/himself
<b>Nos lavamos</b>	We wash ourselves
<b>Os laváis</b>	You (pl) wash yourselves
<b>Se lavan</b>	They wash themselves

# Year 8 – Knowledge Organiser – Design & Technology – Materials

Metals			
Type	Example of	Advantages	Disadvantages
<b>Steel</b> 	<b>Ferrous</b> (Contains iron)	Relatively cheap Widely available Strong/Tough	Rusts Requires a surface finish
<b>Aluminium</b> 	<b>Non-Ferrous</b> (Does not contain iron)	Does not rust Lightweight Easy to cut and shape	Relatively expensive
<b>Copper</b> 	<b>Non-Ferrous</b> (Does not contain iron)	Good conductor of heat and electricity	Corrodes Relatively expensive
<b>Pewter</b> 	<b>Alloy</b> (Mix of multiple metals)	Does not rust Low melting point for easy casting Polishes to a high shine	Relatively expensive Heavier than alternatives

Timber			
Type	Example of	Advantages	Disadvantages
<b>Pine</b> 	<b>Softwood</b>	Cheaper More sustainable as faster growing Widely Available	Knotty Can be weaker than hardwoods Less durable
<b>Oak</b> 	<b>Hardwood</b>	Good aesthetic Extremely durable Easy to maintain High strength	Generally harder to cut and shape More expensive Less sustainable as slower growth rate
<b>Beech</b> 	<b>Hardwood</b>		
<b>Plywood</b> 	<b>Manufactured Board</b>	Available in large sheets Good strength and durability Can be laser cut	More expensive than other board options Edges can splinter

Classification of Metal	
<b>Ferrous</b>	<ul style="list-style-type: none"> <li>Contain iron</li> <li>Magnetic (most)</li> <li>Rust</li> </ul>
<b>Wrought iron, pig iron, mild steel, stainless steels</b>	
<b>Non-Ferrous</b>	<ul style="list-style-type: none"> <li>Do NOT contain iron</li> <li>Are NOT magnetic</li> <li>Do NOT rust</li> </ul>
<b>Copper, tin, silver, gold, aluminium, bronze, nickel</b>	
<b>Alloys</b>	<ul style="list-style-type: none"> <li>Mixture of more than one element</li> <li>Combining 2 metal improves properties</li> </ul>
<b>Solder, Pewter, Brass</b>	

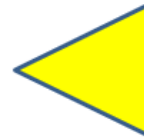
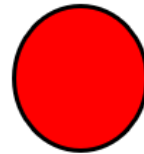
## Specific Language and Terms

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






## Health & Safety

### Specific Language and Terms

<b>PPE</b>	Personal Protective Equipment
<b>Hazard</b>	A danger or a risk
<b>BSI</b>	British Standards Institute
<b>Kitemark</b>	Assures consumers that the product is safe and has been tested by the BSI
<b>CE mark</b>	Assures consumers that the product meets European safety standards








### PPE Equipment

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

## Hand tools:

### Tools and equipment

<b>Try Square</b>	Drawing a line at 90 degrees OR checking a corner is square (90 degrees).	
<b>Tennon Saw</b>	Sawing straight lines in wood.	
<b>Hack saw</b>	Sawing straight cuts in metal.	
<b>Flat File</b>	Shaping or smoothing a piece metal or plastic.	
<b>Vice</b>	Holds work still and secure when cutting, drilling, filing etc.	

Walk safely and calmly around the classroom/ workshop.

Keep your work area and floor area clear – keep your belongings hung up.

Follow the teacher's instructions for using equipment carefully.









Report all spillages & clean up properly after yourself.

Make sure that you are wearing the correct PPE equipment for tasks.

Return all equipment to the correct areas of the classroom/ workshop.

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

# Machinery

Machinery					
<b>Pillar Drill</b>	A free standing machine that uses a motor to rotate a drill bit. This drill bit can then be used to cut holes in materials.		<b>Vacuum former</b>	A machine used to form sheet plastic into permanent objects using a mould.	
<b>Disc Sander</b>	Is used for shaping and finishing wood. It consists of an electric motor that turns a disk of sandpaper.		<b>Hegner saw</b>	A small electrical saw with a thin blade used to cut a variety of thin sheet materials	
<b>Laser Cutter</b>	A CAM machine that engraves and cuts through material using a high powered optical laser		<b>Vinyl Cutter</b>	A CAM machine that has a sharp blade to cut out designs on tin self-adhesive plastic	
<b>Buffer/ Polisher</b>	A machine that can be used to polish metal and plastics to a high shine.		<b>3D Printer</b>	A CAM machine that prints 3D models using thin layers of plastic	

## Specific Language and Terms

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

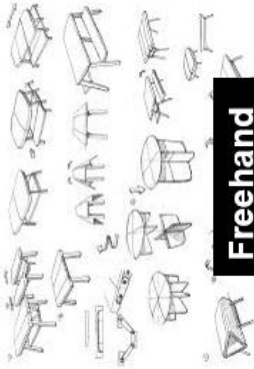
# CAD / CAM

CAD- Computer Aided Design	
<b>Advantages</b>	Designs can be created, saved and edited easily, saving time
<b>Disadvantages</b>	CAD software is complex to learn
<b>Advantages</b>	Designs or part of designs can be easily copied or repeated
<b>Disadvantages</b>	Software can be very expensive
<b>Advantages</b>	Designs can be worked on by remote teams simultaneously
<b>Disadvantages</b>	Compatibility issues with software
<b>Advantages</b>	CAD is very accurate
<b>Disadvantages</b>	Work can be lost if not backed up
<b>Advantages</b>	Designs can be rendered to look-realistic to gather public opinion in a range of finishes.
<b>Disadvantages</b>	Work can be lost if not backed up
CAM – Computer Aided Manufacture	
<b>Advantages</b>	Quick – speed of production can be increased
<b>Disadvantages</b>	Training is required to operate CAM
<b>Advantages</b>	Consistency and accuracy – all parts manufactured are all the same
<b>Disadvantages</b>	High initial outlay cost for machine
<b>Advantages</b>	Less mistakes- there is no human error unless pre programmed
<b>Disadvantages</b>	Loss of jobs for people
<b>Advantages</b>	Cost saving – workforce can be reduced
<b>Disadvantages</b>	Production stoppage – if the machines break down, the production would stop

CAD software programmes:



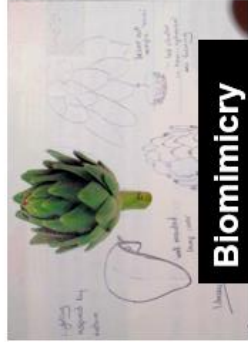
## Creating Ideas and Drawing:



**Freehand**



**Jack Straws**



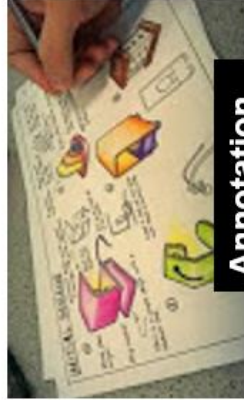
**Biomimicry**



**Scruffiti**



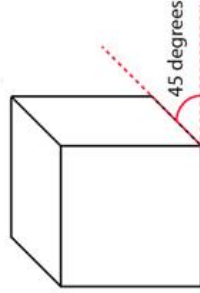
**Geometric Shapes**



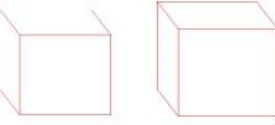
**Annotation**

## Oblique Projection

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



To draw it in Oblique Projection follow the three main steps below:



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


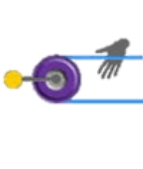
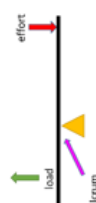


2. Project 45 degrees lines from each corner.

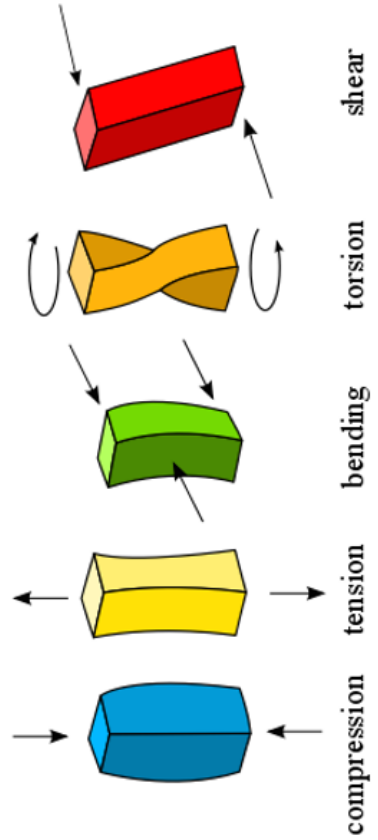
3. Draw the back two lines of the cube in position. Go round the outline of the cube with a fine black pen or dark, sharp pencil.

## Specific Language and Terms

<b>Oblique Drawing</b>	A projective drawing on an object in 3D where the front face is drawn flat and all other lines are projected at 45 degrees.
<b>Freehand Sketching</b>	Quick sketching without using a ruler. This is to be used to get your first thoughts for ideas down on paper.
<b>Creative Ideas</b>	Thinking outside the box. Different ways to get creative are to use techniques such as Jack straws, Geometric shapes, Scruffiti and Biomimicry.
<b>Annotation</b>	The notes you write around your ideas explaining what they show and how it could be made.
<b>Isometric Drawing</b>	An isometric drawing is a type of 3D drawing that is set out using 30-degree angles. It's a type of drawing in which the same scale is used for every axis, resulting in a non-distorted image.
<b>Construction Lines</b>	A lightly drawn line that allows you to construct a drawing, before committing the final shape to a darker line.
<b>Crating</b>	The drawing of a crate (box) using construction lines that allow a drawing to be created to scale within it.

Specific Language and Terms		Mechanisms	
<b>Mechanical System</b>	A mechanical system is a set of physical components that convert an input motion and force into a desired output motion and force. Mechanical systems have at least three elements: input, process and output.	<b>Mechanism</b>	
<b>Mechanism</b>	Is a device that transforms input forces and movement into a desired set of output forces and movement.	<b>Gears</b>	<p><b>Definition</b></p> <p>Gears are toothed wheels (cogs) that lock together and turn one another. When one gear is turned the other turns as well.</p>  <p><b>Example</b></p>
<b>Machine</b>	A system of mechanisms working together.	<b>Pulleys</b>	<p><b>Definition</b></p> <p>Pulleys are like gears, but the wheels do not lock together. The wheels are instead joined together by a drive belt. Pulleys can be used to affect the speed, direction or force of a movement.</p>  <p><b>Example</b></p>
<b>Motion</b>	A type of movement.	<b>Levers</b>	<p><b>Definition</b></p> <p>A rigid bar resting on a pivot, used to move a heavy or firmly fixed load with one end when pressure is applied to the other.</p>  <p><b>Example</b></p>

Forces		Types of Movement	
<b>Force</b>	<b>Definition</b>	<b>Motion</b>	<b>Definition</b>
<b>Compression</b>	A pushing or squashing force	<b>Linear</b>	Moves in one direction
<b>Tension</b>	A pulling or stretching force	<b>Oscillating</b>	Swings back and forth
<b>Torsion</b>	A twisting force	<b>Reciprocal</b>	Repetitive back and forth linear motion
<b>Shear</b>	A cutting force caused by two forces in opposite directions very close together	<b>Rotating</b>	Moves in a circular motion
<b>Bending</b>	When two forces act in opposite directions		











# Core British Values

- I recognise that it is **unacceptable** to dismiss the **beliefs and opinions** of anyone.
- I understand that discussions about **sensitive issues** will be **controlled and structured**.

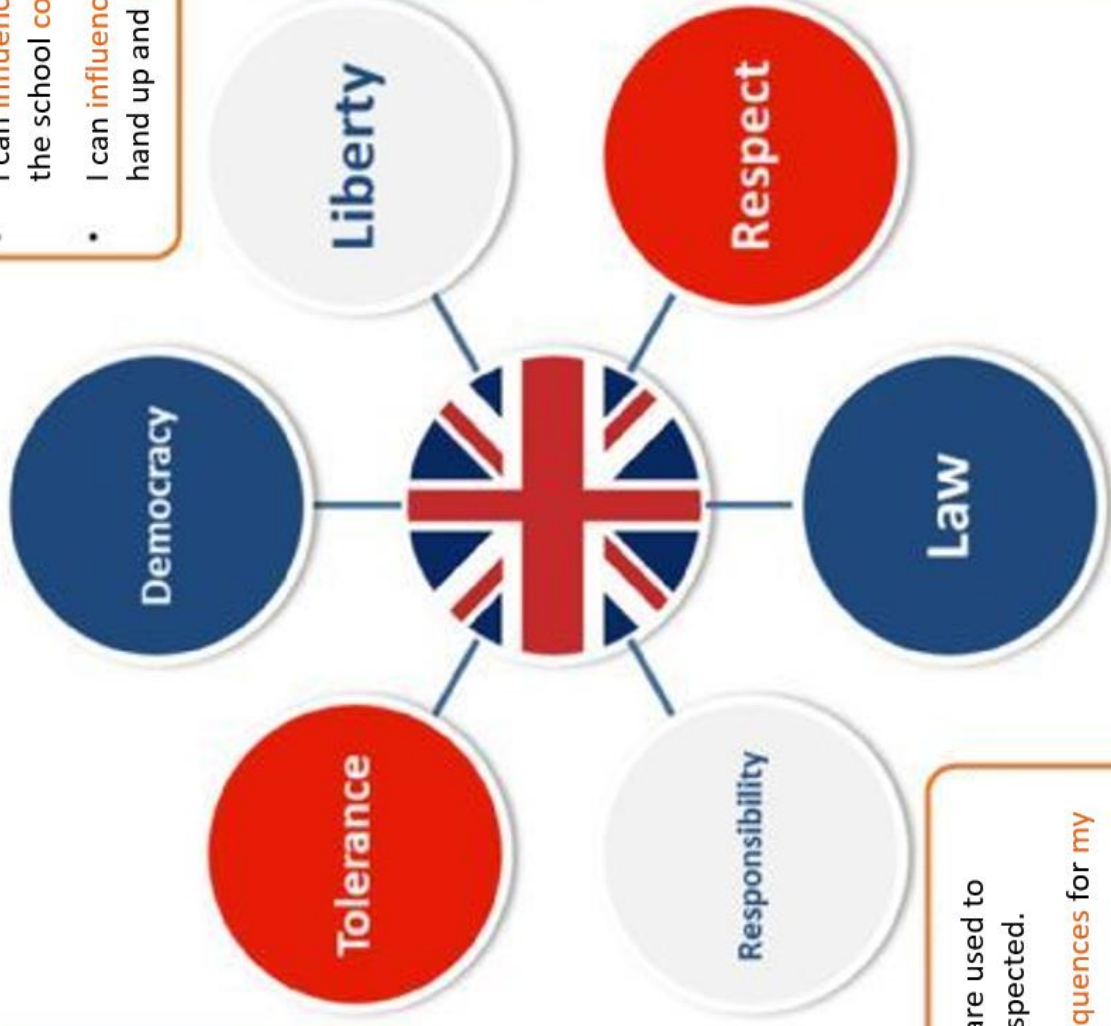
- I recognise that I am as **responsible** for my learning as my teacher.
- I take **responsibility** for all of my **actions** – good or bad.
- We **all** have a **responsibility** to **promote** and **protect** the wellbeing of others.

- I understand that the school **rules** are used to mirror **society laws** and must be respected.
- I recognise that there will be **consequences** for my **actions**.

- I can **influence** the way the school runs through the school **council** and by **talking to staff**.
- I can **influence** my **lessons** through putting my hand up and **responding**.

- I am **free to think** as I see fit.
- I have the **freedom to make** choices that affect me but I recognise that I am **accountable** for **all my actions**.

- I recognise that **everyone** is **entitled** to their **opinion** as long as it **does not promote** **extremism**.
- I understand that everyone is **entitled to a voice** within the classroom.
- I will **listen to others** as I would like to be listened to.

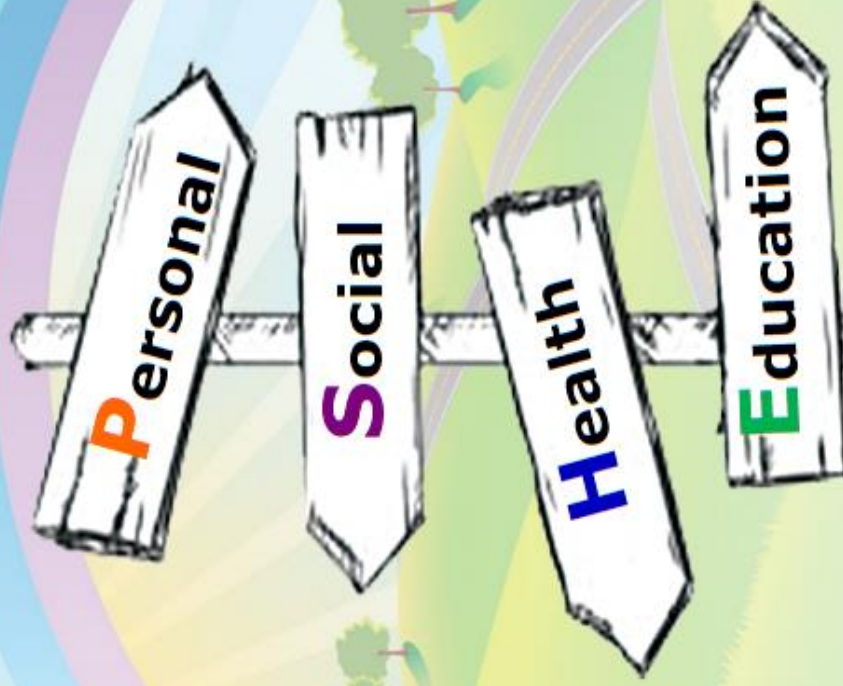


**Social - Moral - Spiritual - Cultural**



# YEAR 8

## STAYING SAFE



**Theme:** E-safety, online safety and exploitation

**Organisation:** The National Crime Agency's CEOP Education team

**Website:** [www.thinkuknow.co.uk](http://www.thinkuknow.co.uk)

**Theme:** Online safety, E-safety and Cyber-bullying

**Organisation:** Child Net

**Website:** [www.childnet.com/](http://www.childnet.com/)

**Theme:** Safety, support and abuse

**Organisation:** Childline

**Phone:** 0800 1111

**Website:** [www.childline.org.uk](http://www.childline.org.uk)

**Theme:** Crime

**Organisation:** Crime stoppers

**Phone:** 0800 555 111

**Website:** <https://crimestoppers-uk.org/>

**Theme:** Drugs, addiction and dependency

**Organisation:** FRANK (National Drugs Helpline)

**Phone:** 0300 123 6600

**Website:** [www.talktofrank.com/](http://www.talktofrank.com/)

**Theme:** Support and help for runaways

**Organisation:** Runaway Helpline

**Phone:** 116000

**Website:** [www.runawayhelpline.org.uk](http://www.runawayhelpline.org.uk)

**Theme:** Health, Wellness and Mental Health

**Organisation:** NHS

**Phone:** 111

**Website:** [www.nhs.uk](http://www.nhs.uk)

**Theme:** Mental Health, Wellness and self-care

**Organisation:** Young Minds

**Text line:** 85258

**Website:** [www.youngminds.org.uk](http://www.youngminds.org.uk)

**Theme:** Healthy teen relationships

**Organisation:** Act on it

**Phone:** 01270 250 390

**Website:** [www.actonitnow.org.uk](http://www.actonitnow.org.uk)

**Theme:** LGBTQI+

**Organisation:** Stonewall

**Website:** [www.stonewall.org.uk](http://www.stonewall.org.uk)

**Theme:** LGBTQ+ Equality

**Organisation:** Kite Trust (Cambs)

**Website:** <https://thekitetrust.org.uk/>

**Theme:** LGBTQ+ Equality

**Organisation:** Norfolk LBGT+ Project

**Phone:** 01603 219299

**Website:** <https://norfolklgbtproject.org.uk/>

**Theme:** Finance

**Organisation:** Barclays Life Skills

**Website:**

<https://barclayslifeskills.com/young-people/>

**Careers:**

**Unifrog** - [www.unifrog.org](http://www.unifrog.org)

**Help you choose:** <https://helpyouchoose.org/content/>

**National Careers Service:** <https://nationalcareers.service.gov.uk/>

**UCAS:** <https://www.ucas.com/explore/career-compass>

**I Can Be A:** <https://www.icanbea.org.uk>