



Year 8 Knowledge Organiser

**Spring Term
2023/24**

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							

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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

Autumn Term 2023		
Wednesday 6 Sept - Friday 20 Oct 2023	Half-term: Monday 23 – Friday 27 Oct 2023	Monday 30 Oct - Wednesday 20 Dec 2023
Spring Term 2024		
Thursday 4 Jan - Friday 16 Feb 2024	Half-term: Monday 19 – Friday 23 Feb 2024	Monday 26 Feb – Thursday 28 Mar 2024
Summer Term 2024		
Monday 15 Apr – Friday 24 May 2024	Half-term: Monday 27 – Friday 31 May 2024	Monday 3 Jun - Friday 19 Jul 2024

My best subject is:

What I want to achieve this term:

School Login Details:

My extra curriculars this term:

Spring Term Calendar

January 2024		
1	Mon	
2	Tue	
3	Wed	
4	Thu	
5	Fri	
6	Sat	
7	Sun	
8	Mon	
9	Tue	
10	Wed	
11	Thu	
12	Fri	
13	Sat	
14	Sun	
15	Mon	
16	Tue	
17	Wed	
18	Thu	
19	Fri	
20	Sat	
21	Sun	
22	Mon	
23	Tue	
24	Wed	
25	Thu	
26	Fri	
27	Sat	
28	Sun	
29	Mon	
30	Tue	
31	Wed	

February 2024		
1	Thu	
2	Fri	
3	Sat	
4	Sun	
5	Mon	
6	Tue	
7	Wed	
8	Thu	
9	Fri	
10	Sat	
11	Sun	
12	Mon	
13	Tue	
14	Wed	
15	Thu	
16	Fri	
17	Sat	
18	Sun	
19	Mon	
20	Tue	
21	Wed	
22	Thu	
23	Fri	
24	Sat	
25	Sun	
26	Mon	
27	Tue	
28	Wed	
29	Thu	

Spring Term Calendar

March 2024		
1	Fri	
2	Sat	
3	Sun	
4	Mon	
5	Tue	
6	Wed	
7	Thu	
8	Fri	
9	Sat	
10	Sun	
11	Mon	
12	Tue	
13	Wed	
14	Thu	
15	Fri	
16	Sat	
17	Sun	
18	Mon	
19	Tue	
20	Wed	
21	Thu	
22	Fri	
23	Sat	
24	Sun	
25	Mon	
26	Tue	
27	Wed	
28	Thu	
29	Fri	
30	Sat	
31	Sun	

April 2024		
1	Mon	
2	Tue	
3	Wed	
4	Thu	
5	Fri	
6	Sat	
7	Sun	
8	Mon	
9	Tue	
10	Wed	
11	Thu	
12	Fri	
13	Sat	
14	Sun	
15	Mon	
16	Tue	
17	Wed	
18	Thu	
19	Fri	
20	Sat	
21	Sun	
22	Mon	
23	Tue	
24	Wed	
25	Thu	
26	Fri	
27	Sat	
28	Sun	
29	Mon	
30	Tue	

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.

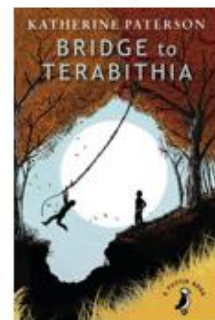
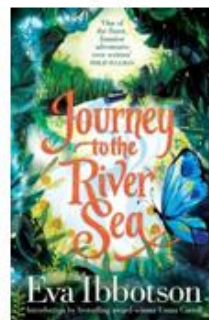
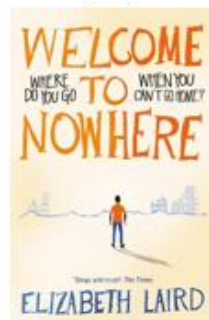
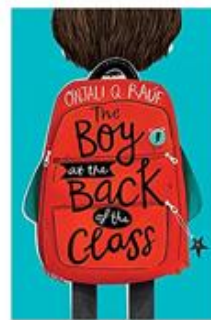
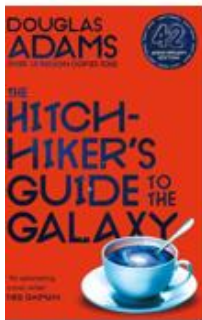
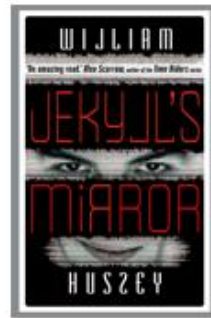
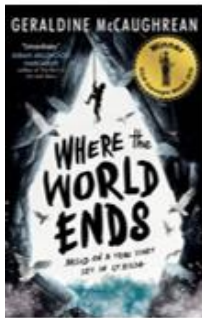
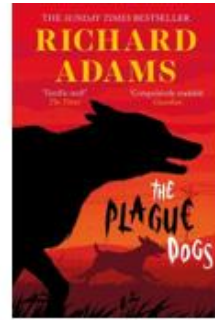
The books selected are fantastic examples of modern and classical literature, representing the best the world has to offer. Students can read these texts independently or they could listen to them as audiobooks. The important thing is to experience a variety of genres, authors and stories! We hope that 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.

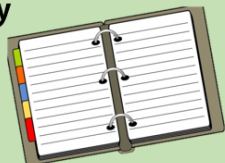
You will be regularly tested on knowledge contained in this booklet in your lessons and through quizzes on Show My Homework.

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

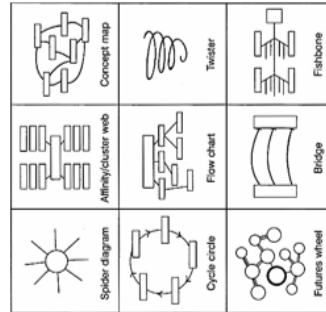
Practice planning exam question answers.

Bullet point, speed plan and draft key paragraph questions.



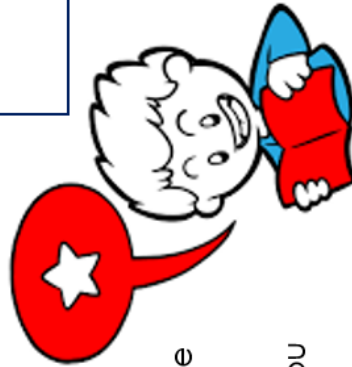
Graphic Organisers

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



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.



Practice!

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

PRACTICE
MAKES
PERFECT

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 its full!

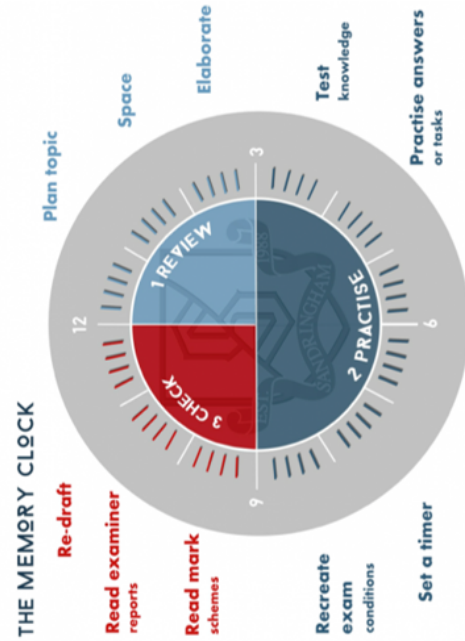
Record It

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



Teach it!

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



Flashcards

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



Post it's

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

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			
Typography	Typography is the art and technique of arranging type to make written language legible, readable, and appealing when displayed.	Screen Printing	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.
Lino-cut Printing	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.	Graphic Designer	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.

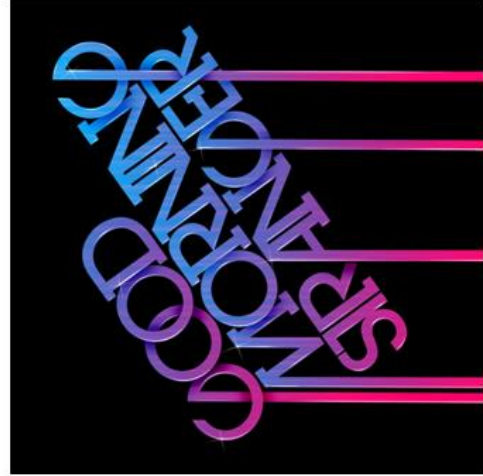
Typographical Art:

BURNING ALL BRIDGES SHE WON'T EVEN KNOW WHAT THAT MEANS
 SHE IS SO BEAUTIFUL THOUGH TWELVE FIFTY FOR MY FIRST PAINTING
 CAUGHT BETWEEN EGO AND TRUE SELF THANK YOU FOR THIS DAY
 I'VE REALISED MY WORLDWIDE SUCCESS AS THE GREATEST ARTIST
 OF MY GENERATION PRAYING TO GOD THAT HE SENDS MESSAGES
 Y SOULMATE PRETTY SOON I'VE USED TO DROVE AND LIL' BRO
 SCHOOL AND SAY WE WERE BLESSED TO GO TOGETHER MY FRIEND LORD
 ARE WALKING WALKING MY SINS I'VE WALKED FEET AND A SUPER
 EASE TO FINDING A REAL Taurus I discovered my life's purpose is to
 KILL LOVE THAT IS ALL I WANT TO DO THAT IS ALL THAT MATTERS
 WAS REMINDED BY JOEL OSTEN THIS MORNING THAT GOD HAS GREAT
 PLAN FOR US THIS IS A TEMPORARY WORLD A WAITING ROOM BEFORE
 PARADISE HER FACE LOOKS LIKE PARADISE HEART-SHAPED FACE AND LIPS
 MAKE ME GOON JUST AND I'VE GOT TO GO TO THE SPITLIGHT
 I WENT TO SEE PICASSO AND THEY ALREADY KNOW TELL ME ABOUT
 N HER FACE I LOVE GOD SHE'S A REAL Taurus & MATADORE EXHIBITION YESTERDAY
 THANK YOU FOR THE HYPNOTIC PICASSO PERHAPS I JUST WANT TO BE FAMOUS
 SO THAT EVERYONE WILL LOVE ME ON THE STAGES OF LOOKING HER
 TERROR TIME WITH SO WHY DON'T YOU SPEND MORE TIME WITH ME ? GOO
 DBYE PAT GOODBYE TINA DRAKE'S ALBUMS ARE THE SOUNDTRACK I
 DON'T WANT TO BE REMEMBERED I REMEMBERED SUPERHEROES I'VE GOT TO GO
 I'VE GOT TO GO UP CLIMB YOUR EYES AND SEE AND SPIT FIRE 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			
Typography	Typography is the art and technique of arranging type to make written language legible and appealing when displayed.	Leading	Leading is the space between individual lines of type.
Typographer	A Typographer is someone who designs a typeface or who arranges type.	Display Typeface	A display typeface is a typeface that is used for visual impact, rather than for extended passages of text.
Kerning	Kerning is the process of adjusting the spacing between letters.	Script Typeface	Script fonts can be formal scripts, derived from 17 th 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.

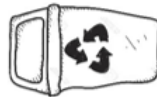


The Chancellor of the Exchequer

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.

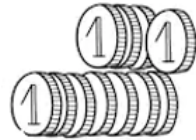


Public Services



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.



How are people paid for jobs?

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

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

Making Connections

How can you link different topics together?

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

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

Constituency The voters in a particular area who elect an MP to Parliament.	Manifesto A statement of policies and aims, usually released around the time of a general election.	Government 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.	MP Member of Parliament - an elected representative who works in the House of Commons. There are 650 all together.	Houses of Parliament 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.
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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

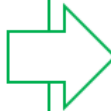
Responsible for defence of the country, including armed forces and weapons.

Voter Apathy

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

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

Government, Politics & Elections

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

Web Authoring	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.
Template	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.
Response Forms	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.
Interactive Menu	Interactive element. Interactive menus can be used as an easy way to navigate a website without the need to remember command line instructions.
Image Roll Over	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.
Web links	Interactive element. Shortcuts to places either within the website or sometimes external links that take the user to a linked website elsewhere.
Site Search	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.
Audience	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.
Purpose	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.
Root Folder	The folder that will contain all of the documents, files and folders that relate to the website.
E-Safety	E-safety is safe and responsible use of technology on the computer and the internet.
Reliability	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?
Sitemap	The underpinning structure and navigation of a website.
Target Audience	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.
Target Audience Needs	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.
Accessibility Features	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.

Web Authoring Task

Use **w3schools html editor** to create a website to inform year 7 students about some of the dangers of using the internet. Your website should include:

- Appropriate images
- Appropriate information
- Hyperlink to a YouTube video on cyberbullying
- Appropriate paragraphs
- Any other appropriate interactive features

Complete this table. Explain these keywords in your own words

Site Search	
Audience	
Root Folder	
	Responsible use of technology on the computer and the internet.
Accessibility Features	
Sitemap	
Target Audience	

Answer the following questions:

1. List 3 features that makes a good website design.
2. Write the correct html code for inserting the image kitten.jpg into a HTML webpage?

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 playscript.
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

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

Practice Task

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



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? If so, how and why?

	Performance Skills
Facial Expression	The feelings expressed on a character's face.
Body Language	The way in which a character communicates using gestures, movements and mannerisms.
Voice	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).
Space	The area between and around the actors. The theatre space in which the drama takes place.
Levels	Characters being visually higher or lower on stage than other characters.
Proxemics	Communicating to the audience what the relationships of the characters are like through the use of space/distance.
Tension	When the character is tense. The concept of making the audience want to know what will happen next.
Semiotics	The signs and symbols created on stage, that an audience finds meaning from (visual and audible).
Character	A person represented by the actor.
Dialogue	Speech/conversation between two or more people.

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=1089tO9wyCA&list=PLgtPWdqMvgTULAREGDvMS3iJ8MADunVWit>
 Can we talk about this? - Based on forced marriage
<https://www.youtube.com/watch?v=vNVpumeTpuA>



Symbolism

Symbolism is a type of figurative language in which an image, object, idea or symbol is used to represent something other than its literal meaning. Symbols are often hidden within a story, and readers must analyse the meaning of a text to uncover them – a rewarding feature that provides a puzzle to be solved! Our interpretation of such symbols relies on our understanding of the writer's culture and context. Sometimes, we need to do a little research in order to place the symbols within their context.

English

Vocabulary

- ☐ Symbolism
- ☐ Symbolic
- ☐ Metaphor
- ☐ Characterisation
- ☐ Denotation
- ☐ Connotation
- ☐ Concrete
- ☐ Abstract
- ☐ Representation
- ☐ Represent
- ☐ Conflict
- ☐ Transition
- ☐ Complex Sentences
- ☐ Fronting

Practise spelling vocabulary words
and matching definitions to words.



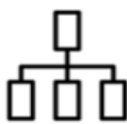
- A. A word or phrase used to describe something as if it were something else.
- B. Existing in thought or as an idea but not having a physical existence.
- C. To stand for or be an example of.
- D. The process or a period of changing from one state or condition to another.
- E. The use of symbols to represent ideas or qualities.
- F. The literal or primary meaning of a word or image.
- G. The way authors create characters and make them believable.
- H. Existing in a material or physical form.
- I. Combining one independent clause and at least one dependent clause.
- J. The depiction of a thing, person or idea through written, visual, performed or spoken language.
- K. Moving clauses to the beginning of a sentence in order to create meaning.
- L. An idea or feeling that a word or image reminds us of.
- M. A clashing or sharp disagreement.
- N. Serving as a symbol.

Check your answers:

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

Symbolism: F / Symbolic: N / Metaphor: A / Characterisation: G / Denotation E: /
Connotation: L / Concrete: H / Abstract: B / Representation: J / Represent: C / Conflict: M /
Transition: D / Complex Sentences: I / Fronting: K

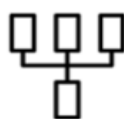
Task 1 - Word Power: Word Families



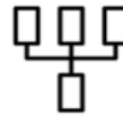
1 a) – ‘manipulation’ ‘manipulated’ and ‘manipulative’ all belong to the same word family. Identify their root.



1 b) – Reverse it! ‘Symbol’ is the root of a larger word family. Expand the root to create three variations.



1 c) – Expand upon a root word of your choice from the vocabulary page. How many variations can you find?



A Poison Tree

By William Blake

I was angry with my friend;
I told my wrath*, my wrath did end.
I was angry with my foe:
I told it not, my wrath did grow.

And I waterd it in fears,
Night & morning with my tears:
And I sunned it with smiles,
And with soft deceitful wiles.

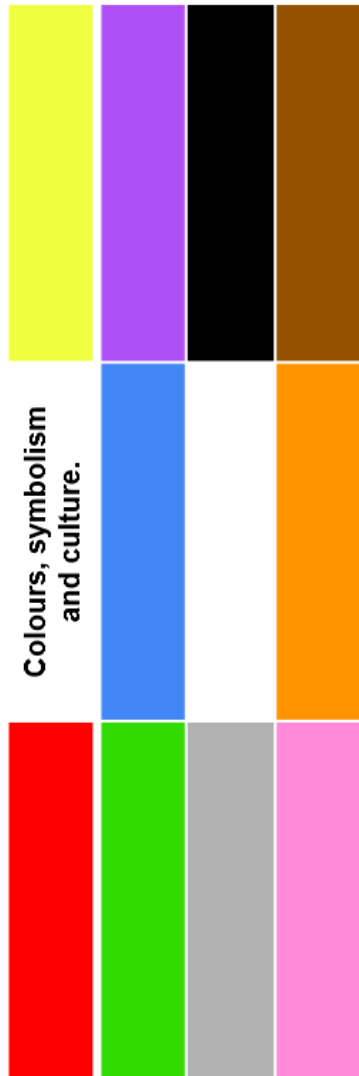
And it grew both day and night.
Till it bore an apple bright.
And my foe beheld it shine,
And he knew that it was mine.

And into my garden stole,
When the night had veild the pole;
In the morning glad I see;
My foe outstretched beneath the tree.

* *wrath*: extreme anger



Colours, symbolism
and culture.



Task 2 – RESEARCH. Colours are often used as symbols in literature, e.g. green can represent jealousy or nature. Create a colour wheel to show what the above colours represent in our culture. Compare this to the same colours in other cultures. What have you learned?



Task 3: A Poison Tree

- Read the poem through. Then read it once more, looking for a connection to the title.
- The imagery in this poem connects to nature. Find two examples. How do they make you feel?
- Can you figure out what the tree itself symbolises? What it might represent?
- What happens when the ‘tree’ is watered?
- What is the poet telling us about what happens when you try to repress anger?



Task 4 - Write your own poem centred around an emotion, e.g. jealousy or joy. Choose an object, colour or element of nature to represent your chosen emotion.



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)

Themes:

- Nutrition and Health
- Food Preparation
- Food Safety
- Food Provenance
- Food Choice
- The Science of Cooking

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)

Key Questions:

Preventing Food Poisoning (the 4Cs)



Key temperatures

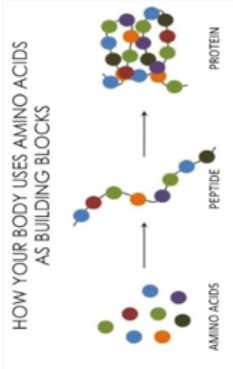
Freeze -18C, Chill 0-5C,
Danger Zone 5-63C, Cook 75C+

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 e.g. soya
- Needed for growth and repair
- Some groups of people need more protein such as pregnant women



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:** AQA 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

Protein

Meat, Poultry and Fish

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

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

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

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

Poultry are birds that are reared for eating. Popular poultry includes chicken, duck, turkey and goose.

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



Eggs and Dairy Foods

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

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

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

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

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



French

Y8 Spring Term Knowledge Organiser

Unit 3: Les loisirs – Hobbies

Qu'est-ce que tu aimes à la télé	What do you like on TV	Qui es ta célébrité préférée ?	Who is your favourite celebrity?
J'aime/J'adore... Je n'aime pas... Je déteste... les comédies les dessins animés les feuilletons les séries (policières) les documentaires les infos les jeux (télévisés) les émissions de... ... sport ... cuisine ... télé-réalité ... musique ... science-fiction Mon émission préférée c'est...	I like/I love... I don't like... I hate... comedies cartoons soaps (police) series documentaries the news game shows ... programmes sports... cooking... reality TV... music... science fiction... My favourite programme is...	Ma célébrité préférée est... parce qu'il/elle est... parce qu'il/elle n'est pas.. intelligent(e) arrogant(e) égoïste drôle modeste généreux/généreuse travailleur/travailleuse beau/belle gentil/gentille Remember to make the adjective ending agree for masculine/feminine.	My favourite celebrity is... because he/she is... because he/she isn't... intelligent arrogant selfish funny modest generous hard-working good-looking kind
Qu'est-ce que tu aimes à la télé	What do you like on TV	Qui es ta célébrité préférée ?	Who is your favourite celebrity?
J'aime/J'adore... Je n'aime pas... Je déteste... les comédies les dessins animés les feuilletons les séries (policières) les documentaires les infos les jeux (télévisés) les émissions de... ... sport ... cuisine ... télé-réalité ... musique ... science-fiction Mon émission préférée c'est...	I like/I love... I don't like... I hate... comedies cartoons soaps (police) series documentaries the news game shows ... programmes sports... cooking... reality TV... music... science fiction... My favourite programme is...	Ma célébrité préférée est... parce qu'il/elle est... parce qu'il/elle n'est pas.. intelligent(e) arrogant(e) égoïste drôle modeste généreux/généreuse travailleur/travailleuse beau/belle gentil/gentille Remember to make the adjective ending agree for masculine/feminine.	My favourite celebrity is... because he/she is... because he/she isn't... intelligent arrogant selfish funny modest generous hard-working good-looking kind
Pourquoi?	Why?	La télé	TV
Parce qu'ils/elles sont... ridicules divertissant(e)s passionnant(e)s plein(e)s d'action nuls/nulles marrant(e)s bêtes ennuyeux/ennuyeuses Remember to make the adjective ending agree for masculine/feminine.	Because they are... ridiculous entertaining exciting action-packed rubbish funny stupid boring Remember to make the adjective ending agree for masculine/feminine.	Je regarde la télé... le matin le soir le weekend à la maison dans le bus chez mes amis seul(e) avec ma famille avec mes copains sur ma tablette/mon smartphone à la demande C'est facile Ce n'est pas cher	I watch TV... in the morning in the evening at the weekend at home on the bus at my friends' house alone with my family with my friends on my tablet/smartphone on demand It's easy It's not expensive
Question words	Question words	Question words	Question words
You can form a range of questions by using : a question word + est-ce que and the tu form of the verb :	You can form a range of questions by using : a question word + est-ce que and the tu form of the verb :	You can form a range of questions by using : a question word + est-ce que and the tu form of the verb :	You can form a range of questions by using : a question word + est-ce que and the tu form of the verb :
Quand est-ce que tu regardes la télé ? Où est-ce que tu regardes la télé ? Avec qui est-ce que tu regardes la télé ? Qu'est-ce que tu regardes ? Comment est-ce que tu regardes la télé ?	Quand est-ce que tu regardes la télé ? Où est-ce que tu regardes la télé ? Avec qui est-ce que tu regardes la télé ? Qu'est-ce que tu regardes ? Comment est-ce que tu regardes la télé ?	Quand est-ce que tu regardes la télé ? Où est-ce que tu regardes la télé ? Avec qui est-ce que tu regardes la télé ? Qu'est-ce que tu regardes ? Comment est-ce que tu regardes la télé ?	Quand est-ce que tu regardes la télé ? Où est-ce que tu regardes la télé ? Avec qui est-ce que tu regardes la télé ? Qu'est-ce que tu regardes ? Comment est-ce que tu regardes la télé ?
Quels sont tes loisirs ?	What are your hobbies?	On va au cinéma ?	Shall we go to the cinema?
J'ai un smartphone Je surfe/Je blogue/Je chatte Je fais des achats en ligne Je crée des playlists Je joue au foot Je télécharge des chansons J'écoute de la musique Je joue sur ma Xbox Je fais du vélo Je lis des BD Je ne regarde jamais la télé	I have a smartphone I surf/blog/chat I shop online I create playlists I play football I download songs I listen to music I play on my Xbox I go cycling I read comics I never watch TV	Je vais voir... une comédie un film d'animation un film romantique un film d'action un film de science-fiction un film de super-héros un film d'horreur Tu viens ? Oui, je veux bien ! Désolé(e), je ne peux pas. Rendez-vous à quelle heure ? Rendez-vous chez moi à 19h	I'm going to the cinema this evening I'm going to see... a comedy an animated film a romantic film an action film a sci-fi film a superhero film a horror film Are you coming? Yes, I'd like to! Sorry, I can't When shall we meet? Meet at my house at 7pm
Negatives	Negatives	Negatives	Negatives
To make a sentence negative, wrap negative expressions around the verb: ne/n' + pas (not) jamais (never) rien (nothing/notanything) Je n'ai pas d'ordinateur Je ne fais pas de sport Je ne joue jamais à des jeux vidéo Je ne lis rien Je ne fais rien en ligne	To make a sentence negative, wrap negative expressions around the verb: ne/n' + pas (not) jamais (never) rien (nothing/notanything) Je n'ai pas d'ordinateur Je ne fais pas de sport Je ne joue jamais à des jeux vidéo Je ne lis rien Je ne fais rien en ligne	To make a sentence negative, wrap negative expressions around the verb: ne/n' + pas (not) jamais (never) rien (nothing/notanything) Je n'ai pas d'ordinateur Je ne fais pas de sport Je ne joue jamais à des jeux vidéo Je ne lis rien Je ne fais rien en ligne	To make a sentence negative, wrap negative expressions around the verb: ne/n' + pas (not) jamais (never) rien (nothing/notanything) Je n'ai pas d'ordinateur Je ne fais pas de sport Je ne joue jamais à des jeux vidéo Je ne lis rien Je ne fais rien en ligne

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

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 infinitive : <i>On peut aller au cinéma</i> – You can go to the cinema
Je peux I can
Tu peux You can
Il/Elle/On peut He/She/We can
Nous pouvons We can
Vous pouvez You (pl). can
Ils/Elles peuvent They can

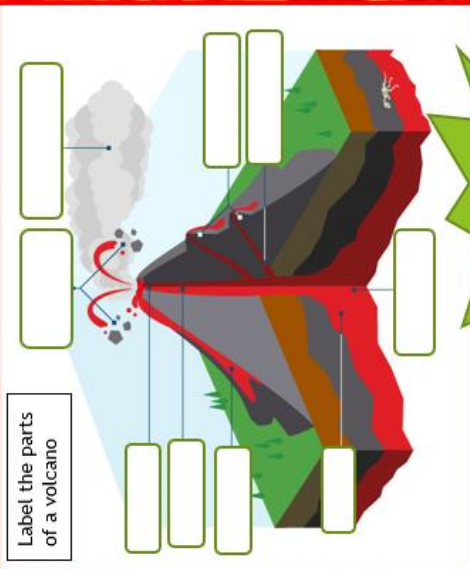
The verb DEVOIR (To have to/must)
The verb DEVOIR is an irregular modal verb. It is usually followed by an infinitive : <i>Je dois laver la voiture</i> – I have to wash the car
Je dois I have to
Tu dois You have to
Il/Elle/On doit He/She/We have to
Nous devons We have to
Vous devez You (pl). have to
Ils/Elles doivent They have to

Qu'est-ce que tu dois faire à la maison	What do you have to do at home?
Je dois... I have to...	
Ma sœur/Mon frère doit... My sister/brother has to...	
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



What are convection currents?

Types of volcano

Fissure (vent)



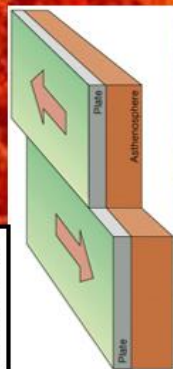
Shield



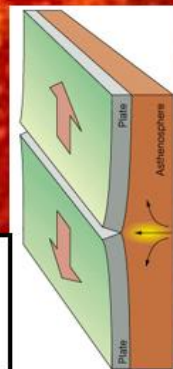
Composite (layers)



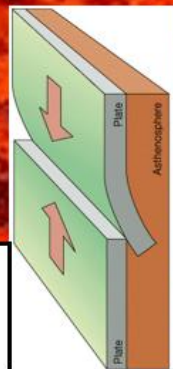
Conservative



Constructive



Destructive



What is plate tectonic theory?

Types of plate margin

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

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 movement 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

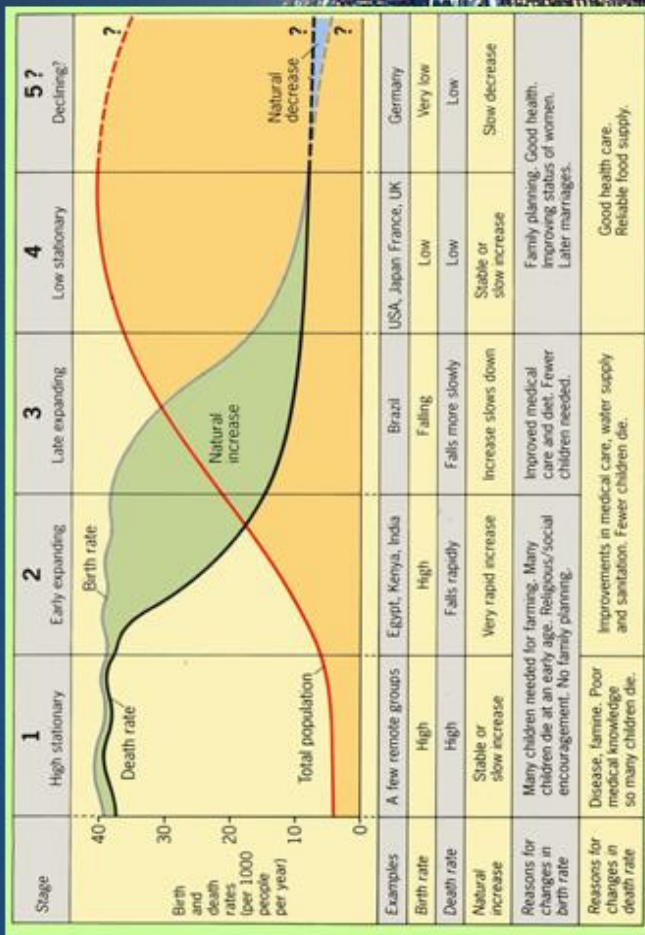
Key Term	Definition
Population	The number of people in a specific area - China has the highest population in the world.
Megacity	A city with a population over 10 million - Tokyo has close to 40 million people, London is NOT a megacity.
Population Pyramid	A bar graph showing the number of people in each 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 on this page) onto the outline map.
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

Das Frühstück	Breakfast
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 heiße Schokolade	hot chocolate
das Brötchen	roll
das Obst	fruit
das Ei/Eier	egg(s)
die Frühstücksflocken	cereal

Was isst du zum Frühstück?

What do you eat for breakfast?

Ich esse einen Joghurt	<i>I eat a yoghurt</i>
ein Brötchen mit Butter und Marmelade	<i>a roll with butter and jam</i>
Ich esse kein Frühstück	<i>I don't eat any breakfast</i>

Die Speisekarte

Menu

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

Die Mahlzeiten

Mealtimes

die Vorspeise	<i>the starter</i>
die Hauptspeise	<i>the main</i>
die Nachspeise	<i>dessert</i>

Wie ist das?

What is it like?

süß	<i>sweet</i>	lecker	<i>delicious</i>
sauer	<i>sour</i>	köstlich	<i>tasty</i>
salzig	<i>salty</i>	gesund	<i>healthy</i>
scharf	<i>spicy</i>	ungesund	<i>unhealthy</i>
vegetarisch	<i>vegetarian</i>		
ekelhaft	<i>disgusting</i>		

Im Restaurant

Was nimmst du?

Ich nehme...	
den Fisch	
die Gemüsesuppe	
das Hähnchen	

In the restaurant

What are you having?

<i>I'll take / I'm having...</i>	
<i>the fish</i>	
<i>the vegetable soup</i>	
<i>the chicken</i>	

Mein Lieblingssandwich

My favourite sandwich

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

Gesund bleiben

Staying healthy

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

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

Key Words

Definition

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.

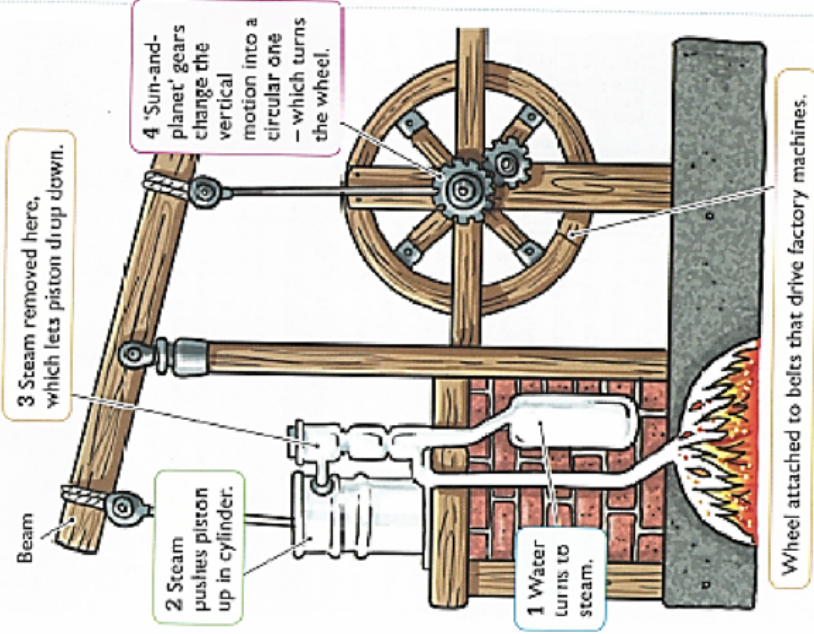
Chronology

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 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

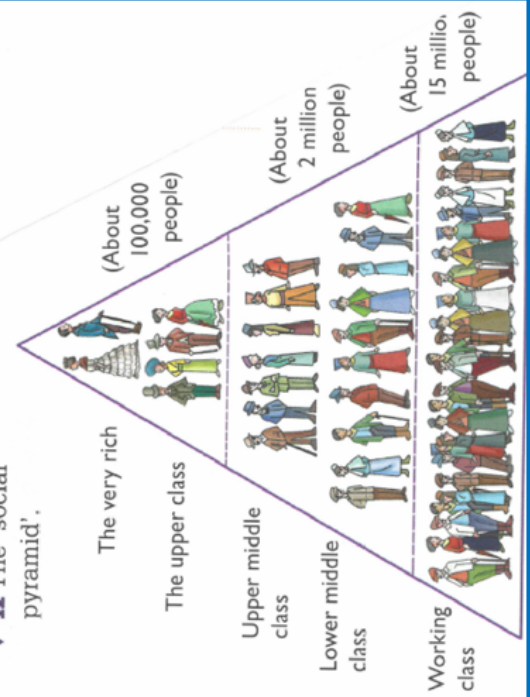
1749	The Bow Street Runners set up.
1823	Prison Reform Act. Jailers were paid by the government not the prisoners. Male and female prisoners were kept separately.
1829	The Metropolitan Police Force set up.
1831	First major Cholera outbreak in Britain.
1842	Chadwick's report into conditions in towns and 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.

Key Words

Definition

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

▼ ▲ The 'social pyramid'.



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.

Books

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

Questions

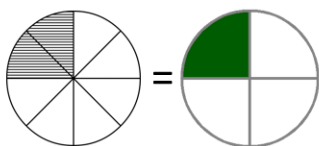
- What effect did the changes in living conditions have on people's health during the industrial revolution?
- Why did Britain need a police force during the industrial revolution?
- What can we learn from how disease was dealt with during the industrial revolution?

Year 8 Knowledge Organiser

RATIO

Key Concept

2 parts \rightarrow $2:6$ \leftarrow 6 parts
 $=$
 $1:3$



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

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 $60:40:100$

$\div 10$
 $6:4:10$
 $\div 2$
 $3:2:5$

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

Share £45 in the ratio $2:7$

$$45 \div 9 = 5$$

$$£10 : £35$$

2	7
5	5
5	5
=10	5
5	
5	
5	
5	
=35	

Write $2:5$ in the form $1:n$

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

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

$2:5$

6	6
6	6
6	6
6	6
6	6

$18 \div 3 = 6$

$=12$ $=30$

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

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

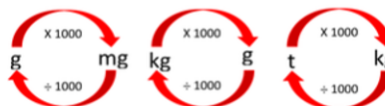
UNIT CONVERSION

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

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

Speed = 4 mph

Time = 2 hours

Find the Distance.

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

Sparx Maths

Clip

Numbers

M515, M530, M761, M774

Questions

- 1) Convert a) 50cm to mm b) 3kg to g c) 3000m to km
- 2) Convert a) 5 gallons to litres b) 8.8 pounds to kg
- 3) 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


 $\frac{3}{5} + \frac{2}{7}$
 Make the denominators the same
 $\frac{3}{5} \times \frac{7}{7} = \frac{21}{35}$
 $\frac{2}{7} \times \frac{5}{5} = \frac{10}{35}$
 $\frac{21}{35} + \frac{10}{35} = \frac{31}{35}$


 $\frac{3}{5} - \frac{2}{7}$
 $\frac{3}{5} \times \frac{7}{7} = \frac{21}{35}$
 $\frac{2}{7} \times \frac{5}{5} = \frac{10}{35}$
 $\frac{21}{35} - \frac{10}{35} = \frac{11}{35}$




 $\frac{3}{5} \times \frac{2}{7}$
 Just multiply the tops and bottoms
 $= \frac{3 \times 2}{5 \times 7} = \frac{6}{35}$


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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$= 3\frac{2}{3}$$

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

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

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

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

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

Find the reciprocal of the second fraction....

...and multiply

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








A Brief History

The Blues is considered to be the 'grandfather' of all modern pop music as nearly all genres can be traced directly back in some way. The roots of Blues Music can be traced back to the late nineteenth century in the Southern states of the USA such as Georgia and Texas. Unfortunately the slave trade was present in the USA still and these slaves sang to keep their spirits up. These songs had lyrics about the struggles they were having and how they had "The Blues"!






The first blues recordings were actually made in the 1920s by Black women such as Mamie Smith, Ma Rainey, Ida Cox and Bessie Smith. Primarily these were not 'Blues singers' but they adopted the style backed by jazz bands. The Great Depression and both World Wars caused the Blues to spread as millions of Black Americans left the cities around the Mississippi to the South for places in the North such as Detroit, Chicago, Atlanta and Memphis. However it was in Chicago where the style really took hold, where a new wave of "Blues men" took the style to another level changing the tempo with a new 'upbeat' version with a larger, more jazz-style, band. This can be heard here with two different versions of the same song "Dust My Broom"; one by Robert Johnson in 1922 and the 'Chicago Version' recorded by Howlin' Wolf in 1966.

Prominent Blues Musical Features

- **The accompaniment** – Primarily traditional Blues music is a singer with a guitar, although later jazz bands were used to accompany.
- **The voice,**– often ‘husky’ with some use of ‘Scat’ singing and improvisation.
- **The lyrics** – As the title suggests “The Blues” has lyrics that tend to tell the story of hardship in some fashion, or lost love.
- **The background harmony used**—what is known as the “12-bar Blues” chord progression with a walking bass.

Term	Symbol	Value
semibreve		4 beats
minim		2 beats
crotchet		1 beat
quaver		1/2 beat
pair of quavers		$\frac{1}{2} + \frac{1}{2} = 1$
semiquaver		1/4 beat
joined semiquavers		$\frac{1}{4} + \frac{1}{4} = \frac{1}{2}$

[illegible]

Term	Symbol	Value
semibreve rest		4 beats of silence
minim rest		2 beats of silence
crotchet rest		1 beat of silence
quaver rest		1/2 beat of silence
semiquaver rest		1/4 beat of silence

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.

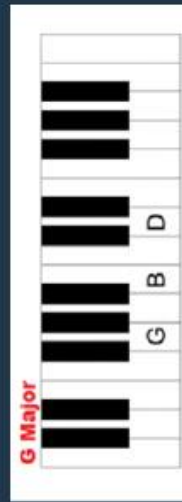
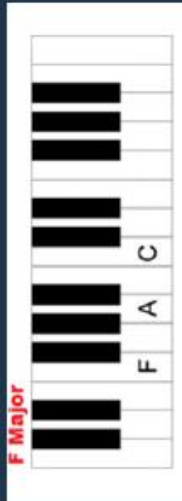
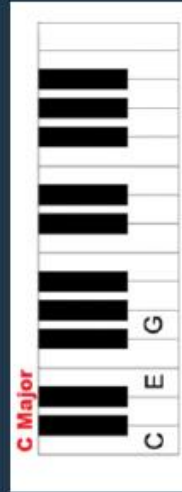
This sequence only uses the chords I, IV and V and lasts 12 musical bars, hence the term "The 12-Bar Blues"

$C_{(I)}$	$C_{(I)}$	$C_{(I)}$	$C_{(I)}$
$F_{(IV)}$	$F_{(IV)}$	$C_{(I)}$	$C_{(I)}$
$G_{(V)}$	$F_{(IV)}$	$C_{(I)}$	$C_{(I)}$

Walking Bass

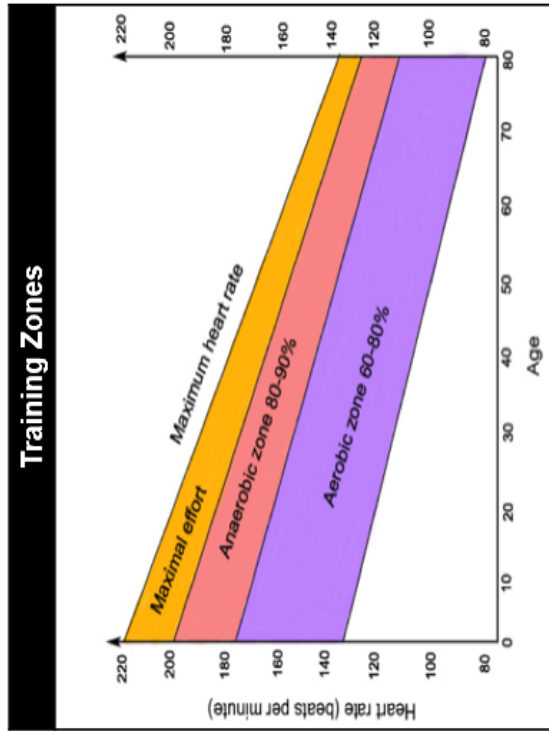
Under the 12-Bar Blues Pattern the bass line often keeps a steady 'walking-pace' beat with the melodic pattern rising and falling almost symmetrically.

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
Heart Rate (HR)	The number of heart beats per minute, measured in beats per minute.
Resting Heart Rate (RHR)	The number of heart beats per minute (at rest), measured in beats per minute.
Maximum Heart Rate (MHR)	The maximum number of beats your heart can beat per minute. This is measured in beats per minute. This is calculated as 220 - age.
Recovery Heart Rate	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 Thresholds

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

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.

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 (his age) = 200bpm (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

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?

Key Vocabulary

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

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	
Body Composition	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 rugby player requires a larger proportion of muscle than a dancer as they need strength to make tackles .
Coordination	The ability to move two or more body parts together, accurately and smoothly.	Tennis players require excellent levels of coordination to be able make contact with the ball and racket at the same time to perform accurate shots .
Power	The ability to combine strength with speed to perform a strong muscular contraction very quickly.	Long jumpers require great amounts of power to be able to push off the ground to propel themselves into the air in order to travel a long distance in their jump.
Reaction Time	The amount of time it takes you to respond to a stimulus.	Sprinters require a quick reaction time to be able to get out of their starting blocks as quickly as possible at the beginning of a race to give them a better chance of winning .
Speed	The rate at which your body, or part of your body, is able to perform a movement.	Rugby players , particularly wingers, require high levels of speed to be able to travel down the wing at a fast pace to be able to score a try .
Balance	Your ability to keep your body steady, both when in a static position and when moving.	Dancers require large amounts of balance to ensure that they maintain control when in a static position , such as standing on one leg . This will give them a better aesthetic score .
Agility	A measure of how quickly you can change the position of your body, while keeping your entire body under control.	Footballers require high levels of agility to be able to change direction at speed when running with the ball to get around their opponents to attack with a bigger threat.
Flexibility	The ability of your joints to move through their full range of movement.	Gymnasts require large amounts of flexibility to be able to move their joints through their full range of motion when performing moves and routines to a higher standard .
Muscular Endurance	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.	Boxers require good muscular endurance to be able to repeatedly contract their muscles when throwing punches many times without getting tired to try enforce a knockout
Strength	The amount of force a muscle can generate when it contracts to overcome resistance.	Powerlifters require excellent muscular strength to be able to generate large amounts of force when lifting heavy weights .
Cardiovascular Fitness	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.	Marathon runners require excellent cardiovascular fitness to be able to use the whole body to run for the entire duration of the race 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 11th 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.

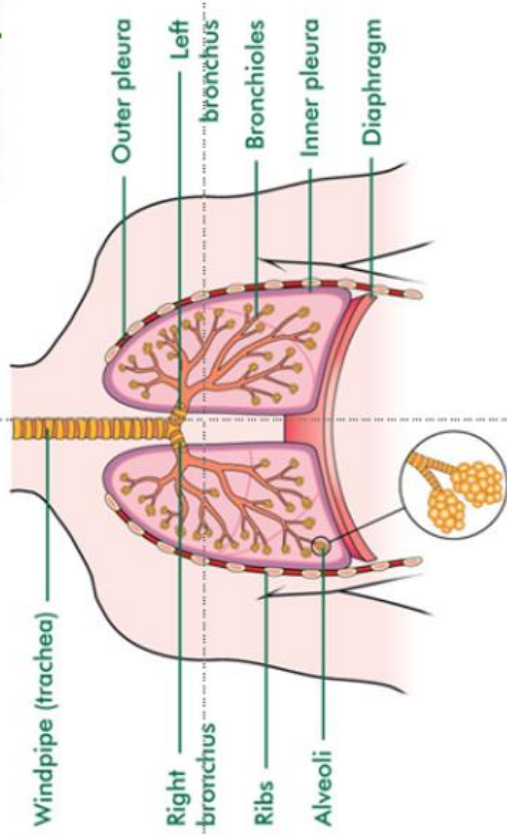


Sikhism

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.



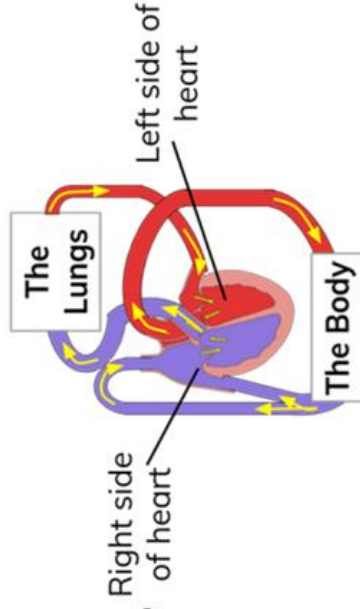
Year 8 Organ Systems Knowledge Organiser

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.



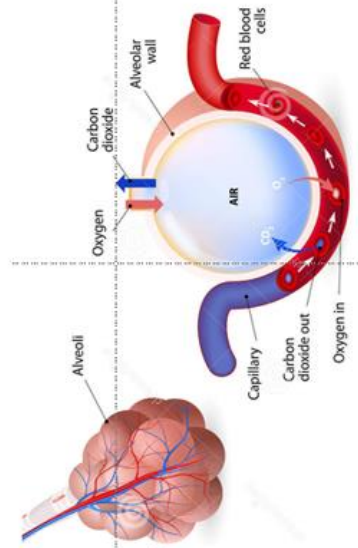
Gaseous Exchange

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**.



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)

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

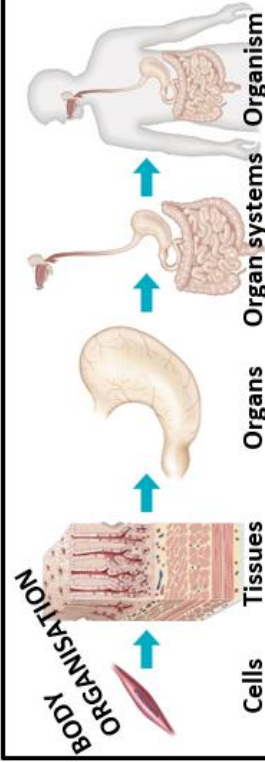


Thin walls due to less blood pressure.
Carries blood back to the heart.
Medium-sized blood vessels.

Capillaries



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



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

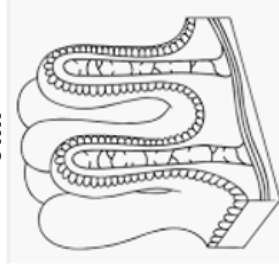
Pancreas - Produces enzymes and insulin

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

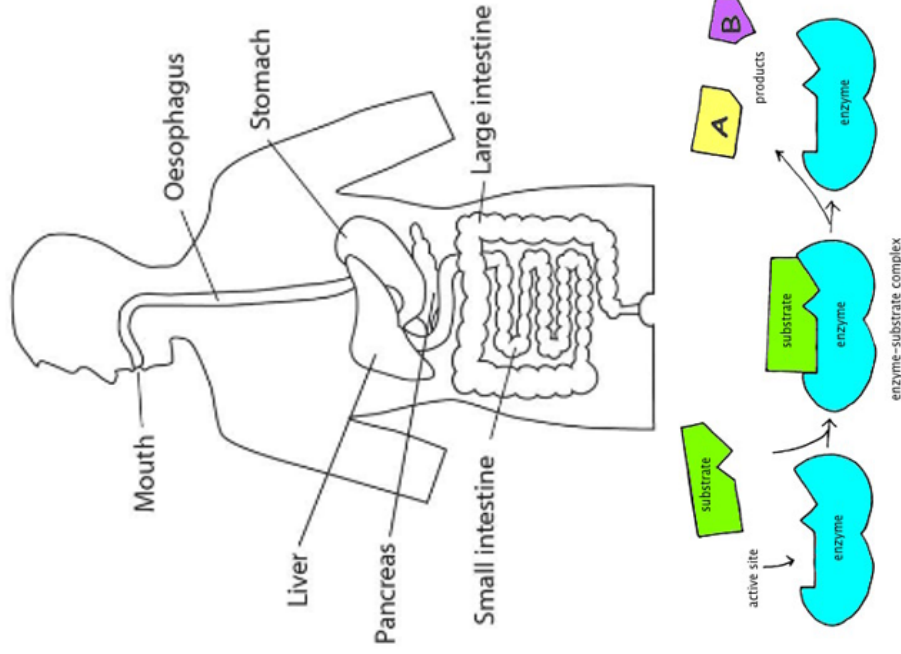
absorption of nutrients via villi

Large intestine - Absorption of water

Villi



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



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.

Food tests

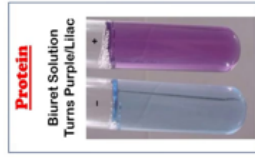
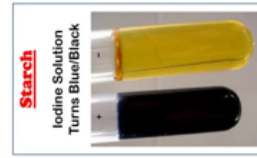
Starch; Iodine solution turns black

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.



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

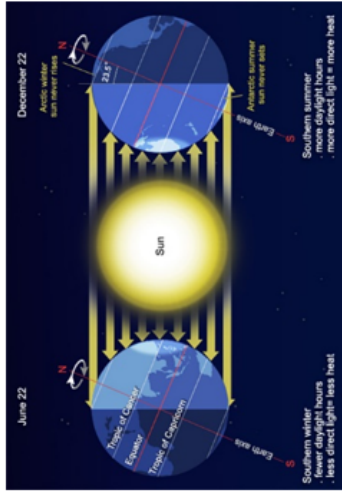
Liver
Ingestion
Small Intestines
Oesophagus
Faeces
Large Intestine
Egestion
Enzyme
Catalyst
Plasma
Villi
Anaerobic
Capillaries
Lactic Acid
Carbohydrates

Solar System



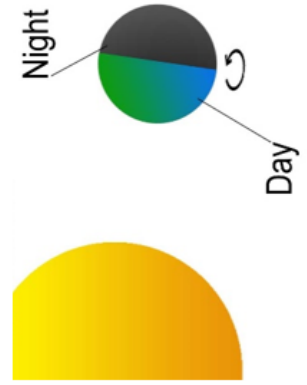
Seasons

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

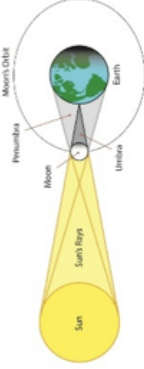
It takes 24 hours for the Earth to complete one rotation on its axis. As a result there are times that the UK is facing away from the sun (night) and there are times when the UK is facing towards the sun (day).



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



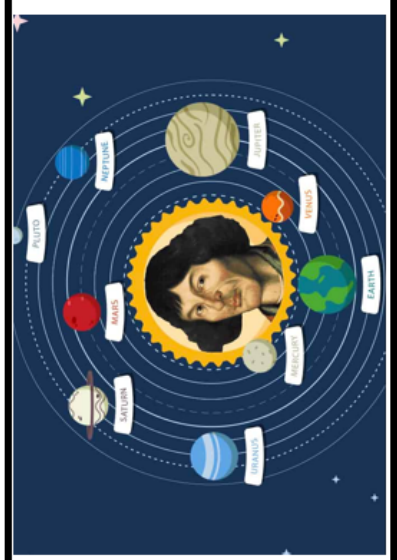
A solar eclipse occurs when a portion of the Earth is engulfed in a shadow cast by the Moon which fully or partially blocks sunlight. The part of the Earth in the umbra experiences a total eclipse and those in the penumbra see a partial eclipse.

The Sun

The star at the centre of the Solar System.

Heliocentric Model

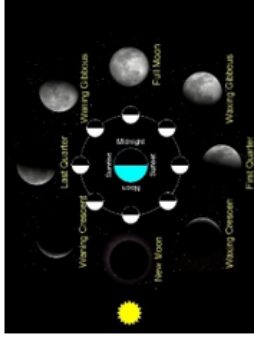
Model of the universe with the Sun at the centre. First proposed by Aristarchus of Samos in the 2nd century BC and later by Copernicus in the 16th century.



Year 8 Topic 2 Physics Knowledge Organiser

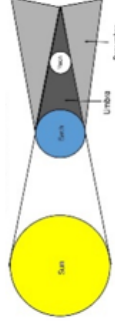
Phases of the moon

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

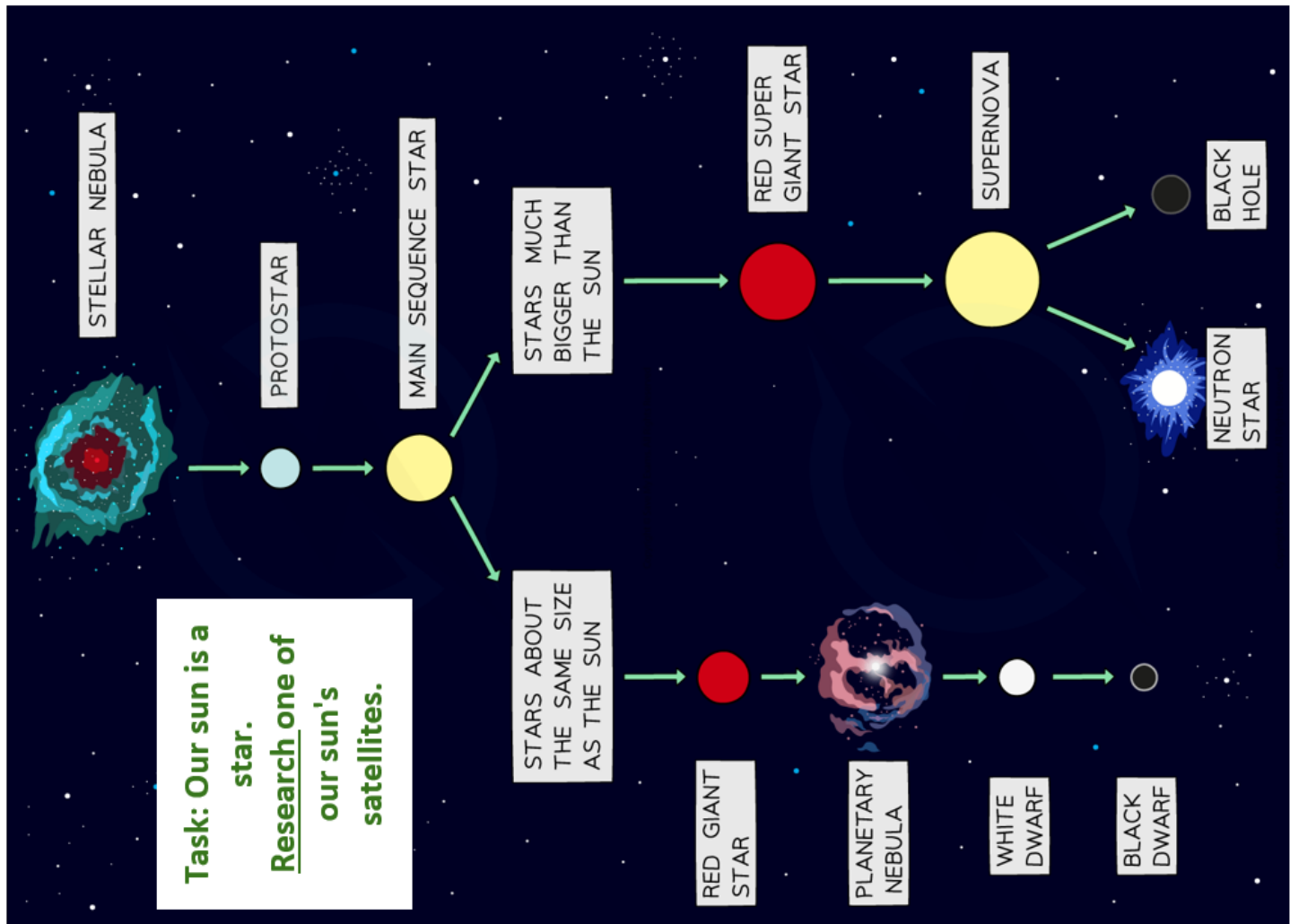
Sun
Star
Orbit
Planet
Earth
Moon
Seasons
Mass
Weight
Ellipse
Luminous
Universe

Tier 3 Vocabulary

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

Life cycle of a Star

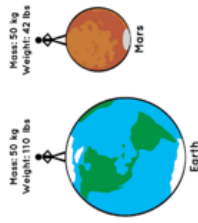
Task: Our sun is a star.
Research one of our sun's satellites.



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.

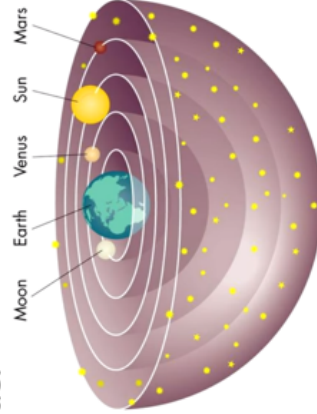
Constellations and Asterisms

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 4th 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. ceno	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 gusta/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?	What do you have for breakfast/lunch/dinner?
Desayuno...	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
zumo (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? <i>churros, paella, tortilla española, Cola Cao.</i>	

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...
cien 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
		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? ¿Te gustaría ir...?	Do you want to go out? 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
How do you know whether to use a or la with the places above?	

¿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
Don't forget to use one of the excuses if you say you can't go.	

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
You'll also need to say on what day. Can you remember all the days of the week?	

¿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
Use sequencers to talk about your routine: primero, luego, después, finalmente...	




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
Can you spot the rule for using del or de la here?	

¿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
Remember that the adjective comes after the noun in Spanish and needs to have the correct ending (masc/fem/plural)	

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 reflexive pronoun that must be added. Don't forget to change the ending of the verb accordingly.	
Lavarse	To wash oneself
Me lavo	I wash myself
Te lavas	You wash yourself
Se lava	S(he) washes her/himself
Nos lavamos	We wash ourselves
Os laváis	You (pl) wash yourselves
Se lavan	They wash themselves

Year 8 – Knowledge Organiser – Design & Technology – MATERIALS

Metals			
Type	Example of	Advantages	Disadvantages
Steel 	Ferrous (Contains iron)	Relatively cheap Widely available Strong/Tough	Rusts Requires a surface finish
Aluminium 	Non-Ferrous (Does not contain iron)	Does not rust Lightweight Easy to cut and shape	Relatively expensive
Copper 	Non-Ferrous (Does not contain iron)	Good conductor of heat and electricity	Corrodes Relatively expensive
Pewter 	Alloy (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
Pine 	Softwood	Cheaper More sustainable as faster growing Widely Available	Knotty Can be weaker than hardwoods Less durable
Oak 	Hardwood	Good aesthetic Extremely durable Easy to maintain High strength	Generally harder to cut and shape More expensive Less sustainable as slower growth rate
Beech 	Hardwood		
Plywood 	Manufactured Board	Available in large sheets Good strength and durability Can be laser cut	More expensive than other board options Edges can splinter

Classification of Metal

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

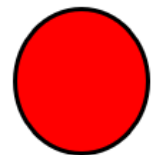
Specific Language and Terms

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

Health & Safety





Specific Language and Terms

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



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

Hand tools:

Tools and equipment	
Try Square	
Drawing a line at 90 degrees OR checking a corner is square (90 degrees).	
Tennon Saw	
Sawing straight lines in wood.	
Hack saw	
Sawing straight cuts in metal.	
Flat File	
Shaping or smoothing a piece metal or plastic.	
Vice	
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.

Machinery

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

Specific Language and Terms

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

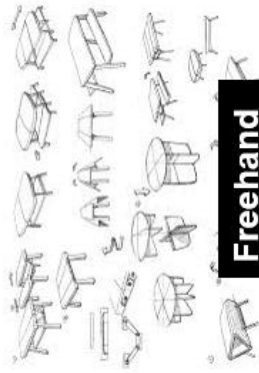
CAD / CAM

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

CAD software programmes:



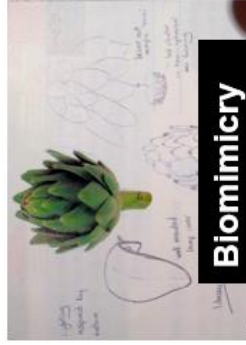
Creating Ideas and Drawing:



Freehand



Jack Straws



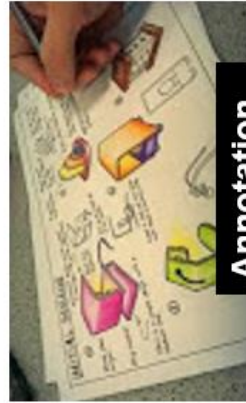
Biomimicry



Scruffiti



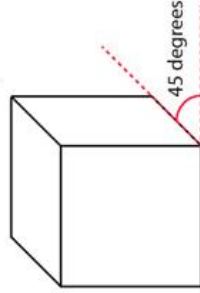
Geometric Shapes



Annotation

Oblique Projection

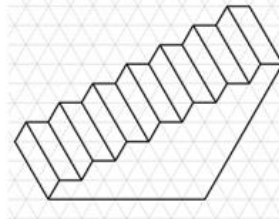
Opposite is a cube that has been drawn in Oblique Projection.



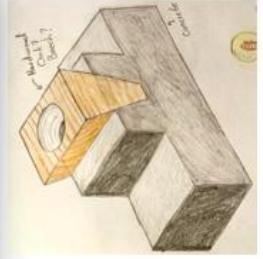
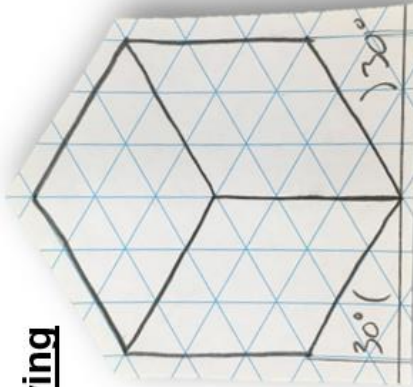
To draw it in Oblique Projection follow the three main steps below:

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.

Isometric Drawing



These stairs have been drawn in isometric.



Isometric Rules:

1. 30 Degrees
2. Parallel lines
3. Drawing to scale
4. Drawing must show 3 sides of the object drawn



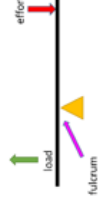
Specific Language and Terms

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

Specific Language and Terms

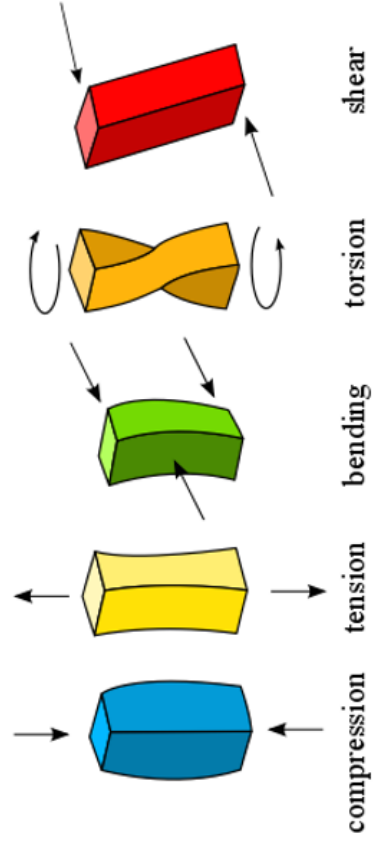
Mechanical System	A mechanical system is a set of physical components that convert an input motion and force into a desired output motion and force. Mechanical systems have at least three elements: input, process and output.
Mechanism	Is a device that transforms input forces and movement into a desired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

Mechanisms

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

Forces

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



Types of Movement

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

Notes

[illegible]

Notes

[illegible]

Notes

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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**.

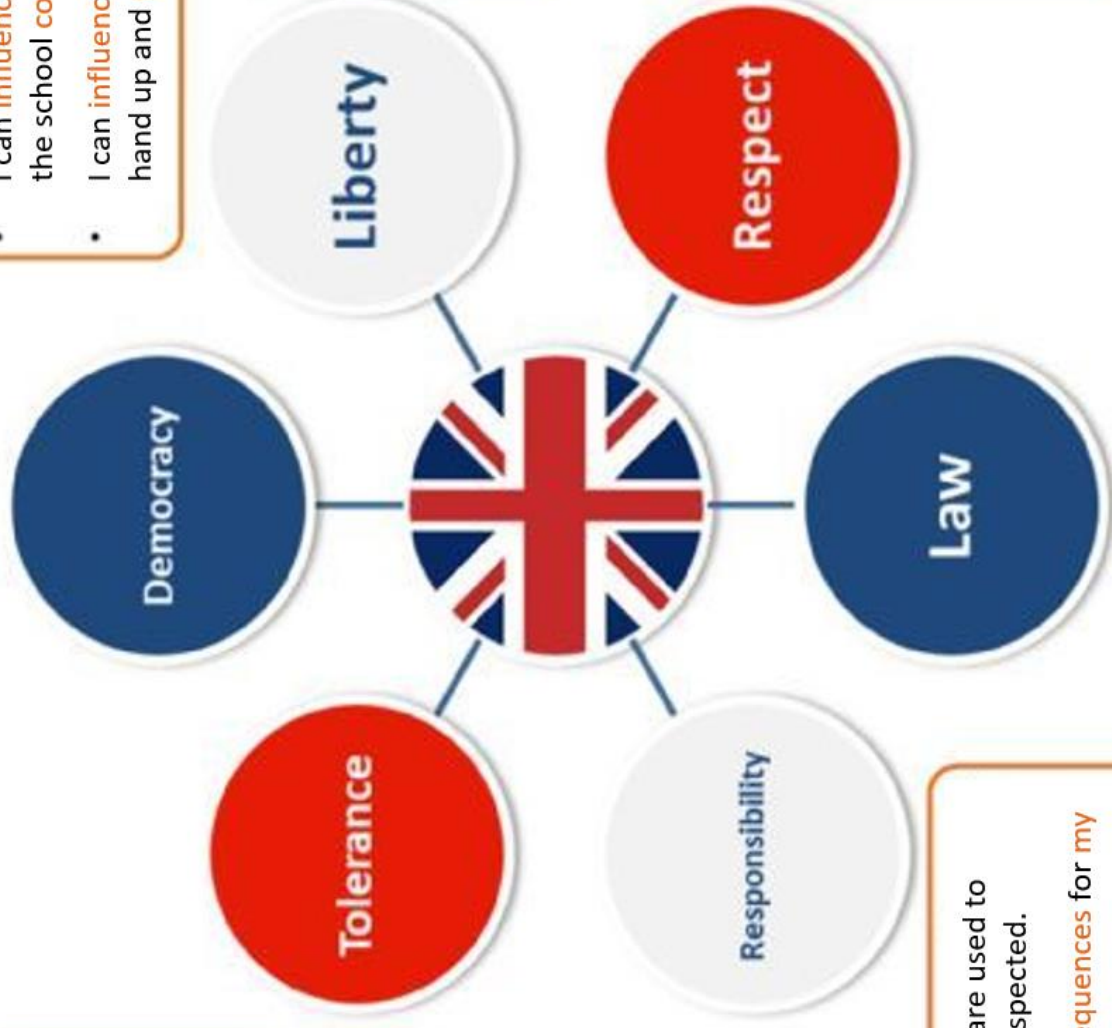
- I recognise that I am as **responsible** for my learning as my teacher.
- I take **responsibility** for all of my **actions** – good or bad.
- We **all** have a **responsibility** to **promote** and **protect** the wellbeing of others.

- 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.

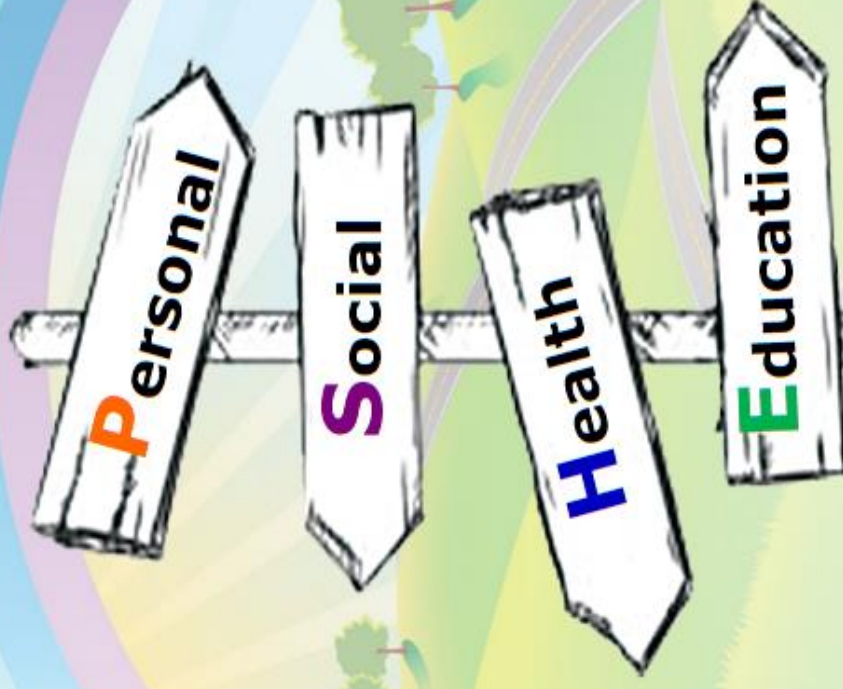


Social - Moral - Spiritual - Cultural



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

Theme: Online safety, E-safety and Cyber-bullying
Organisation: Child Net
Website: www.childnet.com/

Theme: Safety, support and abuse
Organisation: Childline
Phone: 0800 1111
Website: 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/

Theme: Support and help for runaways
Organisation: Runaway Helpline
Phone: 116000
Website: www.runawayhelpline.org.uk

Theme: Health, Wellness and Mental Health
Organisation: NHS
Phone: 111
Website: www.nhs.uk

Theme: Mental Health, Wellness and self-care
Organisation: Young Minds
Text line: 85258
Website: www.youngminds.org.uk

Theme: Healthy teen relationships
Organisation: Act on it
Phone: 01270 250 390
Website: www.actonitnow.org.uk

Theme: LGBTQI+
Organisation: Stonewall
Website: www.stonewall.org.uk

Theme: LGBTQ+ Equality
Organisation: Kite Trust (Cams)
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

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>