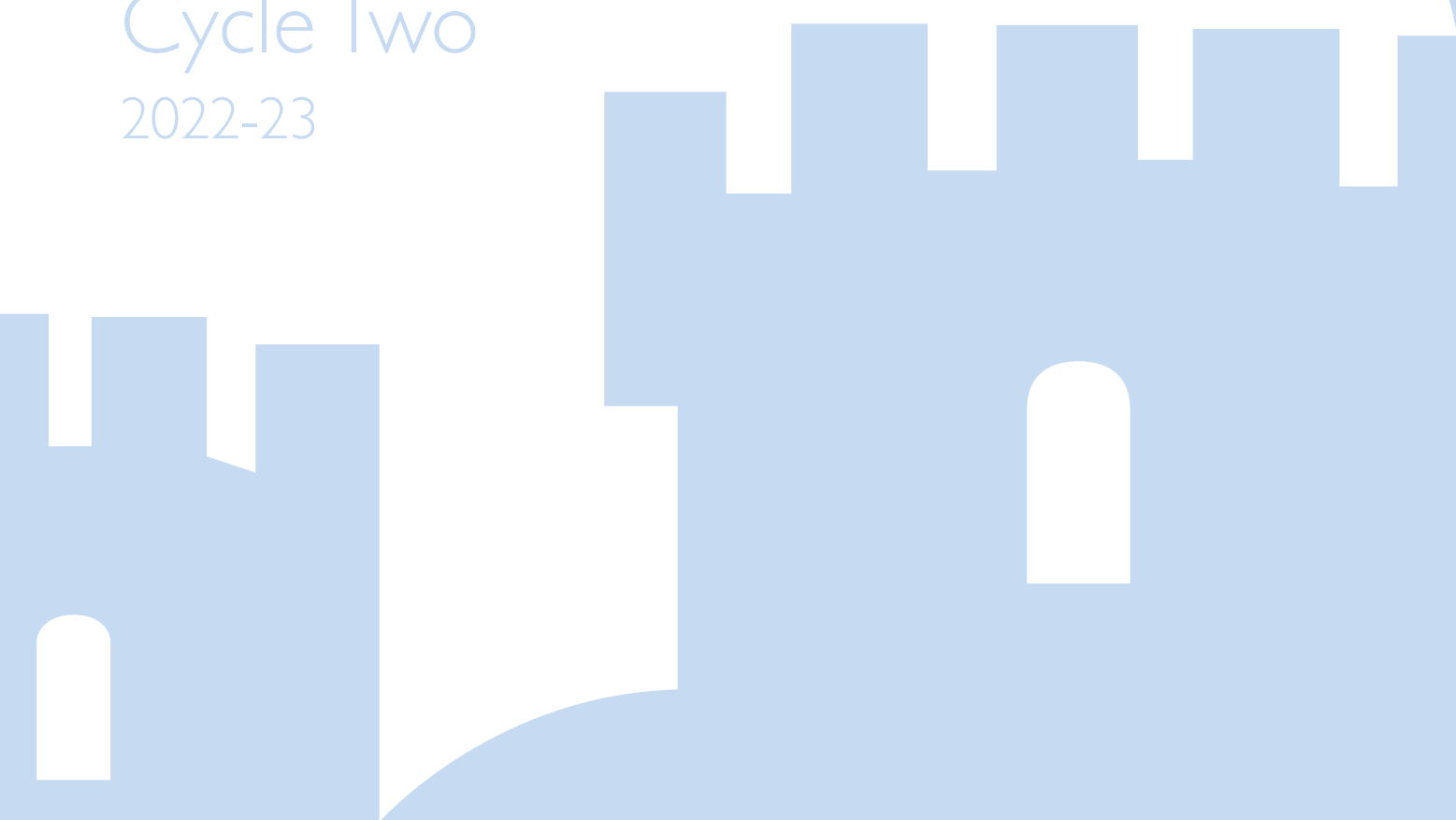


# Knowledge Organiser

**Year 9**

Cycle Two

2022-23


















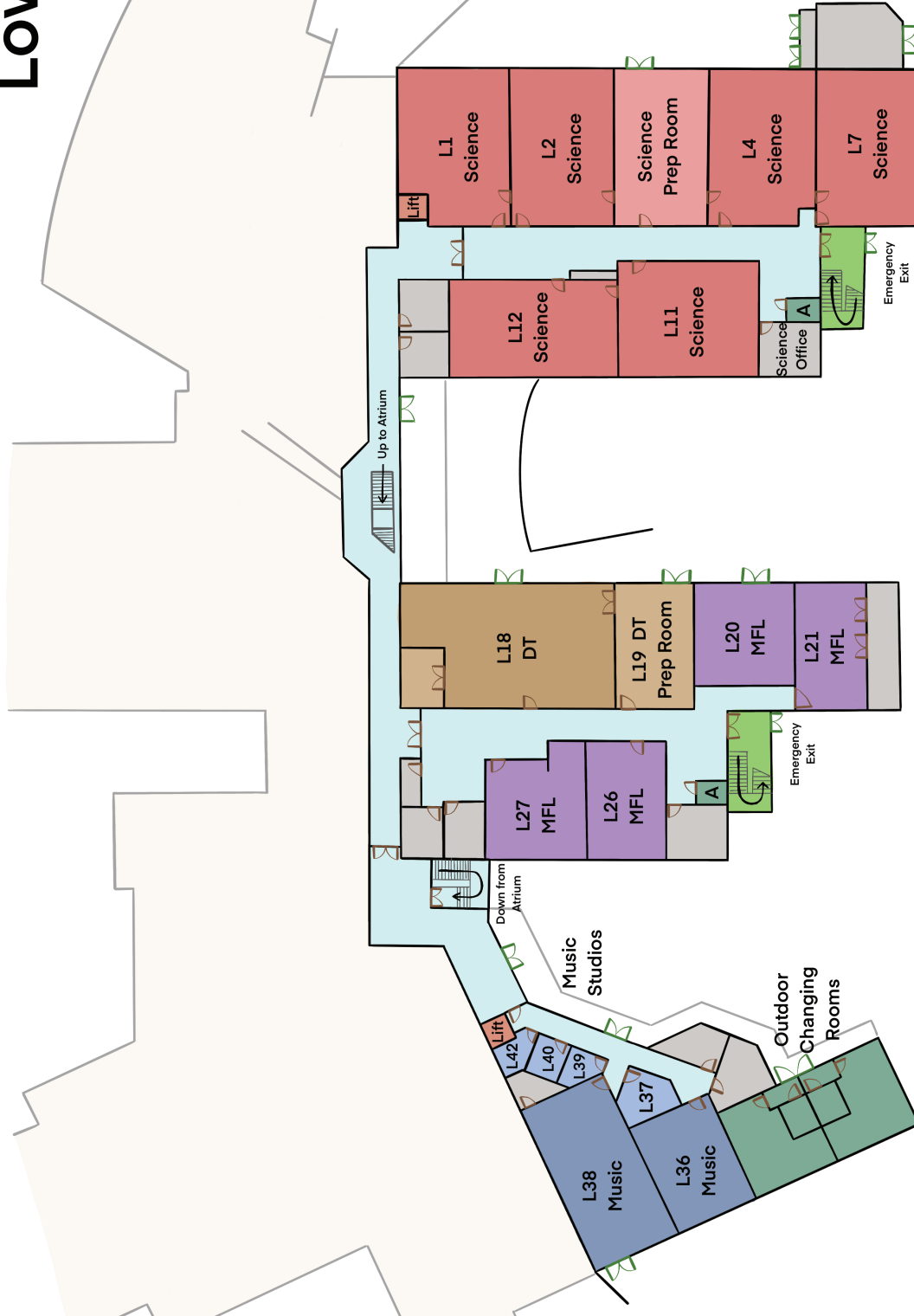
Week A	Monday	Tuesday	Wednesday	Thursday	Friday
Period 1					
Period 2					
BREAK TIME					
Period 3					
Period 4					
LUNCH TIME & CANON					
Period 5			Electives 13:30-15:00		
Period 6					

Week B	Monday	Tuesday	Wednesday	Thursday	Friday
Period 1					
Period 2					
BREAK TIME					
Period 3					
Period 4					
LUNCH TIME & CANON					
Period 5			Electives 13:30-15:00		
Period 6					

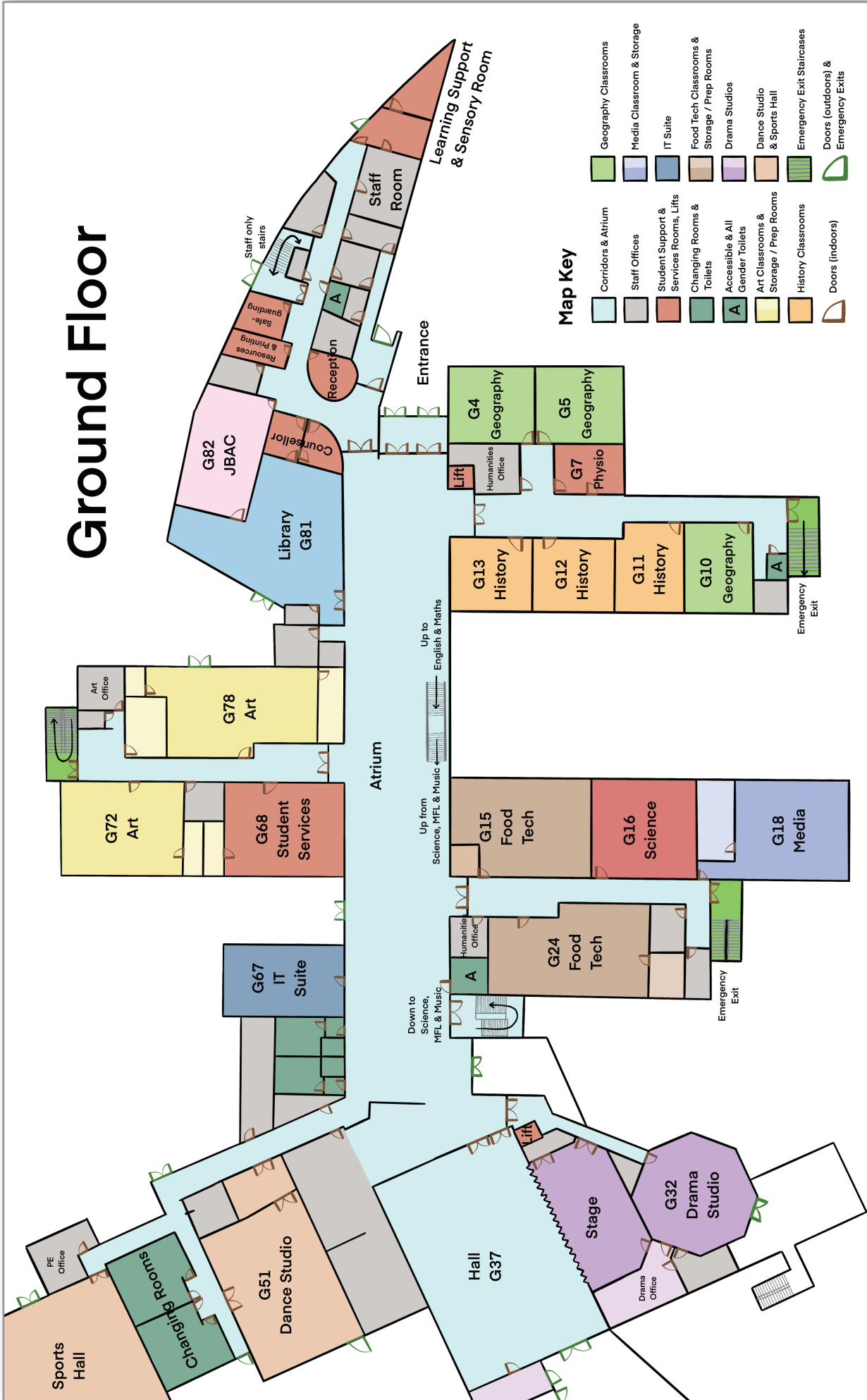
# Lower Floor

## Map Key

	Corridors		Recording Studios
	Staff Offices & Storage		DT Classroom & Storage / Prep
	Changing Rooms & Toilets		Emergency Exit
	Accessible & All Gender Toilets		Staircases
	Science Labs & Prep Rooms		Shadow of Ground Floor
	MFL Classrooms		Ground Floor
	Music Classrooms		Doors (indoors)
			Doors (outdoors) & Emergency Exits



# Ground Floor



# First Floor

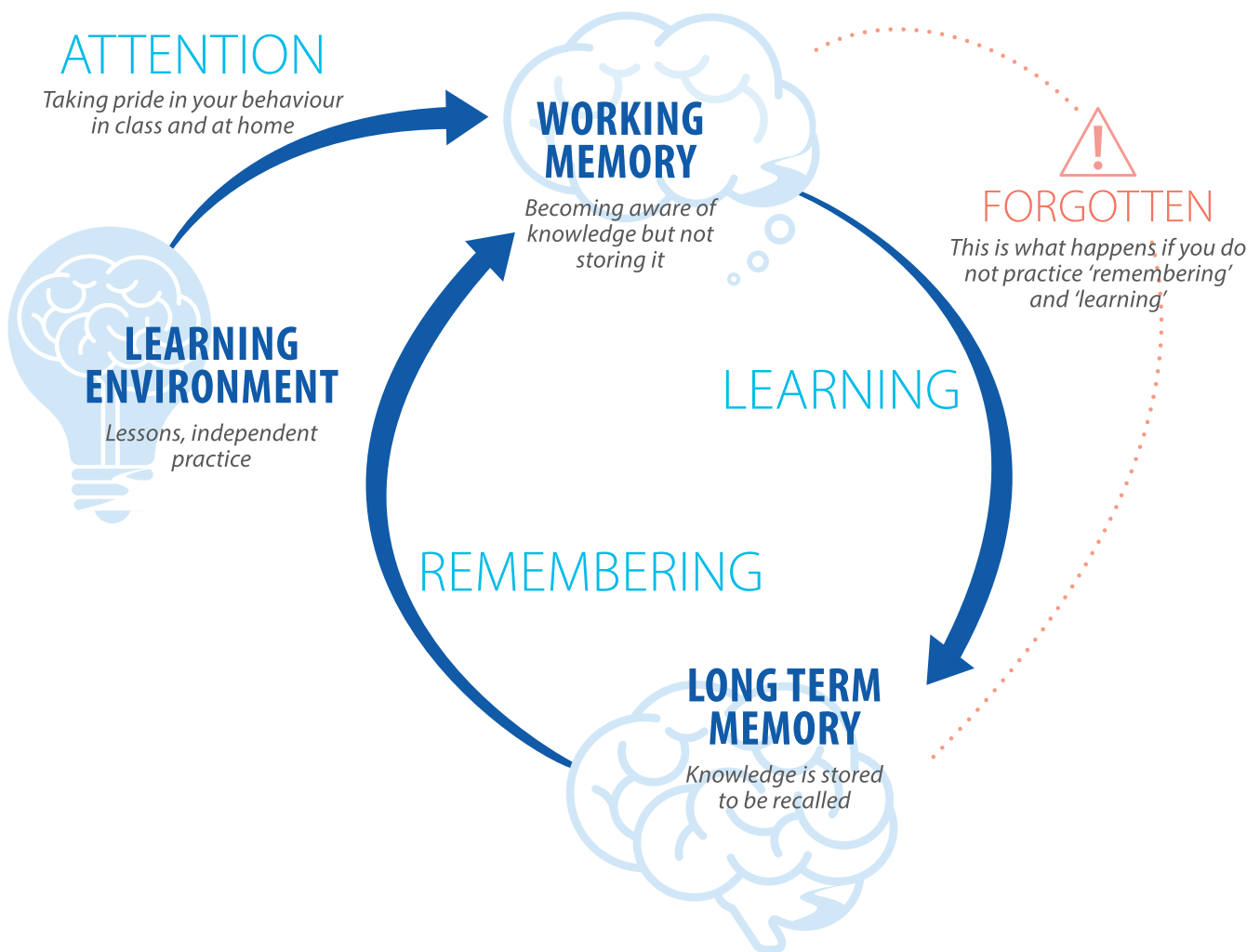


## Map Key

- Corridors
- Staff Offices
- Shadow of lower floors
- English Classrooms & Storage
- Maths Classrooms & Storage
- Humanities Classrooms
- Student Support & Services, Lifts & Headteacher's Office
- Toilets
- Accessible & All Gender Toilets
- Emergency Exit Staircases
- Doors (indoors)

# This is how you learn

Your mind is split into two parts: the **working-memory** and the **long-term memory**. Everybody's **working-memory is limited**, and therefore it can very easily become overwhelmed. Your **long-term memory**, on the other hand, **is effectively limitless**.

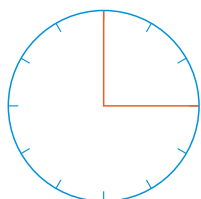


There are many different ways to learn the material in your knowledge organisers. Mr Ovens and Mrs Payne will be demonstrating how to use your knowledge organiser effectively in videos during the school year. These will be used in lessons and Canon time and will also be available on the school website. Whichever retrieval practice method you decide to use, your tutor will ask to see evidence of your work.

**Here are some methods you could use to complete your homework:**

- a. Read - Cover - Write - Check:** Read the section (or week) of your knowledge organiser several times. Cover it so you can no longer see it. Write down as much as you can remember. Check your knowledge organiser again. What information did you recall and what did your memory not retain? Make any corrections and additions using your green pen.
- b. Flashcards** - using an A6 size card/paper; turn the information in your knowledge organiser into a series of questions and then write the corresponding answer on the back of the card. This means that you can test yourself. Simply writing everything on the card would have no impact on your memory and retention of the information.
- c. Flip and fold pages** - This may be useful when you have completed a series of weeks or at the end of the topic. On one page, write down all of your revision notes. Fold the paper in half and create a mind map of the most important information on one side. Fold it again and write all of the key vocabulary on one side. Fold for the final time and draw symbols and icons that would help you to remember the content of your full page.

- a. Elaboration** - For each of the points you are revising, develop them further by asking yourself questions e.g. why would the rainfall be 2000mm? Why might mime be used as a theatrical technique?
- b. Retrieval practice grid** - Many of you would have used these in history. Divide your page into three columns and nine lines. Write questions and answers for your chosen topic. Ask family members and friends to ask you the questions and you give them the answer, focusing on one column at a time. If you get it wrong, they need to tell you the answer and you repeat it. You now need to go back into the top of the column of nine questions and try again until you get them all correct. Move onto the next column. This would be a good grid to build up over the course of the 10 weeks of knowledge organiser homework so that you had one grid per subject!

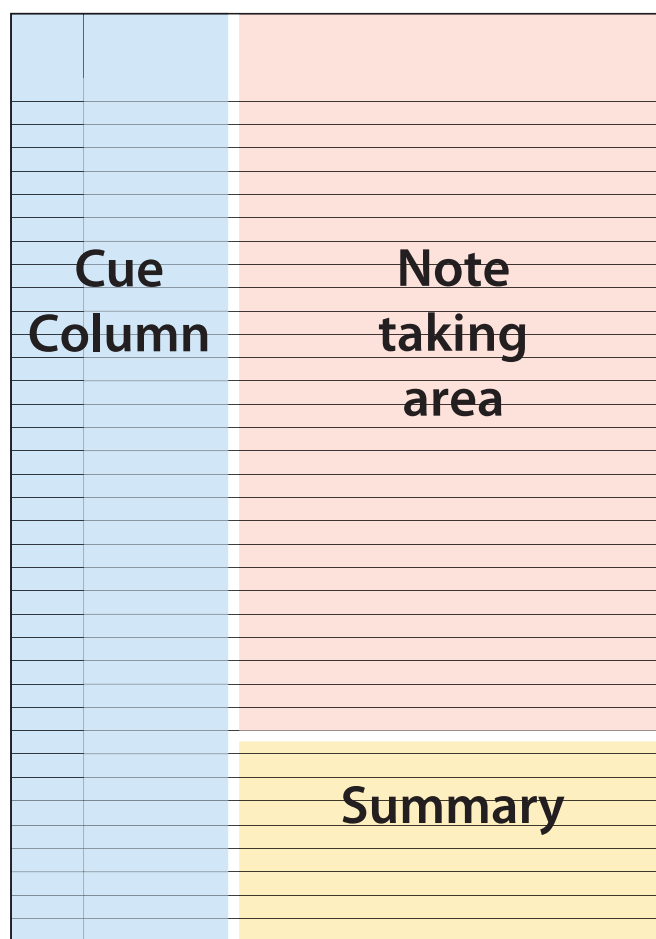


Repeat the processes above until you have spent 15-20 mins per subject per day. For example, repeated practices of 'Read - Cover - Write - Check' would be expected; not just one attempt.

## REMEMBERING: MASTERING YOUR MEMORY

### Cornell Notes

1. Divide your page into three sections like in this diagram.
2. In the note taking area, complete your work normally (if taking notes, try only to write down key information)
3. In the bottom section, summarise all the information in the note taking area into 3 bullet points
4. The Cue Column is where the magic happens - in this area, write a series of quiz questions about the notes you have written.
5. When revising, try to answer the quiz questions in the cue column before you read your notes. If you can do it, well done! You have **remembered** this. If not, you need to **learn** it again.
6. The Summary at the bottom of the page also strengthens the learning. It can be used as a prompt for you too try and remember the knowledge in the note taking area.



### Link to Learning

Cornell Notes are a note taking system that was developed at Cornell University in America.

It is specifically designed to help you initially strengthen your **learning** but perhaps more importantly, build in opportunities to **remember** what you have **learned**.

# Writing Structures

## HISTORY: Key phrases in written answers

### Using evidence:

- » This can be shown by...
- » I know this because...
- » Evidence to support this is...

### Explanation:

- » This led to...
- » This meant that...
- » This clearly shows us that...
- » This was significant because...
- » This had an impact on...
- » Admittedly x was a factor; however, y was more significant because...

## GEOGRAPHY: Writing structures / acronyms

### When you are describing the location of a place in the world, refer to CLOCC:

Compass directions  
 Latitude  
 Oceans  
 Continents  
 Countries

*When you are describing a pattern on a map or a trend on a graph, refer to TEA:*

Trend (what is the general pattern?)  
 Example (Identify specific examples from the map/graph)  
 Anomaly (what does not fit the pattern/is an outlier?)

*When you are completing a 5, 6 or 9 mark question in geography, it requires you to write well-developed points. To do this, follow the structure below:*

Make a point  
 ...which means that...  
 As a result of this, ...  
 We call this **double developing** a point.

*You are regularly asked the question 'To what extent do you agree...?'*

In response, consider the range of 'extents'.  
 I slightly / partially / mostly / completely agree because, firstly, ...  
 To a small / some / large extent, ...  
 To some extent / to a large extent, I agree...

*If you are asked to write about two sides of an argument, try 'Triple O'*

On the one hand, ...  
 On the other hand, ...  
 Overall, ...



In geography, we regularly refer to:

 **Social**,  **economic** and  **environmental perspectives**

(e.g. The social impacts of Typhoon Haiyan included the deaths of over 6,000 people)

**Sustainability:** which refers to 'meeting the needs of the present without compromising the ability of future generations to meet their own needs'. Here, we can use our previous terms. 'This is socially/economically/environmentally sustainable because...'

**The level of development of a country:** High Income Countries (HICs - e.g. UK); Newly Emerging Economies (NEEs - e.g. Brazil); Low Income Countries (LICs .e.g Chad)

## ENGLISH:

### English: Analyse your quotation using IMPACTS

<b>I</b>	In particular, [WRITER]'s use of (METHOD) "... " creates a .... IMAGE, suggesting... The writer's use of (EVOCATIVE/EMOTIVE/GRAPHIC) IMAGERY in the phrase "... " suggests...
<b>M</b>	In particular, [WRITER]'s use of (METHOD) "... " contributes to a ... MOOD, creating the sense that... The use of the (WORD TYPE) "... " further adds to the ... ATMOSPHERE evoking a feeling of...
<b>P</b>	[WRITER]'s repeated use of (METHOD) throughout the extract establishes a PATTERN of... that perhaps reinforces...
<b>A</b>	The term "... " is typically ASSOCIATED with..., perhaps implying...
<b>C</b>	In the CONTEXT of the extract, the term "... " creates CONNOTATIONS of..., perhaps suggesting...
<b>T</b>	In particular, [WRITER]'s use of (METHOD) "... " strikes a ....TONE, creating the sense that...
<b>S</b>	[WRITER]'s use of the phrase "... " is perhaps SYMBOLIC of... and may suggest...

PARAGRAPH STRUCTURE	PURPOSE OF PARAGRAPH	SENTENCE STRUCTURES
Premise/Title	Fit with convention and to alert reader to topic	
<b>Descriptive hook: begin by describing a scene that is relevant to the question. Do not express your view, although your view ought to be implied by your description. Ask the reader to imagine a scene.</b>	To engage your reader in imagining a scene which then illustrates your point. The narrative tone is easy to engage with.	Imagine, if you will Do you see...? Do you see...? Do you see...? No. No. And no. Instead, you see... We live in a world where ..., where ..., where ...
<b>Position paragraph: now, very clearly express your position on the issue. Provide an overview and reasons for your opinion, supported by an expert view.</b>	To begin to persuade the reader of the logic and the wisdom of your point of view.	...should absolutely... In 2017, the centre for X research at Exeter university produced a report on ... Shockingly/unsurprisingly/staggeringly, Professor Julie Buckle, who co-authored the report, is adamant that ... Some believe...; others believe..., but this much is clear: put your position here
<b>Relevance paragraph: make the point that the debate is relevant now and explain why. Why should people think about the issue now?</b>	Explains why the debate is relevant to modern society so that the audience can engage with the topic.	Why does it matter? Let me tell you why it matters: it matters because...; it matters because ..., and it matters because ... Those that experience this ..... No one - no matter where he lives or what he believes - can be certain that ... No wrongs have ever been righted by ... Some believe..., some believe...
<b>Optional Counter Argument: here accept other people may believe differently to you. Perhaps acknowledge part of their argument but then provide a rebuttal. Why are they wrong?</b>	This shows you recognise others may not have the same views, but your view is better.	Officials from/ Name claim that..... I'm not saying.....I'm not saying..... I'm not saying..... but..... Ultimately we must recognise.....
<b>Solution paragraph: by this point you have explained the problem and your view, but now you need to offer a solution. It is not enough simply to describe the issue, there must be a call to action</b>	To offer a solution to the issue and encourage the reader to do something about it.	I do not propose a set of specific remedies, nor is there a single set. Though for a broad and adequate outline, we know what must be done: ...
<b>Conclusion: Remind the reader of your position in a powerful way.</b>	Pithy fragmented paragraph to summarise main idea.	Here then, is the thought with which I wish to leave you: less..., more ...

# St James Academic Writing Builder (Higher)

- St James Academic Writing Steps**
1. Be clear
  2. Objective voice : No 'I's. Any-where. At all.  
Put the writer in charge.
  3. Speculative phrases: speculate to accumulate marks! Use uncertainty to sound smart!
  4. Confident phrases - be the ex-pert.
  5. Academic verbs
  6. Interest phrases
  7. 'Flow': Connective phrases
  8. Context to introduce and idea
  9. Voice: individual style

**WAIT!**

1. Before you choose: make sure you select adverbs, verbs and noun phrases that work together and make sense.
2. Check with your teacher or ask a friend if you're not sure.

2. Put the writer in charge:	3. Choose your academic adverb:	4. Choose your academic verb:	5. Select your academic noun phrase:
The author The poet The writer [Author's name] Through the use of....., Shakespeare.....	powerfully movingly poignantly ironically insistently subversively persistently consistently subtly interestingly humorously unexpectedly typically unusually unsettlingly disturbingly	critiques exposes attacks alludes subverts explores criticises reveals plays with contrasts expresses insinuates argues highlights evokes exploits elicits suggests	attitudes sentimentality idealisation conventions consequences ideas language Truth symbolism metaphors illusions thoughts reality effects representations stereotypes clichés
			to of about
			love women poverty conflict ambition power war battle humanity control nature maturity loss of innocence loss of... human psyche human nature motherhood responsibility isolation identity gender

I. Construct an academic 'nod' to the context	
<b>Appalled by</b>	Appalled by widespread poverty, Dickens.....
<b>Motivated by</b>	Motivated by a desire for social reform, Priestley.....
<b>Due to the widespread</b>	Due to the widespread belief in Malthusian Economic theory, Dickens....
<b>Driven by a desire to</b>	Driven by a desire to promote social reform, Priestley.....
<b>Having witnessed</b>	Having witnessed the widespread poverty in Victorian Britain, Dickens....
<b>Perhaps seeking to</b>	Perhaps seeking to highlight the cruelty of child poverty, Dickens....
<b>An ardent believer in</b>	An ardent believer in Socialist political ideologies, Priestley.....

Confident phrases	Speculative phrases
Certainly	Perhaps
Unquestionably	It could also be suggested
Undoubtedly	It could also be interpreted
Fundamentally	It might
Ultimately	It could also be considered
This certainly	It could be viewed from a different perspective
Without doubt	Possibly

# Homework Expectations

## What are the Independent Study expectations?

You must aim to meet the following expectations. Any adjustments to these expectations must be discussed with your Tutor:

- Check the schedule below to see which knowledge organisers you should use each day.
- Complete **work should reflect 15 minutes worth of recall/revision per subject.**
- Use your knowledge organiser after you have finished to **mark and correct** your own work.
- Write the date and subject heading for each piece of work.

**T** on **Time**

Homework should be **TANC**.

**A** **Accurate**

Any work that is not **TANC** will be considered incomplete.

**N** **Neat**

**C** **Complete**

## Homework Timetable

Some subjects will not set homework every week. But when they do set homework, it will be due in on set days. Your teachers will inform you of which day their homework is due in. You can write it in the table below.

	Subject 1	Subject 2	Subject 3	Subject 4
Monday		Sparx Maths		Geography
Tuesday		Enrichment		
Wednesday	Option A	Option B	Science	English
Thursday	French or Spanish	History	Science	English
Friday	French or Spanish	JBACC	Science	Extended Writing*

**BTEC Sport Studies & Health and Social Care:** Students will be set weekly homework by their teacher, which will be either Knowledge Organiser work, or completion of work towards assignment preparation. This work will be set and marked by their lead teacher in class.

\*It is vital that you have opportunities to practise your extended writing. This will be completed in your English books and will be checked by your English teacher.

Options	
Option A	Option B
Art & Design	Art & Design
Performing Arts Drama (Voc)	Performing Arts Dance (Voc)
Engineering Design (Voc)	Engineering Design (Voc)
Health & Social Care (Voc)	Health & Social Care (Voc)
Photography	Photography
Sport Studies (Voc)	Sports Studies (Voc)
Statistics & Further Maths	Computing
	Sociology

# Stop

STOP

*'They're not bullying you because of you, they're bullying you because of how they are'*

Jessie J

Bullying affects lots of people and can happen anywhere: at school, travelling to and from school, in sporting teams, in friendship or family groups.

**Bullying can take many forms including:**

- emotional abuse
- social bullying
- social media
- threatening behaviour
- name calling
- cyberbullying
- sexting

**Bullying includes REPEATEDLY:**

- people calling you names
- making things up to get you into trouble
- hitting, pinching, biting, pushing and shoving
- taking things away from you
- damaging your belongings
- stealing your money
- taking your friends away from you or leaving you out
- posting insulting messages or rumours, in person online
- threats and intimidation
- making silent or abusive phone calls
- sending you offensive texts or messages

# Speak

*'Blowing out someone else's candles doesn't make yours shine any brighter'*

Drake

**Speak to someone.**

No one has a magic wand, but we always do our best and we do really care.

Telling someone shares the problem. It helps you feel supported.

It is really important to tell someone, particularly if the bullying has been going on for a while or the strategies you've tried haven't worked.



You're **not** alone

Don't be afraid to tell an adult. **Telling isn't snitching!**



# Support

*'You always have to remember that bullies want to bring you down because you have something that they admire'*

Zak Efron

**What we do at St James to deal with bullying:**

- **Mentoring** is having a named person you can go to for support at school. Tutor/HOY/Refocus/Other
- **Restorative justice** brings all children involved together so everyone affected plays a part in repairing the harm and finding a positive way forward.



Any form of bullying will not be accepted at St James.



# Life after St James:

## What qualification should I choose?

Since 2015, in England, young people must be in some form of 'education or training' until they are 18. ([www.devon.gov.uk](http://www.devon.gov.uk)). The government decided to do this because it is widely recognised that staying in training improves your career prospects. Early in Year 11, you will need to decide what you want to do after your GCSEs.

- **Full-Time Study** - an academic or vocational qualification taken at a sixth form, college or training provider.
- **An Apprenticeship** - working for an employer while studying for a qualification as part of your training.
- **Traineeships** - this is an option for students who would like to do an apprenticeship but who do not yet have the experience, skills or qualifications to do so. A traineeship can prepare you for an apprenticeship.
- **Part-Time Study** - you may work or volunteer full-time if you are also studying part-time for a qualification.

### ADVANCED (A) LEVELS

A Levels are academic qualifications, where you study a subject in depth. Most students chose three subjects, which are assessed by exams at the end of two years. There are many different subjects to choose from, so you need to see what courses are offered at your chosen provider.

When choosing A Levels, think about the combination of subjects - do they work well together? Some University courses require specific A Levels - so do your research when choosing.

**Providers:** 6th Forms and Further Education Colleges

### TECHNICAL (T) LEVELS

T Levels are a new technical qualification, directly related to the world of work. You pick one subject, and the course is 80% study and 20% (or 45 days) of relevant work experience.

Like A Levels, T Levels take 2 years to complete. They are assessed by a mixture of exams and coursework, and students will be graded "Distinction", "Merit", "Pass" or fail. A Distinction is equivalent to three A\* at A Level.

**Providers:** Exeter College currently offers three T Levels: Construction, Digital, and Education & Childcare. It is important to check the course guide (available in the school library) or their website for up to date information.

### VOCATIONAL QUALIFICATIONS

Vocational qualifications are work-related qualifications that blend classroom learning with practical elements, often including work experience. There are literally hundreds of different qualifications at different levels, ranging from Entry Level up to Level 3 (including NVQs and BTECs), your options are only limited by what is offered locally. It is worth noting that T Levels will replace some Level 3 qualifications.

**Providers:** Further Education Colleges

### THE INTERNATIONAL BACCALAUREATE (IB)

The IB Diploma is an academic qualification, where you study three subjects to a higher level and three at a standard level. There are also core courses that you must study. It allows you greater breadth than A Levels, although the trade-off is less depth.

**Providers:** Exeter College, Bridgwater & Taunton College

Entry Requirements: See website for specifics, but at least 6 GCSEs (inc. Maths and English) at Grade 6+.

**Maths and English resits?** If you get Grade 3 (or below) in your GCSE Maths or English, you will re-sit these qualifications as part of any course you study at college or as part of an apprenticeship. If you achieve lower than a Grade 3, you might be offered an alternative qualification called "Functional Skills Maths and English".

# Local Further Education (FE) Colleges



**Exeter College:** Offers a whole range of subjects (e.g., Hair and Beauty, Childcare, Construction, Business Management, Performing Arts and Photography) at various levels (from Entry Level to Level 5). <https://exe-coll.ac.uk/>



**Bicton College:** Part of the Cornwall College group, the Bicton College site focuses on land-management type courses, including Animal Care and the Military and Protective Services. Again, it runs courses from Entry Level through to Level 5. [www.bicton.ac.uk/](http://www.bicton.ac.uk/)



**Exeter Maths School:** A small college, focusing on Maths, Physics and Computer Science. Linked to the University of Exeter [www.exetermathematicsschool.ac.uk/](http://www.exetermathematicsschool.ac.uk/)

Some of the secondary schools in Devon have a **Sixth Form** where students can stay at school and enter year 12 and then year 13. Sixth Forms typically focus on A-Level qualifications.

## Apprenticeships

**Apprenticeships** combine practical training in a job with studying for a related qualification. The employer decides the qualification and chooses a training provider, which could be a local or national college or an industry-specific training provider. Apprenticeships are governed by "Standards". The standards set out the skills, knowledge and behaviours that apprentices must achieve during the apprenticeship.

At Post 16, you will probably be looking at Intermediate Level apprenticeships.

**Traineeships** are for students that do not have the relevant qualifications, experience or skills to start an apprenticeship but are interested in progressing on to one in the future. They involve a programme of up to six months of study, including a work placement, qualifications in Maths and English and support with finding a job or apprenticeship once the course is completed. Traineeships are unpaid. [www.gov.uk/find-traineeship](http://www.gov.uk/find-traineeship)

In addition to Exeter College and Bicton College, there are local specialist training providers, who work with employers to deliver apprenticeships. If you are looking for an apprenticeship, it can help to talk to one of these providers as well as the colleges:



PGL Training offer a wide range of courses; from Hairdressing to Bricklaying, to Warehousing and Business Administration. Pick up a prospectus from the Careers Library or see [www.pgtraining.com](http://www.pgtraining.com).

Many employers will not use local training providers for Apprenticeships. Some, such as Hays Travel, have an in-house scheme that they run themselves. Others, such as some accountancy firms, will also use national bodies such as Kaplan.

GOV.UK
Find an apprenticeship

**Your location**

Exeter (Devon)

[Use current location](#)

**Within**

20 miles

**Apprenticeship level**

Intermediate

## Search results

We've found **76** apprenticeships in your selected area.

[Receive alerts for this search](#)



# WHERE TO GO FOR MORE HELP...

## Your 1:1 appointment with a qualified Careers Advisor

All students will receive an invitation to a 1:1 meeting with our qualified Careers Advisor, Maria. This meeting will take place at the end of Year 10 or the very start of Year 11. You should come to this meeting prepared to talk about your ideas, likes, dislikes. The Advisor will then be able to help you to focus your thinking.

## Use your network

Your friends and family, tutors and teachers, people who know you well: tap into your network and ask them questions. What route did they take? What did they like / dislike? What do they think you would prefer? At the end of the day, it is your decision that you need to take, but it can be helpful to learn from other peoples' experiences.

## Go online

Be sure to look at the website of local colleges and sixth forms, here you will find the most up to date selection of courses. The Career Pilot website is so easy to use. It has loads of useful information about all aspects of choosing your next steps. It is worth having a look, even if you are already certain about your choices. Another good one is BBC Bitesize, which has useful videos and information: [www.bbc.co.uk/bitesize/articles/z6ws47h](http://www.bbc.co.uk/bitesize/articles/z6ws47h)





## Artist Research Guide AO1

### Who is your chosen Artist/Photographer/Designer?

Provide a brief biography...

What is their best-known work? Do they belong to a particular 'genre' or 'movement' of Art or Photography - i.e. Surrealism, Pop Art or Expressionism etc?

#### Sentence starters:

*Andy Warhol was considered to be...*

*Frida Kahlo is thought to be...*

### The artwork, photograph, design

What is the title of the artwork or photograph you are looking at?

Why has the artist chosen that title? What clues does it give you about the work?

When was it made or taken?

*The piece of work is titled...from the title I think the artist was...*

*The title of the work suggest...*

*What I first noticed about this piece of work...*

*Warhol's work is considered to be the pinnacle of Pop Art due to...*

### Analysis of artwork or design

**Form** - what has been printed, painted or sculptured? (Portrait, buildings? etc.) Please describe in detail.

Can you see any experimentation with the colour/composition/texture or materials?

*I can see...*

*In the photograph...*

*The light that has been used...*

**Process** - How has it been made? What materials, techniques or equipment have been used?

What size or scale is it?

*I think the artist has used...*

*The artist has created the work using...*

*By using reds and orange the artist has created a...*

*The expressive brush strokes suggest...*

*I think it would have been interesting if the artist had used...*

**Context** - what is the key themes in the artwork? What do you think the artist's intentions were? What does it remind you of? Is the mood of the work aggressive/tense/angry/happy/laid back/imposing/theatrical etc.?

Can you make links to other cultural references? Film? Theatre? Literature?

*I think the main theme or idea behind this piece is...*

*I can see how this work links to... I think this because...*

*The artwork reminds me of...*

*I think the possible meaning behind the work is...*

*The mood of the artwork...*

*I think that the piece of work was created in response to....I think this because...*

### You're opinions...

What appeals to you about the image or artwork and the artist? How does it make you feel? What has it inspired you to do? What materials or techniques would you like to apply to your own art?

*I think that the artist was trying to say...*

*My eyes are drawn to... I believe the artist has achieved this by...*

*If I were inside this artwork I would be feeling/thinking...*

*I like the idea of using this technique to make...*

*I would like to take the idea one step further and include...*

*I am going to use this artwork to inspire my own ideas and artwork by...*

*I'm very interested in trying out this technique and experimenting with...*

Year 9 Computer Science Cycle Two - Networking		
Week 1	Week 2	Week 3
<p><b>Network</b> - Two or more devices which are connected</p> <p><b>WAN</b> - A wide area network. Features include:</p> <ul style="list-style-type: none"> <li>» Connects LANs together over a large geographical area</li> <li>» Infrastructure is leased from telecommunication companies who own and manage it</li> </ul> <p><b>LAN</b> - A local area network. Features include:</p> <ul style="list-style-type: none"> <li>» Covers a single site within a small geographical area</li> <li>» All the hardware is owned by the organisation using it</li> </ul> <p><b>Internet</b> - A collection of interconnected networks spanning the world (A really large WAN)</p> <p><b>WWW</b> - World wide web. A service on the internet.</p>	<p><b>Client/Node/Workstation</b> - A device on a network which makes requests to the server for data and connections</p> <p><b>Peer</b> - A device on a network with equal status to other devices</p> <p><b>Server</b> - A centralised place for storing data on a network</p> <p><b>File server</b> - A server which is responsible for storing files on a network</p> <p><b>Backup server</b> - A server which stores backups of files on a network</p> <p><b>Web server</b> - A server which stores website data</p>	<p><b>Client server network</b> - A network model which uses a centralised server to send and store data</p> <p><b>Advantages of a client server network are...</b></p> <ul style="list-style-type: none"> <li>» Easier to manage security</li> <li>» Easier to back up shared data</li> <li>» Easier to install software updates on all computers at once</li> </ul> <p><b>Disadvantages of a client server network are...</b></p> <ul style="list-style-type: none"> <li>» Expensive to set up and maintain</li> <li>» Requires IT specialists</li> <li>» Single point of failure</li> <li>» Users lose access if the server fails</li> </ul>
Week 4	Week 5	Week 6
<p><b>Peer to peer network</b> - A network model where all devices are equal and share data directly with one another without the use of a centralised server or specialist equipment</p> <p><b>Advantages of a peer to peer network are...</b></p> <ul style="list-style-type: none"> <li>» Very easy to maintain</li> <li>» Specialist staff are not required</li> <li>» No dependency on a single computer</li> <li>» Cheaper to set up</li> <li>» No expensive hardware</li> </ul> <p><b>Disadvantages of a peer to peer network are...</b></p> <ul style="list-style-type: none"> <li>» Less secure</li> <li>» Users manage their own backups</li> <li>» Can be difficult to maintain a well-ordered file store</li> </ul>	<p><b>Network performance</b> - The speed at which data can travel round a network</p> <p><b>Network performance depends on these factors:</b></p> <p><b>Bandwidth</b> - The amount of data that can be sent and received successfully in a specified period of time</p> <p><b>Numbers of users</b> - Too many users or devices on the same network can cause it to slow down if there is insufficient bandwidth available</p> <p><b>Transmission media</b> - Wired connections offer higher bandwidth than wireless connections and Fibre optic cables offer higher bandwidth than copper cables.</p> <p><b>Error rate</b> - The number of errors which take place over a set period of time</p> <p><b>Latency</b> - The delay between data being transmitted and a user's device receiving it, latency is caused by bottlenecks in network infrastructure</p>	<p><b>Network interface card (NIC)</b> - Connects a device to a wired or wireless network. An NIC uses a protocol to ensure successful communication</p> <p><b>Wireless access point (WAP)</b> - Allow wireless-enabled devices to access a network. Wireless connections are popular because they avoid the need to install cables</p> <p><b>Router</b> - Sends data between networks and is required to connect a local area network to a wide area network. Routers use devices' IP address to route traffic to other routers</p> <p><b>Switch</b> - Uses a device's NIC address to route traffic</p> <p><b>Transmission media</b> - Cables used to connect hardware on a network</p> <p><b>Ethernet</b> - A cable used to connect routers and LANs</p> <p><b>Coaxial</b> - A copper cable used to connect LANs to WANs</p> <p><b>Fibre Optic</b> - A optical cable used to connect LANs to WANs where data travels at the speed of light</p>

Week 7	Week 8	Week 9
<p><b>Network topology</b> - The arrangement of all the elements required to build a network</p> <p><b>What is a STAR topology?</b></p> <ul style="list-style-type: none"> <li>» Most popular type of wired network</li> <li>» Central switch with all devices connect to the switch</li> <li>» The switch is intelligent, ensuring traffic only goes where it is intended</li> <li>» If a single cable breaks, only that computer is affected</li> </ul> <p><b>What is a full mesh topology?</b></p> <ul style="list-style-type: none"> <li>» Every device is connected to every other device</li> <li>» If any of the connections break, traffic can be sent via another route</li> <li>» More cabling and switch hardware required, which adds to the cost</li> </ul> <p><b>What is a partial mesh topology?</b></p> <ul style="list-style-type: none"> <li>» Multiple routes exist between devices, but every device is not connected to every other device.</li> <li>» Reduces the amount of hardware compared to a full mesh network.</li> </ul>	<p><b>The job of a DNS (domain name server) server</b> - To convert the address of a webpage from its natural IP address made of numbers to a name that is easily remembered by a human</p> <p><b>Hosting</b> - When you buy a web space you will be paying a host to host that website on their server for you. The job of a host is to make sure that the websites they support give 24/7 access, support for multiple users and enhanced security</p> <p><b>Connecting a network using Bluetooth</b></p> <ul style="list-style-type: none"> <li>» Ideal for connecting personal devices like Bluetooth-enabled headphones to a smartphone.</li> <li>» Very short range - around 10 meters</li> <li>» Low power consumption compared to Wi-Fi.</li> </ul>	<p><b>Connecting a network using WIFI</b></p> <ul style="list-style-type: none"> <li>» Users can move around freely.</li> <li>» Easier to set up and less expensive.</li> <li>» Can handle a large number of users.</li> <li>» Data transfer is much easier.</li> <li>» Network speeds are lower than with wired networks.</li> <li>» Relies on signal strength to the wireless access point (WAP). Signal can be obstructed by objects</li> <li>» Less secure than wired networks.</li> </ul> <p><b>How can wireless networks be made safe?</b></p> <p>Wireless networks broadcast data that must be encrypted in order to be secure - this is done by scrambling the data into ciphertext using a master key created from the network's SSID and password. The SSID is set automatically, but you can change it if you wish. It can also be hidden or can be secured with a password</p> <p><b>What are the wireless encryption protocols?</b></p> <p>WEP, WPA and WPA2. A handshake protocol is used to ensure the receiver has a valid master key before transmission begins.</p>
Week 10	Week 11	Week 12
<p><b>MAC addressing</b> - Used to route frames on a local area network (LAN). Each MAC address is unique to every network interface card (e.g, 00:0a:95:9d:68:16)</p> <p><b>IP addressing</b> - Used to route packets on a wide area network (WAN). There are two versions of IP addresses - IPv4 and IPv6</p> <p><b>The difference between IPv4 and IPv6</b> - IPv4 is 32 bits and made up of four numbers between 0 and 255 separated with fullstops but IPv6 is 128 bits made up of eight groups of four 16-bit hex values separated by colons</p>	<p><b>Client request to access a webpage:</b></p> <ul style="list-style-type: none"> <li>» The client requests a URL via a web browser (e.g, www.bbc.co.uk).</li> <li>» The browser sends the domain name to a Domain Name Server (DNS)</li> <li>» The DNS maps the domain name to an IP address and returns it to the browser</li> <li>» A GET request for the web page is sent to the web server using its IP address</li> <li>» The requested web page is returned to the client's web browser</li> </ul>	<p><b>Cloud</b> - Servers that can be used to store data and programs that can be accessed over the internet</p> <p><b>Advantages of the cloud</b></p> <ul style="list-style-type: none"> <li>» Access anytime, anywhere, from any device</li> <li>» Large storage capacity</li> <li>» Automatic backup / version control</li> <li>» Easy collaboration</li> </ul> <p><b>Disadvantages of the cloud</b></p> <ul style="list-style-type: none"> <li>» Without a connection, you can't access anything</li> <li>» Reduced security</li> </ul>

Year 9 Dance Cycle Two

Week 1 and 2	Week 3 and 4	Week 5 and 6	Week 7 and 8	Week 9 and 10
<p><b>GENRE AND PRACTITIONER</b></p> <p><b>Fosse</b> - highly stylised jazz, started in 50s with a strong influence from burlesque. Isolated and simplistic movement with key moves.</p> <p><i>Bob Fosse - Chicago</i></p> <p><b>Ballet</b> - Romantic, classical or modern style, using turnout, formal positions and alignments.</p> <p><i>David Bintley - Still Life</i> <i>Matthew Bourne - Nutcracker</i></p> <p><b>Contemporary</b> - expressive style using contrasting movements and a strong use of breath and spine curves. Martha Graham and Merce Cunningham are leading practitioners</p> <p><i>Christopher Bruce - Swansong</i></p> <p><b>Hip hop/street</b> - A fusion of African, Latino and Caribbean American dance in the Bronx in the 70s. Characterised by an aggressive and competitive style, popping, isolations, contraction movements and syncopated beats.</p> <p><i>ZooNation - Alice in wonderland</i></p> <p><b>Musical Theatre</b> - Song, dance and acting amalgamated, highly exaggerated/ non-naturalistic</p> <p><i>Lee Hall - Billy Elliot</i> <i>Hugh Jackman - Greatest Showman.</i></p>	<p><b>REHEARSAL AND EXPLORATIVE TECHNIQUES</b></p> <p><b>Stimulus</b> - the thing you base it on/ use as inspiration could include: Themes, issues, existing repertoire, props, time and place, a painting, song, poem, literature or news article.</p> <p><b>Chance dance</b> - creating a dance through 'chance' often with a dice to lead decision making.</p> <p><b>Improvisation</b> - Dancing without rehearsal to help inspire the choreographer and develop ideas.</p> <p><b>With/without music</b> - creating choreography then applying music or changing the music from what was initially used. This creates different dynamics and emotion in the movement.</p> <p><b>Technical rehearsal</b> - rehearsal where the lights/props/sound are first used on the stage (sometimes costumed)</p> <p><b>Dress rehearsal</b> - final rehearsal on stage as though the audience are there. Used to identify any last minute issues.</p> <p><b>Areas to consider when improving work:</b></p> <ul style="list-style-type: none"> <li>Shaping of material</li> <li>Response to feedback from peers or an audience.</li> <li>Design elements</li> <li>Participation within the group</li> <li>Use of performance space</li> <li>Communication of ideas to the audience</li> </ul>	<p><b>DEVSING AND STRUCTURING DEVICES</b></p> <p><b>Constituent features</b> - characteristics of the choreography - can be used to enhance your theme</p> <p><b>RADS</b> - used to build your motifs/ choreography. Can be used to enhance your theme.</p> <p><b>Binary</b> - AB structure (2 sections but might have similarities eg. tempo, music, rhythm, movement)</p> <p><b>Ternary</b> - ABA structure (B part is sandwiched between A parts which should remain the same)</p> <p><b>Rondo</b> - ABACA structure (A remains the same each time but B and C can differ)</p> <p><b>Episodic</b> - has several sections. Can either compliment or contrast depending on themes</p> <p><b>Narrative</b> - has a storyline and defined characters</p> <p><b>Motif</b> - distinctive repeating feature or individual section</p> <p><b>Motif development</b> - repeating section that is changed using RADS</p> <p><b>Reordering/fragmenting</b> - All scenes are in a different order and can miss parts out.</p> <p><b>Repetition</b> - scenes or moments are shown more than once, not necessarily identically.</p> <p><b>Embellishment</b> - something that has already been used is used again but added to in some way.</p>	<p><b>PERFORMANCE ELEMENTS</b></p> <p>Technically accurate</p> <p>Movement memory</p> <p>Projection/facial expressions</p> <p>Timing (with music and with group)</p> <p>Phrasing</p> <p>Musicality</p> <p>Expression of themes</p> <p>Spatial awareness</p> <p>Group awareness</p> <p>Focus</p> <p>Consideration of performance style/genre</p> <p>Posture</p> <p>Coordination</p> <p>Stamina</p> <p>Flexibility</p> <p>Balance</p> <p>Alignment</p> <p>Extension</p> <p>Be prepared</p> <p>Be adaptable</p> <p>Be confident</p> <p>Be impressive</p> <p>Enjoy the performance</p>	<p><b>MEDIUM AND STAGING</b></p> <p><b>Masks</b> - exaggerated or blank.</p> <p><b>Costume</b> - blank canvas, naturalistic, traditional (like a tutu) or symbolic.</p> <p><b>Set/Props</b> - naturalistic; minimalistic or symbolic.</p> <p><b>Sound effects/music</b> - recorded, live, naturalistic or symbolic.</p> <p><b>Lighting</b> - naturalistic or symbolic.</p> <p><b>Proscenium Arch</b> - traditional, with apron, audience = 1 side.</p> <p><b>End on</b> - modernised P-Arch, no curtain/apron</p> <p><b>Traverse</b> - audience = 2 sides like a catwalk.</p> <p><b>In the Round</b> - audience on all sides, stage in middle.</p> <p><b>Thrust</b> - T shaped with piece that juts into audience.</p> <p><b>Centre stage</b> - middle of stage</p> <p><b>Upstage</b> - back of the stage.</p> <p><b>Downstage</b> - front of the stage</p> <p><b>Stage L/R = as the ACTOR</b></p> <p><b>Wings</b> - to the sides of the stage to hide offstage and to enter through.</p>
<p><b>WITH ALL AREAS YOU MUST CONSIDER YOUR AUDIENCE:</b></p> <p>Who is this for? You must consider their age, demographic and location. You must consider the cultural, social and historical relevance of the piece you choreograph. You should consider how best to engage them and what message you are trying to say. Are you trying to educate, to entertain, provoke/challenge, express your viewpoints or give alternative viewpoints? Is the piece meant to celebrate?</p>				

Year 9 Engineering Design and Technology Cycle Two - Designing processes

Week 1	Week 2	Week 3	Week 4	Week 5
<p><b>LINEAR DESIGN</b></p> <p>Linear design thinking is often to do with a single, non-complex problem to solve. e.g. A football goal does not fit in a storage cupboard.</p> <p>Research = measure goal and cupboard, Design a solution i.e. smaller goal, folding goal or a goal that comes apart.</p> <p>Pick the solution that best fits the criteria and manufacture it.</p> 	<p><b>ITERATIVE DESIGN</b></p> <p>The iterative design process develops a product through many small incremental changes/improvements.</p> <p>It is often used to develop, update or improve an existing product or solution. Design changes are modelled, tested, evaluated and kept or disregarded. It is a constant cycle of improvement.</p> <p>Iterations help balance complex multi-stranded problems making sure you get the best solution meeting all areas of the customer requirements.</p> <p>Multiple versions of a particular design can be released over the life of a product.</p>	<p><b>INCLUSIVE DESIGN</b></p> <p>Inclusive design looks for solutions that fit everyone.</p> <p>Solutions should not just be fit for one user or even two but everyone regardless what there individual requirement is.</p> <p>For example, instead of a building entrance with narrow stairs and a narrow wheelchair ramp, the entire entrance may be a slope that is attractive, barrier-free and minimalistic.</p>	<p><b>USER CENTRED DESIGN</b></p> <p>UCD is an iterative process (see week 3) in which designers focus on the users and their needs in each phase of the design process.</p> <p>In UCD, design teams involve users throughout the design process via a variety of research and design techniques.</p> <p>A good example is the development of a App for young people specifically to manage their finances. Banking Apps are very common but research showed young people found it difficult to use them .The 'money think' app was born.</p> <p>Check out thinkmoney.co.uk</p>	<p><b>SUSTAINABLE DESIGN</b></p> <p>Sustainable design seeks to reduce negative impacts on the environment through skilful design and innovative use of materials.</p> <p>Sustainable design principles include...</p> <p>Using Low-impact materials: choose non-toxic, sustainably produced or recycled materials which require little energy to process</p> <ul style="list-style-type: none"> <li>» Energy efficiency</li> <li>» Design for reuse and recycling</li> <li>» Design for disassembly</li> </ul> <p>Using Renewable resources materials should come from nearby sustainably managed renewable sources that can be composted when their usefulness has been exhausted.</p>
Week 6	Week 7 and 8			Week 10
<p><b>ERGONOMIC DESIGN</b></p> <p>Ergonomics is the study of how people interact with the objects they use and the environments they use them in.</p> <p>Ergonomic design is therefore designing a product that is comfortable to use, easy to understand and should fit the user it is designed for.</p> <p>It is partly to do with the shape, shape size and geometry of a product ,but it allow considers how easy a product is to understand and use.</p>	<p><b>COPY OUT THE DESIGN CYCLE (wk7) AND LEARN THE STAGES (wk8)</b></p>  <p><b>1. identify</b></p> <ul style="list-style-type: none"> <li>Analyse design brief</li> <li>Carry out research</li> <li>Make a Plan</li> </ul> <p><b>2. design</b></p> <ul style="list-style-type: none"> <li>Generate design ideas</li> <li>Sketches and drawings</li> <li>Write a design specification</li> </ul> <p><b>3. optimise</b></p> <ul style="list-style-type: none"> <li>Produce Prototypes</li> <li>Make Design improvements</li> </ul> <p><b>4. validate</b></p> <ul style="list-style-type: none"> <li>Test designs</li> <li>Evaluate final design decisions</li> <li>Compare design against design brief and specification</li> </ul>			<p><b>Week 10</b></p> <p><b>KEY TERMS WITHIN DESIGNING PROCESSES</b></p> <p><b>Client</b> - Person, group of people or company that has commissioned the development of a new product.</p> <p><b>User</b> - Person or people who will use the final product.</p> <p><b>Design Cycle</b> - A set of processes, split into 4 phases that designers follow to ensure efficient/effective design development.</p> <p><b>Sustainable</b> - When something is used in a way that ensures it does not run out.</p> <p><b>Anthropometrics</b> - Study of the measurements of the human body. (Closely linked to Ergonomics)</p>

Year 9 English Cycle Two - Power and Conflict Poetry			
Week 1	Week 2	Week 3 and 4	Key
<p><b>ARROGANCE AND ABUSE</b></p> <p><b>'I met a traveller from an antique land, /who said' Ozy</b>                      'My name is Ozymandias, King of Kings' 'Nothing beside remains.' Ozy</p> <p><b>'That's my last Duchess painted on the wall' 'her looks went everywhere.'</b> MLD</p> <p>'I gave commands; Then all smiles stopped together.' MLD</p> <p><b>Ozymandias</b> reveals the ephemeral nature of power and warns that all power must end.</p> <p><b>MLD</b> reveals the megalomania of a Duke and how power and arrogance have corrupted him.</p> <p><b>Shelley's</b> poem is a veiled criticism of King George III's reign which he felt was tyrannical. Shelley reminds the public that all power must end.</p> <p><b>Structure</b> - both poems are rigidly structured -&gt; control; MLD structure breaks line 43</p> <p><b>Form - Ozy</b> is in a modified sonnet form - suggests self-love.</p> <p><b>A&amp;B:</b> Some commentators have seen Ozymandias as Shelley attacking the Church.</p> <p><b>Ephemeral</b> - lasting a short time</p> <p><b>Transient</b> - impermanent;</p> <p><b>Megalomania</b> - obsession with the exercise of power;</p> <p><b>Objectification</b> - the action of degrading someone to the status of a mere object.</p>	<p><b>IDENTITY</b></p> <p><b>'Dem tell me/Wha dem want to tell me' COMH</b>                      'Bandage up me eye' 'I carving out me identity' COMH</p> <p><b>'Pages smoothed and stroked'</b> Tissue                      'trace a grand design/With living tissue'                      'turned into your skin.' Tissue</p> <p><b>COMH</b> conveys Agard's anger at white euro-centric education that left him ignorant of his own identity.</p> <p><b>Tissue</b> explores the nature of identity itself.</p> <p><b>Dharker's</b> identity is itself a combination of multiple cultures - Pakistani, Scottish, Welsh and Indian. This background provides a unique perspective.</p> <p><b>Structure:</b> Tissue's enjambment reflects the ongoing creative process of identity. COMH - no conventional structure.</p> <p><b>Form:</b> COMH refuses to employ standard English forms, possibly as a form of protest.</p> <p><b>A&amp;B:</b> COMH is a racially charged poem but some argue that it also insights criticism of class as well.</p> <p><b>Euro-centric:</b> a point of view that is heavily biased towards, or influenced by White European history</p> <p><b>Ostracise (v)</b> - to exclude from a society or group.</p>	<p><b>NATURE</b></p> <p><b>'We our prepared: we build our houses squat'</b>  <b>SOTL</b>                      'raise a tragic chorus' 'spits like a tame cat/turned savage' SOTL</p> <p><b>'It was an act of stealth/and troubled pleasure'</b>  <b>Prelude</b>                      'A huge peak, black and huge...up reared its head.'</p> <p><b>SOTL</b> may be about a literal storm that steals the islanders' sense of control or a metaphorical storm that refers to political uncertainty.</p> <p><b>Prelude</b> is an autobiographical poem relating the night when Wordsworth's worldview is changed forever.</p> <p><b>Structure:</b> enjambment is used in both to show disjointed and thoughts and loss of control.</p> <p><b>Form:</b> SOTL is in 1st person plural to create community; Prelude is 1st person to share personal experience</p> <p><b>A&amp;B:</b> SOTL may refer to a time of unrest known as the Troubles. The IRA bombed civilians.</p> <p><b>Poignant (adj)</b> - evoking sadness.</p>	<p><b>Content (AO1)</b></p> <p><b>Quotations (AO2) Structure Form</b></p> <p><b>Context (AO3)</b></p> <p><b>Above and Beyond</b></p> <p><b>Key Vocabulary</b></p>



Year 9 English Cycle Two - Power and Conflict Poetry			Key
Week 5 and 6	Week 7 and 8	Week 9 and 10	
<p><b>SOCIETY</b></p> <p><b>'Marks of weakness, marks of woe.'</b> London 'Mind forged manacles I hear' London</p> <p><b>'There once was a country'</b> Emigree</p> <p><b>'It tastes of sunlight'</b> 'They accuse me of being dark in their city' Emigree</p> <p><b>London</b> is a description of the horrors plaguing the lower classes.</p> <p><b>Emigree</b> considers how power and conflict are irrevocably tied to location and identity.</p> <p><b>Blake</b> was a critic of organised religion and their treatment of the poor. He was a Romantic poet and thought civilisation corrupted mankind.</p> <p><b>Structure:</b> London has a rigid structure and rhyme scheme to mirror the repetitive nature of poverty.</p> <p><b>Form:</b> Both write in 1st person to vividly share their experiences, esp. the senses.</p> <p><b>A&amp;B:</b> 'mind forged manacles' was originally German forged links' - a criticism of George III's links to Germany.</p> <p><b>Monotony</b> (n) tedious repetition</p> <p><b>Thinly veiled criticism</b> - a criticism of something that is not direct and obvious but easily understood and only partially hidden.</p> <p><b>Fervent</b> - having or displaying a passionate intensity.</p>	<p><b>EFFECTS OF CONFLICT</b></p> <p><b>'I see every round as it rips through his life / I see broad daylight on the other side.'</b> Remains 'his bloody life in my bloody hands.' Remains</p> <p><b>'Belfast. Beirut. Phnom Penh. All flesh is grass.'</b> WP 'running children in nightmare heat' WP</p> <p><b>Remains</b> is crafted like a conversational story from a ex-soldier. He recounts an episode where he killed a looter in a war, and then goes on to explain how it has affected him: he has been left with PTSD, unable to move on.</p> <p><b>War photographer</b> follows the life of a war photographer between jobs - his memories return as he develops the photos he has taken. The final stanza concerns the public's reaction to these pictures.</p> <p><b>Structure</b> - Remains uses the shift from conversational tone to a recurring focus to show how the episode's effects.</p> <p><b>Form</b> - Remains employs 1st person, conversational tone; WP is 3rd person.</p> <p><b>A&amp;B:</b> Remains can be seen as an implicit criticism of the government's treatment of PTSD in veterans.</p> <p><b>Combatant (n)</b> - a person directly involved in combat.</p> <p><b>Deindividualization</b> - where a person's individual identity is removed.</p>	<p><b>EFFECTS OF CONFLICT CONT.</b></p> <p><b>'Her father embarked at sunrise'</b> 'A shaven head/ full of powerful incantations.' Kamikaze 'till gradually we too learned to be silent' which had been the better way to die' Kamikaze</p> <p><b>'spasms of paper red'</b> 'Selotape bandaged around my hand' Poppies 'After you'd gone I went into your bedroom/ released a song bird from its cage.' Poppies</p> <p><b>Kamikaze</b> tells the story of a pilot who didn't complete his mission and the stigma he faced on his return.</p> <p><b>Poppies</b> explores the effects of war on non-combatants; in this case a mother of a 'dead' soldier.</p> <p><b>Kamikaze</b> pilots followed ideals called Bushido. To break these rules was to invite dishonour on yourself and your family. In Japanese culture, honour and shame play a significant role in people's choices.</p> <p><b>Structure</b> - Poppies employs frequent enjambment and caesura to represent loss of emotional control.</p> <p><b>Form</b> - Kamikaze is 3rd person -&gt; distance; Poppies is 1st person.</p> <p><b>A&amp;B:</b> What does Garland's discussion of Japanese culture reveal about our own reactions to shame and honour?</p> <p><b>Patriotism (n)</b> - support for one's country.</p> <p><b>Self-condemnation (n)</b> - the blaming of oneself for something.</p>	<p>Content (AO1)</p> <p>Quotations (AO2) Structure Form</p> <p>Context (AO3)</p> <p>Above and Beyond</p> <p>Key Vocabulary</p>

Year 9 French Cycle Two

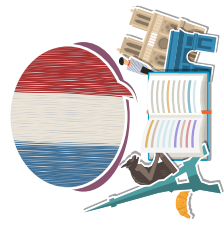
<b>faire = to do</b>
je fais = I do
on fait = we do
j'ai fait = I did
on a fait = we did
je faisais = I used to do
je vais faire = I'm going to do
je ferai = I will do
je ferais = I would do

je crois que = I think that  
 j'imagine que = I imagine that  
 je dirais que = I would say that  
 il me semble que = It seems to me that  
 cela me rappelle de = It reminds me of

<b>aimer = to like</b>
j'aime = I like
on aime = we like
j'ai aimé = I liked
on a aimé = we liked
j'aimais = I used to like
je vais aimer = I'm going to like
j'aimerai = I will like
j'aimerais = I would like

c'est = it is  
 c'était = it was  
 ça sera = it will be  
 ça serait = it would be

<b>être = to be</b>
je suis = I am
on est = we are
j'ai été = I was
on a été = we were
j'étais = I used to be
je vais être = I am going to be
je serai = I will be
je serais = I would be



<b>envoyer = to live</b>
j'envoie = I send
on envoie = we send
j'ai envoyé = I sent
on a envoyé = we sent
j'envoyais = I used to send
je vais envoyer = I am going to send
j'envoyerais = I will send
j'envoyerais = I would send

il y a = there is / there are  
 il y avait = there was / were  
 il y aura = there will be  
 il y aurait = there would be

<b>télécharger = to download</b>
je télécharge = I download
on télécharge = we download
j'ai téléchargé = I downloaded
on a téléchargé = we downloaded
je téléchargeais = I used to download
je vais télécharger = I am going to download
je téléchargerai = I will download
je téléchargerais = I would download

<b>aller = to go</b>
je vais = I go
on va = we go
je suis allé(e) = I went
on est allé(e) = we went
j'allais = I used to go
je vais aller = I am going to go
j'irai = I will go
j'irais = I would go

<b>avoir = to have</b>
j'ai = I have
on a = we have
j'ai eu = I had
on a eu = we had
j'avais = I used to have
je vais avoir = I am going to have
j'aurai = I will have
j'aurais = I would have

<b>pouvoir = to be able to</b>
je peux = I can
on peut = we can
j'ai pu = I was able to
on a pu = we were able to
je pouvais = I was able to
je vais pouvoir = I'm going to be able to
je pourrai = I will be able to
je pourrais = I could

<b>jouer = to play</b>
je joue = I play
on joue = we play
j'ai joué = I played
on a joué = we played
je jouais = I used to play
je vais jouer = I'm going to play
je jouerai = I will play
je jouerais = I would play

<b>préférer = to prefer</b>
je préfère = I prefer
on préfère = we prefer
j'ai préféré = I preferred
on a préféré = we preferred
je préférais = I used to prefer
je vais préférer = I am going to prefer
je préférerai = I will prefer
je préférerais = I would prefer

il y a du soleil = it's sunny  
 il fait beau = it's nice weather  
 il fait mauvais = it's bad weather  
 il pleut = it's raining  
 il y a du vent = it's windy



Year 9 French Cycle Two

2A – 2.1.G	2B – 2.1.F	2C – 2.1.H – PART 1	2D - 2.1.H – PART 2	2E - REVISION
<p>au moins at least                      les autres (the) others                      avec with                      communiquer to communicate                      discuter to discuss                      écrire to write                      en ligne online                      le montage montage                      partager to share                      penser to think                      regarder to watch                      sans without                      souvent often                      tchatter to chat                      tout le temps all the time                      travailler to work                      trouver to find</p>	<p>blogger to blog                      des centaines hundreds                      connaître to know                      croire to believe                      devoir to have to, must                      dire to say, to tell                      en train de in the process                      envoyer to send                      exprimer to express                      faire confiance to trust                      faire partie de to belong to                      le forum internet forum                      grâce à thanks to                      isolé isolated                      montrer to show                      passer to spend (time),                      permettre to allow                      la réalité reality                      remplir to fill in                      le réseau social social network                      savoir to know (a fact)                      le sondage survey                      vivre to live                      voir to see                      vouloir to want</p>	<p>à domicile at home                      amener to bring                      anonyme anonymous                      appartenir to belong                      attendre to wait                      avoir peur to be afraid                      le but aim                      courir un risque to run a risk                      la cyber intimidation cyber-bullying                      déçu disappointed                      se déplacer to move                      désespéré desperate</p>	<p>une entreprise company                      entretenir to maintain                      établir to establish                      faciliter to facilitate                      faire attention to take care                      lier to link                      menacer to threaten                      réfléchir to think                      soi-disant supposed(y)                      souffrir to suffer                      vendre to sell                      le vol d'identité identity theft</p>	<p><b>Recap of vocabulary                      from Weeks 1-4</b></p>
<p>2F – 2.2.G</p> <p>assez quite                      cher expensive                      dernier last, latest                      le gadget gadget                      le lecteur MP3 MP3                      lent slow                      marcher to work                      ne ... plus no more                      nouveau new                      le portable mobile phone                      pratique practical                      rapide fast                      la souris mouse                      super great                      la tablette tablet                      très very                      utiliser to use                      vieux / vieille old                      vraiment really</p>	<p>accro hooked                      l'agenda diary                      l'application application                      avoir raison to be right                      avoir tort to be wrong                      ça me suffit that's enough                      contacter to contact                      dégoûtant disgusting                      dépendant dependent                      devenir to become                      en cas d'urgence in case of emergency                      le GPS satnav                      gratuit free                      illégalement illegally                      le mail email                      mettre en marche to switch on                      sans without                      se servir de to use                      le smartphone smartphone                      télécharger to download                      le texto text</p>	<p>agenda diary                      avoir peur to be afraid                      le bienfait benefit                      ça me convient it suits me                      la carte map                      le cerveau brain                      le chercheur researcher                      compenser to compensate                      le compte bancaire bank account</p>	<p>2I 2.2.H – PART 2</p> <p>la fonctionnalité functionality                      manquer to miss                      le monde réel the real world                      n'importe quel any                      se permettre de to afford to                      la poche pocket                      rappeler to remind                      reprocher to reproach                      la réunion meeting                      séduire to seduce                      souffrir to suffer</p>	<p><b>Recap of vocabulary                      from Weeks 6-9</b></p>

Year 9 Geography Cycle Two - Extreme Environments

Week 1	Week 2	Week 3	Week 4	Week 5
<p><b>HOT DESERTS</b></p> <p>A desert is an area that receives less than 250mm of rainfall per year. Hot deserts are mostly found in dry continental interiors, away from the coasts, in a belt approximately 30°N and 30°S. At these latitudes, air that has risen at the Equator descends forming a belt of high pressure.</p> <p>There is a lack of cloud and rain and very high daytime temperatures. With a lack of clouds, temperatures can plummet to below freezing at night.</p> <p><b>Desert soils</b> are sandy or stony with little organic matter due to the lack of leafy vegetation. Evaporation draws salt to the surface. The soil is not very fertile.</p>	<p><b>ADAPTATIONS</b></p> <p>Plants tend to have thin leaves or spines to reduce water loss and some have long roots to reach deep underground water (e.g. cactus).</p> <p>Vegetation is low growing and sparse.</p> <p>Many rodents are nocturnal, living in burrows underground and venturing out at night.</p> <p>Snakes and lizards retain water by having waterproof skin and producing only tiny amounts of urine.</p> <p>Camels have long eyelashes to keep out the sand and a hump to store fat on their back</p>  	<p><b>THAR DESERT</b></p> <p>Stretches across north-west India and into Pakistan. Covers 200,000km<sup>2</sup>. Most densely populated desert.</p> <p><b>Opportunities</b></p> <p><b>Mineral extraction:</b> Gypsum, feldspar, phospherite, kaolin, Sanu limestone in Jaisalmer for India's steel industry.</p> <p><b>Energy:</b> Ideal location for wind and solar power. At Baheri, solar power is used in water treatment. Jaisalmer Wind Park was constructed in 2001.</p> <p><b>Challenges</b></p> <p>Temperatures exceeding 50°C makes farming work difficult and high rates of evaporation leads to water shortages. The 650km long Indira Gandhi Canal was constructed in 1958 as a source of freshwater.</p>	<p><b>CAUSES OF DESERTIFICATION</b></p> <p>Desertification happens when land is gradually turned into a desert.</p> <p><b>Over-cultivation:</b> results from the need to produce more food so the soil becomes exhausted. It will turn to dust and become infertile.</p> <p><b>Over-grazing:</b> Population pressure results in land being overgrazed - too many animals to be supported by limited vegetation.</p> <p><b>Fuelwood:</b> demand is increasing</p> <p><b>Climate change:</b> Causing drier conditions and unreliable rainfall, raining less than it did 50 years ago.</p> <p><b>Soil erosion:</b> When the vegetation is destroyed, the soil is exposed to the wind and the rain, making it vulnerable to erosion.</p>	<p><b>MANAGING DESERTIFICATION</b></p> <p><b>Appropriate technology:</b> involves using methods appropriate to the level of development. 'Magic stones' are used in Burkina Faso. Used to build low stone walls on the contours of slopes to trap water and soil.</p> <p><b>Tree planting:</b> Trees bind the soil together and the leaves and branches provide shade, grazing for animals and fuelwood.</p>  <p>Total distance: 7,775 km Total area: 11,662,500 hectares</p>
<p><b>Week 6</b></p> <p><b>LAS VEGAS</b></p> <p>Approximately 650,000 inhabitants. Population in the Colorado Basin is set to almost double to 77 million by 2060. Average household in Las Vegas uses around 840 litres of water per day. The city gets just over 10cm of rain each year. The city recently suffered its longest drought with 116 days without rain.</p> <p>Seven states all rely on the Colorado River for their water. The water that feeds Las Vegas comes from Lake Mead behind the Hoover Dam. It is drying up.</p> <p><b>Xeriscape</b> – a garden that requires little or no irrigation or other maintenance.</p> <p><b>Desalination</b> – the process of removing salt from seawater.</p>	<p><b>Week 7</b></p> <p><b>ALASKA</b></p> <p>Covers 2 million km<sup>2</sup>. Tundra overlaying permafrost in the north. Indigenous people include the Inupiat.</p> <p><b>Opportunities</b></p> <p><b>Mineral extraction:</b> Coal, copper, silver and gold. 20% of Alaska's mineral wealth is in gold. \$2.1 billion worth of gravel is mined.</p> <p><b>Energy:</b> 1/3 of the state's income comes from oil and gas, employing over 100,000 people. Transported from Prudhoe Bay in the north to Valdez in the south via the Trans-Alaskan pipeline (1,200km long / 800 miles).</p> <p><b>Challenges</b></p> <p>Roads built on gravel beds to reduce heat transfer; reducing the permafrost melting. Limited sunlight in winter makes working outside difficult. Travel by snowmobiles or 4x4s.</p>	<p><b>Week 8</b></p> <p><b>ANTARCTIC TREATY (LARGE SCALE)</b></p> <p>Treaty came into force in 1961, originally signed by 12 countries. By 2016, there were 53 countries. Protocol states Antarctica is a natural reserve dedicated to peace and science. Objectives include: no military operations, scientific cooperation, ban mineral extraction.</p> <p><b>UNION GLACIER (SMALL SCALE)</b></p> <p>Expanse of ice in the Ellsworth Range. Natural blue ice runway to land large Ilyushin cargo planes which bring equipment for expeditions. Camp open for four months of the summer season. Small number of visitors for walking, trekking, visiting penguin colonies (must stay 5m away from wildlife). Some equipment is powered by solar panels to reduce the use of diesel.</p>	<p><b>Week 9</b></p> <p><b>MOUNT EVEREST</b></p> <p>Height of 8,850 metres above sea level on the Nepal-Tibet border. Everest formed due to the collision between the Indian and Eurasian tectonic plates.</p> <p>Sherpa community are an ethnic group indigenous to the Himalayan region. Many work as mountain guides, carrying extra gear such as oxygen bottles and are expert navigators.</p> <p>In 2019, Nepali climbers retrieved four bodies and collected some 11 tonnes of decades-old garbage from Mount Everest. Slopes were littered with human excrement, torn tents, cans and plastic wrappers. People living near Everest use melted snow for their water supply.</p>	<p><b>Week 10</b></p> <p><b>MARIANA TRENCH</b></p> <p>Located in the western Pacific Ocean. It is a crescent-shaped trench, considered the deepest oceanic trench on Earth. It is about 2,550km in length and 69km in width. The maximum known depth is 10,984 metres at Challenger Deep. Only three divers have explored this. Some measurements suggest 11,034 metres.</p> <p>The Mariana Trench is part of the Izu-Bonin-Mariana subduction system that forms the boundary between two plates. The Pacific plate is subducted beneath the smaller Mariana Plate.</p> <p>In 2019, Victor Vescovo reported finding a plastic bag and candy wrappers at the bottom of the trench.</p>

Year 9 Health and Social Care Cycle Two

Week 1 and 2

**HEALTH AND WELL-BEING**

**Physical** - healthy body & diet, sleep, shelter and personal hygiene.  
**Intellectual** - Healthy brain, learn new knowledge, communicate & solve problems.  
**Emotional** - Security, express & deal with emotions, self-concept.  
**Social** - friendships and relationships.  
**GENETIC INHERITANCE**  
**Inherited characteristics** - height, eye colour, hair colour.  
 Inherited conditions - Some alleles (genes) can be faulty & pass on conditions.  
**Dominant condition** - One parent passes faulty allele on e.g. Huntington's.  
**Recessive condition** - Both parents pass faulty allele on e.g. Cystic fibrosis.  
**Genetic predisposition** - Some people are more likely to develop a condition due to genetic makeup.  
**Enquiry task:**  
 1. Choose a genetic trait that runs in your family (e.g. hair or eye colour) and research to see if the gene is recessive or not. Record your findings.  
 2. Research the impact that lack of sleep can have on health and well-being. Refer back to PIES.

Week 3 and 4

**ILL HEALTH AND PERSONAL HYGIENE**

**Physical** - Catching & spreading disease, poor body odour, poor oral hygiene.  
**Intellectual** - Reduction of opportunities.  
**Emotional** - Poor self-concept, bullied.  
**Social** - Social isolation, loss of friendship.  
**Acute** - lasts for a short period of time. Usually cured.  
**Chronic** - Comes on slowly, lasts a long time. Usually treated but not cured.

**DIET AND EXERCISE**

Section	Nutrient	Needed for
Starches	Carbohydrates	Provides energy
Fruit & vegetables	Vitamins Fibre	Keep the body healthy Digestive system
Meat, fish, eggs, beans	Protein	Growth and repair of cells and muscles
Dairy	Calcium	Strong bones and teeth
Oils	Unsaturated fats	Reduces cholesterol. Protects organs

**Physical Activity**

An adult should take approximately 150 minutes of moderate exercise per week, e.g. a light jog.  
**Benefits:** Increases confidence and relieves stress. Strengthens bones and muscles. Lowers BMI and supports weight loss. Boosts memory and thinking skills.  
**Enquiry task:** Research advice for good personal hygiene for teens and create a poster for your peers to promote personal hygiene.

Week 3

**SUBSTANCE USE**

**Alcohol** - Men & women should drink less than 14 units/week. 1 unit = one single spirit, 1.5 units = 1 pint, 1 small glass of wine. Can increase risk of addiction & cancers.  
**Smoking & Nicotine** - Cigarettes contain nicotine (addictive drug), tar, carbon dioxide & soot which are all harmful. People smoke to relieve stress, peer pressure, or are unable to quit.  
**Drugs** - Legal. Prescription misuse - when people become addicted to them, take excess, or take someone else's.  
**Drugs** - Illegal:  
 >> Stimulants - Increase alertness i.e. Cocaine  
 >> Depressants - calm, relax the body i.e. Cannabis  
 >> Hallucinogens - cause hallucinations i.e. LSD.  
**Enquiry task:** Research and create a poster for health awareness based on nicotine addiction.

Week 7 and 8

SOCIAL INTERACTIONS AND STRESS

	Positive relationships	Negative relationships
<b>P</b>	Day to day care & practical assistance	Peer pressure/Poor lifestyle choices
<b>I</b>	Shared experiences, supported learning	Less support with learning, conversation
<b>E</b>	Unconditional love, security, contentment	Loneliness, insecurity, anxiety, depression,
<b>S</b>	Companionship, social interactions	Relationship difficulties

**Wealth:** Level of income, amount of personal wealth including non-essential, valuable material possessions.

**Adequate income:** Able to pay rent, bills and afford some luxuries.

**Relative Poverty:** Can only afford essentials which will limit life choices and personal development.

**Absolute Poverty:** Not enough money to meet basic needs even with benefits.

**Enquiry Task:** Research different options that can reduce stress and create a mindfulness plan.

Week 9 and 10

ENVIRONMENTAL CONDITIONS AND HOUSING

**Environmental:** relating to or arising from a person's surroundings.

**Pollution:** Contamination of the environment and living organisms by harmful substances.

**Impact of pollutants:** Health concerns, for example: asthma, heart damage, low birth weight or premature births.

**Good living conditions:** Areas with less pollution that are quiet, safe, spacious and dry with a safe outdoor space.

**Poor living conditions-** Overcrowding, causing anxiety & depression, sleeplessness, difficulty concentrating, A lack of open space with pests, damp & mould and poor health.

**City living means:**

- >> Better transport links
- >> Close to services
- >> More social events
- >> Pollution problems

**Rural living means:**

- >> Sense of community
- >> Outdoor space
- >> Less polluted
- >> Less services
- >> Higher risk of isolation

**Enquiry Task:** Research two contrasting living situations and report on the findings for both, referring to PIES.

Week 11 & 12

TYPES OF SUPPORT

**Formal support** - provided by trained professionals such as Counsellors, Doctors, trained carers.

**Informal support** - provided by Family, friend partners.

**Voluntary support** - Given by community groups, voluntary and faith based organisations.

**Sources of support** - School / Doctors/ AA groups/ Counselling/ Family/ Friends/ Support groups/ Helplines/ Religious groups.

**Benefits of support** - Emotional support/ advice/ Practical help.

**Careers:** Follow the QR code for careers information:

Year 9 History Cycle Two - To what extent was the early 20th Century the era of dictators?

1 - Key concepts	<p><b>Dictatorship:</b> A country or government in which absolute power is exercised by an individual.</p> <p><b>Nationalism:</b> A political outlook in which all policies are organised to make the nation stronger and more independent.</p> <p><b>Socialism:</b> A political outlook which stresses that a country's land, industries and wealth should all belong to the workers of that country.</p> <p><b>Totalitarianism:</b> Power in the hands of one leader</p>	6 - Key Words	<p><b>S Sturmabteilung (SA):</b> better known as the Brownshirts or Storm Troopers. The SA got their nickname from the colour of the shirts they wore. From 1921 to 1933 the SA disrupted the meetings of Adolf Hitler's political opponents as well as defended the halls where Hitler was making a speech in public.</p> <p><b>Schutzstaffel (SS):</b> Led by Heinrich Himmler, the SS was the most important of these organisations and oversaw the others. Initially set up as Hitler's personal bodyguard service, the SS was fanatically loyal to the Führer. It later set up concentration camps where enemies of the state were sent.</p>												
2 - Key People 1	<p><b>Benito Mussolini:</b> Il Duce (Italian: "The Leader"), Italian prime minister (1922-43) and the first of 20th-century Europe's fascist dictators.</p> <p><b>Joseph Stalin:</b> Communist leader of the USSR during WW2. After this conflict he became committed to taking both political and ideological control of eastern European states, believing this to be integral to creating a buffer between the democratic West. This quest for domination is seen as one of the predominant factors in starting the Cold War.</p>	7 - Key Dates 1	<p><b>1917- Russian Revolution</b> - Imperial Government overthrown, Bolsheviks came to power. People were unhappy with government corruption, the Tsar's policies, and WW1 losses.</p> <p><b>April 9, 1920</b> - Mussolini becomes Prime Minister of Italy. His rise came right after he created a famous radical group at the time called Fasci Itali di Combattimento which was anti communism and pro nationalism.</p> <p><b>June 20, 1921</b> - Hitler becomes leader of the Nazis. Adolf Hitler joined a small society called the Nazis when he was a few years younger. After many changes in the Nazi quota, Hitler became the leader of the Nazis and he promised to bring them to power.</p>												
2 - Key people 2	<p><b>General Franco:</b> El Caudillo ("The Leader"), general and leader of the Nationalist forces that overthrew the Spanish democratic republic in the Spanish Civil War (1936-39); thereafter he was the head of the government of Spain until 1973 and head of state until his death in 1975</p> <p><b>Adolf Hitler:</b> Der Führer (German: "The Leader"), leader of the Nazi Party (from 1920/21) and chancellor and Führer of Germany (1933-45). He was chancellor from January 30, 1933, and, after President Paul von Hindenburg's death, assumed the twin titles of Führer and Chancellor (August 2, 1934)</p>	7 - Key Dates 2	<p><b>August 12, 1924</b> - Stalin becomes ruler of U.S.S.R. Rising to rule, Stalin became power hungry, and his thoughts about humanitarianism soon depleted. He became a dictator in 1924 and made changes that would not benefit society in a positive way.</p> <p><b>March 23, 1933</b> - Hitler uses enabling act to become a dictator. Democracy was removed from Germany, and Hitler and the Nazis began to tighten their grip on their brutal regime over the country.</p> <p><b>1935</b> - The Nuremberg Laws formalised anti-Semitism into the Nazi state by:</p> <ul style="list-style-type: none"> <li>- Stripping Jews of German citizenship.</li> <li>- Outlawing marriage and sexual relations between Jews and Germans.</li> <li>- Taking away from Jews all civil and political rights.</li> </ul> <p><b>September 1939</b> - World War Two begins in Europe when Hitler invades Poland. He and Stalin had agreed a non-aggression pact: Hitler in June 1941 then invaded Russia, going back on his promise.</p>												
3 - Key words 1	<p><b>Censorship:</b> Involves banning information or ideas. It sometimes involves banning the vehicles for delivering ideas, such as newspapers, pictures, radio or film. Therefore, it controls attitudes by forbidding certain information or opinions.</p> <p><b>Chancellor:</b> The Head of the German Government.</p> <p><b>Concentration Camps:</b> New prisons set up to house those that spoke out against Hitler. They were run by the SA and the SS</p>	8 - Comparison	<table border="1"> <thead> <tr> <th>Similarities</th> <th>Differences</th> </tr> </thead> <tbody> <tr> <td>Blamed scapegoats (Hitler-blamed Jews &amp; communists; Stalin blamed Kulaks &amp; professionals)</td> <td>Hitler rose to power in Weimar Republic (democracy), then made it into a new government</td> </tr> <tr> <td>Killed enemies who were in their way (Stalin's Great Purge; Hitler's Night of the Long Knives)</td> <td>Soviet Union was already in place as a communist dictatorship; Stalin just succeeded Lenin as Soviet leader</td> </tr> <tr> <td>Came to power legally (Hitler/Nazis through elections &amp; appointments; Stalin through Communist Party promotion)</td> <td>Hitler used economic emergency of Great Depression to increase popularity and power</td> </tr> <tr> <td>Used propaganda and censorship to build totalitarian states</td> <td>Stalin was firmly in control of USSR before the Great Depression began.</td> </tr> <tr> <td>Built up the military and economy</td> <td></td> </tr> </tbody> </table>	Similarities	Differences	Blamed scapegoats (Hitler-blamed Jews & communists; Stalin blamed Kulaks & professionals)	Hitler rose to power in Weimar Republic (democracy), then made it into a new government	Killed enemies who were in their way (Stalin's Great Purge; Hitler's Night of the Long Knives)	Soviet Union was already in place as a communist dictatorship; Stalin just succeeded Lenin as Soviet leader	Came to power legally (Hitler/Nazis through elections & appointments; Stalin through Communist Party promotion)	Hitler used economic emergency of Great Depression to increase popularity and power	Used propaganda and censorship to build totalitarian states	Stalin was firmly in control of USSR before the Great Depression began.	Built up the military and economy	
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4 - Key words 2	<p><b>Enabling Act:</b> An act that was passed to allow Hitler to make laws for four years without the support of the Reichstag</p> <p><b>Gestapo:</b> This was the Nazis' secret police force. Its job was to monitor the German population for signs of opposition or resistance to Nazi rule. It was greatly helped by ordinary German people informing on their fellow citizens.</p> <p><b>Propaganda:</b> A way of controlling the public attitudes. Propaganda uses things like newspapers, posters, radio and film, to put ideas into people's minds and therefore shape attitudes.</p>	9 - Comparison													



## History of Photography

### Light Drawings

#### Where does the word Photography come from?

The word 'photography' literally means 'drawing with light'. The word was supposedly first coined by the British scientist Sir John Herschel in 1839 from the Greek words phos, (genitive: phōtós) meaning "light", and graphê meaning "drawing or writing".

### In the beginning

#### What is a Camera Obscura?

Camera Obscura also referred to as pinhole image, is the natural optical phenomenon that occurs when light passes through a small hole in a surface or wall. An image will appear reversed and inverted on an opposite wall or surface of the scene outside.

*How do you create one? Who discovered the concept? The term 'Camera Obscura' literally means what?*

### Capturing an image

#### What is a Photogram?

A photogram is a photographic image made without a camera by placing objects directly onto the surface of a light-sensitive material such as photographic paper and then exposing it to light.

*Are they negative or positive? How do you make the paper light sensitive? How many, and what types of photograms are there?*

#### What is a Cyanotype?

Cyanotype is a camera less photographic printing process that produces a cyan-blue print. *How are they made? What two chemicals do you need to coat the paper? Who invented the process? Which female artist and botanist is famous for her Cyanotypes?*

### The first photographs

#### World's first permanent photograph?

French scientist Joseph Nicéphore Niépce, took the first permanent photograph, titled Window at Le Gras.

*When was it taken? How long was the exposure? What was the process?*

British inventor of photography, William Henry Fox Talbot (1800-1877), produced his first 'photogenic drawings' in 1834 and in the following year made his first camera negative.

*What made Fox Talbot invent a permanent photographic process? Where did he live and work?*

### Picturing Motion

#### Who was Eadweard Muybridge?

Eadweard Muybridge was an English-American photographer important for his pioneering work in photographic studies of motion and his early work in motion-picture projection.

*What did he create? What was he trying to achieve? How did he do it? What is a Zoöpraxiscope?*

### What about Colour?

#### Who was James Clerk Maxwell?

The foundation of all practical colour processes, the three-color method was first developed in 1855 by Scottish physicist James Clerk Maxwell, with the first color photograph produced by Thomas Sutton for a Maxwell lecture in 1861.

*What was the photograph of? Before colour photography, how were colour images created? Which two French brothers invented Autochromes?*



Year 9 JBACC Cycle Two - Politics and Democracy

Week 1	Week 2	Week 3	Week 4	Week 5
<p><b>Political spectrum:</b> The idea that politics exists on a line between 'left' and 'right'.</p> <p><b>Left-wing:</b> Generally focused on workers' rights, collectivism and 'big government'.</p> <p><b>Right-wing:</b> Generally focused on business, financial responsibility and individual freedom.</p>	<p><b>Political party:</b> A group of people with a shared political interest</p> <p><b>Election:</b> An organized vote to decide which political party should have control of the country</p> <p><b>Manifesto:</b> A public declaration of policies and aims made by a political party, especially one made before an election</p>	<p><b>Independence:</b> Freedom from interference, particularly by the government.</p> <p><b>Democracy:</b> The political idea that society should be organized by elected officials.</p> <p><b>Liberty:</b> Individual freedom.</p> <p><b>Dictatorship:</b> A regime where a rule has absolute power, such as North Korea.</p>	<p><b>Rule of Law:</b> Agreeing to live by certain rules that a society has agreed on.</p> <p><b>Civil law:</b> The branch of law that deals with issues such as personal injury claims, breaches of contract and matters that arise between individuals and companies.</p> <p><b>Criminal law:</b> The branch of law that deals with crime. Minor crimes are dealt with in a Magistrate's court, whilst more serious offences are dealt with by the Crown Court.</p>	<p><b>Parliament:</b> The highest law making body in the UK, made up of the Monarch, the House of Lords and the House of Commons.</p> <p><b>Monarch:</b> A sovereign (supreme) head of state. In the UK, our current monarch is King Charles III. His role is largely symbolic.</p> <p><b>House of Lords:</b> The second chamber of UK parliament. Some members of the house are appointed by the government whilst others inherit the role;</p> <p><b>House of Commons:</b> The chamber or parliament made up of elected MPs. The House of Commons is responsible for making laws and checking the work of the government.</p>
Week 6	Week 7	Week 8	Week 9	Week 10
<p><b>Executive:</b> The government, including the Prime Minister and Cabinet of Ministers, as well as the Civil Service.</p> <p><b>Legislature:</b> The creation and changing of laws. IN the UK Parliament holds this power.</p> <p><b>Judiciary:</b> Judges and courts. The role of the judiciary is ensure that laws are followed by the people, the government and the monarch.</p>	<p><b>MP:</b> Member of Parliament. MPs represent an area of the country in Parliament and are usually part of a political party. The political party with the largest number of MPs forms the government.</p> <p><b>Government:</b> The group of people with authority to govern (be in charge of) the country.</p> <p><b>Cabinet:</b> The main body that controls policy and coordinates activities within the government.</p>	<p><b>Free Market:</b> A system where prices are determined by privately owned businesses.</p> <p><b>UN:</b> An organisation which replaced the League of Nations after WWII with the aim of preventing further wars.</p> <p><b>NATO:</b> The North Atlantic Treaty Organisation. A collective defence system for countries to protect each other.</p>	<p><b>Human Rights:</b> Rights that belong to every person</p> <p><b>Equality:</b> The idea that every human should be treated equally and fairly.</p> <p><b>Equity:</b> The idea that some people need more help to receive equality than others.</p>	<p><b>Protest:</b> A demonstration expressing disapproval of something.</p> <p><b>Riot:</b> When a protest becomes violent or damages property</p> <p><b>Terrorism:</b> Unlawful use of violence, particularly aimed at civilians, for a political goal.</p>

# Maths - Sparx

Sparx for every year group is set at **1400 on Monday**.

Hand in (100% compulsory **AND TARGET**) is **0730 the following Monday morning**, for every year group.

All students must have completed a minimum of 50% compulsory **AND TARGET** by **0730 Thursday morning** or they will receive a compulsory invitation to Sparx catch up with maths staff. This is held on a **after school on Thursday 1500-1600 and students may leave when they are up to date**.

All students are expected to complete 100% of their compulsory **AND TARGET** homework. General support sessions are held on various evenings (depending on year group) in the library. Sparx only support sessions are held at **B+L on Friday** or Thursday after school on the maths corridor. Students can receive any additional Sparx support from their maths teacher during their own free time (when your teacher is unavailable other maths teachers can help).

Detentions for non 100% compulsory **AND TARGET** completion, are held **Monday's after school for 1hr**.

Incomplete or inadequate bookwork will also result in detentions.

It is expected that ALL outstanding Sparx HW will be completed to support you when you have been off and to keep you up to speed with the class and scheme of learning.

**Staff:** Sparx Coordinator: Miss Sadler (AJS)

## Weekly Communication plan:

Action	When	By Whom
Homework set for all year groups	<b>1400 Monday</b>	Sparx
50% compulsory AND TARGET completed or compulsory Sparx catch up issued	<b>0730 Thursday</b>	Class teacher
Previous weeks Sparx statistics announced in whole school briefing	<b>Monday whole school briefing</b>	AJS
Homework due in, any incomplete work results in a detention. Parents are contacted by admin team and notified about detention.	<b>0730 Monday</b>	Maths team / admin team
Incomplete lists are shared with tutors and HoY.	<b>Monday</b>	AJS
Non completion detention runs after school. Failure to attend results in a Reset on Tuesday.	<b>1500 Monday</b>	PSW team



Year 9 Drama Cycle Two

Week 1 and 2	Week 3 and 4	Week 5 and 6	Week 7 and 8	Week 9 and 10
<p><b>KEY VOCABULARY</b></p> <p><b>Conscience alley</b> - Used as a way of exploring thoughts and opinions about a dilemma or issue.</p> <p><b>Status</b> - The power difference in the relationship between characters.</p> <p><b>Subtext</b> - The implied meaning of a scene, something that is not spoken.</p> <p><b>Stage directions</b> - An instruction in the script telling you a particular movement, position or tone of the actor. It could also include lighting and sound effects.</p> <p><b>Blocking</b> - The precise movement and positioning of actors on stage.</p> <p><b>Playwright</b> - the individual who has written the text as a play.</p> <p><b>Historical context</b> - What is happening during the time the playwright created the text.</p> <p><b>Marking the moment</b> - Using a dramatic technique to draw the audience's attention to an important moment in the scene</p> <p><b>Physical characterisation skills</b> - all the things you can change about your body to show a character.</p> <p><b>Vocal characterisation</b> - How an actor changes their voice to represent their character.</p> <p><b>Character arc</b> - Transformation or inner journey of a character throughout the play.</p>	<p><b>WEEK 3 - PLAY FACTS</b></p> <ul style="list-style-type: none"> <li>Willy Russell (The playwright) was born in Liverpool in 1947 in a working class background</li> <li>Russell left schools with no qualifications and became a hairdresser</li> <li>Russell returned to college at age 20 and went on to become a teacher and started writing plays</li> <li>Blood Brothers was written in 1982</li> <li>During the 1980's there was high unemployment in Liverpool</li> <li>Margaret Thatcher was prime minister and working class people struggled to find jobs</li> <li>Russell was frustrated with the upper and lower class divide which is why the play</li> </ul> <p><b>WEEK 4 - THEMES IN THE PLAY</b></p> <p><b>Write down the following themes</b></p> <ul style="list-style-type: none"> <li>Social class</li> <li>Nature Vs Nurture</li> <li>Friendship and loyalty</li> <li>Growing up</li> <li>Fate and superstition</li> </ul>	<p><b>THE STORYLINE</b></p> <ul style="list-style-type: none"> <li>Mrs Johnstone, a struggling single mother of seven, finds out that she is pregnant with twins. Her employer, Mrs Lyons persuades Mrs Johnstone to give her one of the babies.</li> <li>Mrs Lyons takes Edward and pretends he is hers even convincing her husband. Mrs Lyons fires Mrs Johnstone</li> <li>Aged 7, Mickey and Edward meet and become best friends, along with Mickey's neighbour Linda.</li> <li>Scared of Edward finding out the truth, the Lyons move to the countryside. Soon afterwards, the Johnstone's (and Linda's family) are rehoused by the council.</li> <li>As teenagers, Mickey and Edward meet. Linda and the boys remain close. Edward goes to university.</li> <li>After marrying a pregnant Linda, Mickey loses his factory job. Unemployed, Mickey is involved in crime with his brother Sammy, and both are sent to prison.</li> <li>Mickey becomes depressed and relies on tablets to cope</li> <li>After Mickey comes out of prison and starts a new job, Edward and Linda start a light romance. Mickey finds out and is furious so he gets a gun and goes to find Edward at his workplace, the town hall.</li> <li>Mrs Johnstone follows Mickey and tells him in front of Edward that they are twins. The police also arrive.</li> <li>Mickey waves the gun around and it accidentally goes off, killing Edward. The police shoot Mickey. The twins both lie dead</li> </ul>	<p><b>CHARACTERS</b></p> <ul style="list-style-type: none"> <li><b>The narrator</b> - On stage throughout the whole play, communicates with the audience but does not get involved in the events</li> <li><b>Mickey</b> - One of seven kids, he is close to his mother. Has a lack of education and grown up with his mum struggling for money. He feels hopeless in adulthood and makes criminal decisions.</li> <li><b>Edward</b> - Brought up thinking he is the son of Mrs and Mr Lyons. He is a warm and kind boy who is well educated and goes to university. He is surprised by Mickey and finds his way of life exciting.</li> <li><b>Mrs Johnstone</b> - She is a warm and caring mother despite her money worries. She was left by her husband for another woman. She is very superstitious, Mrs Lyons takes advantage of this.</li> <li><b>Mrs Lyons</b> - She is a very lonely lady who wants attention from her husband. She is unable to have children and convinces Mrs Johnstone to give up one of her twins. She is devout and well educated. Mrs Lyons is upper class and has money.</li> <li><b>Linda</b> - She is kind and confident. She tries to protect Mickey throughout the play but has a relationship with Edward when Mickey becomes addicted to drugs. She is torn between Mickey and Edward.</li> </ul>	<p><b>WEEK 9 - STORY ARCH</b></p> <p>The transformation or inner journey of a character over the course of a story.</p>  <p><b>WEEK 10 - STAGE DIRECTIONS</b></p> <p>Stage directions can be prescriptive (They tell you what to do) or descriptive (describe what's going on but not exactly what you should do to show it.)</p> <p><b>STAGE DIRECTIONS</b></p> 

Year 9 Sociology Cycle Two				
Week 1	Week 2	Week 3	Week 4	Week 5
<p><b>SOCIAL SURVEYS</b></p> <p><b>Social Survey:</b> Research based on self-administered questionnaires or structured interviews with a standardised set of questions.</p> <p><b>Respondent:</b> Someone who completes/takes part in a social survey.</p> <p><b>Open Question:</b> A question that allows respondents to put forward their own answers rather than choose a from a fixed set of responses.</p> <p><b>Closed Question:</b> A question with a fixed set of responses, e.g. multiple choice.</p>	<p><b>INTERVIEWS</b></p> <p><b>In-depth Interview:</b> An unstructured or loosely structured.</p> <p><b>Group Interview:</b> An interview in which the interviewer asks the questions and the interviewees respond.</p> <p><b>Focus Group:</b> A type of group interview that focuses on one particular topic. It explores how people interact within the group and how they respond to each other's views.</p>	<p><b>OBSERVATION</b></p> <p><b>Participant Observation:</b> Where the researcher joins in a group and takes part in its daily activities in order to study it.</p> <p><b>Non-participant Observation:</b> Where a researcher observes a group but does not take part in any of its activities.</p> <p><b>Overt Observation:</b> Where participants in research are aware that they are being observed.</p> <p><b>Covert Observation:</b> Where a group are observed without their knowledge.</p>	<p><b>SECONDARY DATA SOURCES</b></p> <p><b>Official Statistics:</b> Statistics compiled by government agencies.</p> <p><b>Content Analysis:</b> The analysis of documents or data by counting the number of times a word or theme appears.</p> <p><b>Census:</b> A questionnaire survey conducted every 10 years in the UK to collect information on the whole population of England and Wales.</p>	<p><b>ETHICAL CONSIDERATIONS &amp; LINKS TO SOCIAL PROBLEMS/ POLICIES</b></p> <p><b>Confidentiality:</b> An agreement that all information from research participants will only be seen by those who have the authority to access it.</p> <p><b>Informed Consent:</b> Where a research participant is fully aware of what the research is about and why it is being carried out.</p> <p><b>Welfare Reform:</b> Changes to the way the welfare system operates, e.g. cutting or replacing state benefits.</p>
<p><b>Week 6</b></p> <p><b>TYPES OF FAMILY AND HOUSEHOLDS</b></p> <p><b>Nuclear Family:</b> A mother, father and children.</p> <p><b>Extended Family:</b> A nuclear family plus grandparents, aunts, uncles etc.</p> <p><b>Reconstituted Family:</b> A couple with children from previous relationships.</p> <p><b>Household:</b> Either one person who lives alone or a group of people who live at the same address and share facilities and at least one meal per day</p>	<p><b>Week 7</b></p> <p><b>CHANGING FAMILIES AND FAMILY DIVERSITY</b></p> <p><b>Cultural Diversity:</b> Culture-based differences between people in a society in terms of religion, ethnicity, social class etc.</p> <p><b>Life Course:</b> The sequence of stages that an individual passes through overt their lifetime, e.g. childhood, adolescence etc.</p> <p><b>Cohort:</b> A group of people who share a particular characteristic, e.g. age, or experience, e.g. attending the same school.</p>	<p><b>Week 8</b></p> <p><b>FAMILIES AND MARRIAGE IN A GLOBAL CONTEXT</b></p> <p><b>Commune:</b> A group of people who share accommodation, money and property.</p> <p><b>Kibbutzim:</b> A group of people who live together communally and value equality and cooperation between members.</p> <p><b>One-child families:</b> Families that are only allowed to have one child by law.</p> <p><b>Polygamy:</b> The practice of having more than one husband or wife at the same time.</p>	<p><b>Week 9</b></p> <p><b>FUNCTIONALIST PERSPECTIVES ON FAMILIES</b></p> <p><b>Functionalism:</b> A sociological approach that examines society's structures (inc. the family) in terms of the function they perform in keeping society going.</p> <p><b>Economic Function:</b> The way in which a family provides financial support, food and shelter.</p> <p><b>Dysfunctional Family:</b> A family in which some functions e.g. providing emotional support are not being carried out.</p>	<p><b>Week 10: Revision</b></p> <p><b>MARXIST AND FEMINIST PERSPECTIVES ON FAMILY</b></p> <p><b>Capitalism:</b> An economic system that generates extreme wealth for the Bourgeoisie.</p> <p><b>Patriarchy:</b> Male power, authority and dominance over women.</p> <p><b>Canalisation:</b> The way parents channel their children's interests into toys, games and other activities that are seen as gender appropriate.</p>

Year 9 Spanish Cycle Two - Mi tiempo libre			
Week	Spanish	English	Literal English
1	Para mí el tiempo libre es muy importante y la música es mi pasión. <b>Me ayuda a descansar y relajarme.</b>	In my opinion, free time is very important and music is my passion. <b>It helps me to unwind and relax.</b>	For me, the time free is very important and the music is my passion. <b>Me it helps to unwind and relax myself.</b>
2	También soy teleadicto y me chiflan los concursos. En cuanto al cine, suelo ver las películas de terror porque son entretenidas.	Also, I am a TV addict and I love game shows. As for the cinema, I usually watch horror films because they are entertaining.	Also, I am TV addict and me they whistle the competitions. In regards to the cinema, I tend to watch the films of terror because they are entertaining.
3	Este fin de semana pienso ir al cine con mi amigo que se llama Jorge. ¡Qué genial!	This weekend I am thinking of going to the cinema with my friend who is called Jorge. How great!	This end of week I think to go to the cinema with my friend who calls himself Jorge. What great!
4	Vamos a comer fuera y va a ser guay. Para mí, prefiero ir a restaurantes de comida rápida <b>pero mi madre dice que es importante comer bien.</b>	We are going to eat out and it is going to be cool. Personally, I prefer to go to fast-food restaurants <b>but my mum says that it's important to eat well.</b>	We are going to eat out and it is going to be cool. For me, I prefer to go to restaurants of food fast <b>but my mum says that it is important to eat well.</b>
5	<b>¿Mi opinión de la comida? Pues,</b> las hamburguesas son sabrosas y me gusta el chorizo porque es picante.	<b>My opinion of food? Well,</b> burgers are tasty and I like chorizo because it is spicy.	<b>My opinion of the food? Well,</b> the hamburgers are tasty and me it likes the chorizo because it is spicy
6	Idealmente me gustaría ser vegano <b>porque me preocupa el medio ambiente y no</b> suelo comer carne frecuentemente.	Ideally I would like to be vegan <b>because I worry for the environment and I</b> don't usually eat meat frequently.	Ideally me it would like to be vegan <b>because me it worries the environment and I</b> do not tend to eat meat frequently.
7	Para el cumpleaños de mi padrastro vamos a comer en un restaurante típicamente español <b>donde preparan platos sabrosos.</b> Le encanta la comida española. Vamos a pasarlo muy bien.	For my step-dad's birthday we are going to eat in a typical Spanish restaurant <b>where they prepare tasty dishes. He loves Spanish food.</b> We are going to have a great time.	For the birthday of my step-father we are going to eat in a restaurant typically Spanish <b>where they prepare plates tasty. Him it enchants the Spanish food.</b> We are going to spend it very well.
8	<b>Con respecto a los deportes,</b> juego al baloncesto diariamente porque soy miembro de un equipo local. Este domingo, <b>si no tengo deberes,</b> haré vela con mis amigos.	<b>In terms of sport,</b> I play basketball daily because I am a member of a local team. This Sunday, <b>if I don't have homework,</b> I will go sailing with my friends.	<b>With respect to the sports,</b> I play at the basketball daily because I am member of a team local. This Sunday, <b>if I don't have homework,</b> I will do sailing with my friends.
9	A mi hermana, le gusta nadar <b>y el fin de semana que viene habrá un torneo de natación.</b> Hace mucho entrenamiento <b>y estoy seguro que ganará.</b>	My sister, she likes to swim <b>and next weekend there will be a swimming tournament.</b> She is doing lots of training <b>and I am sure that she will win</b>	To my sister, her it likes to swim <b>and the end of week that comes there will be a tournament of swimming.</b> She does a lot of training <b>and I am sure that she will win .</b>
10	El deporte puede ser muy beneficioso para su vida. <b>Te aprende la importancia de contar de los demás, cumplir las reglas y desarrollar los habilidades sociales.</b>	Sport can benefit your life greatly. <b>It teaches you the importance of relying on others, obeying rules, and developing social skills.</b>	The sport can be very beneficial for your life. <b>You it learns the importance of counting of the others, obeying the rules and developing the skills social.</b>
11	Vale la pena - ¡no se ganó Zamora en una hora!	It's worth it - Rome wasn't built in a day!	It is worth the pain, Zamora not was won in an hour!

**Week 1 - La música**

cantar	to sing
disfrutar	to enjoy
grabar	to record
tocar	to play(instrument)
al aire libre	open air
las canciones	the songs
un cantante	a singer
en directo	live
una entrada	a ticket
la letra	lyrics
la música	music
el ritmo	the rhythm

**Week 6 - Mis opiniones**

afortunadamente	fortunately
frecuentemente	frequently
normalmente	normally
tristemente	sadly
picante	spicy
rico	delicious/tasty
sabroso	tasty
salado	salty/savoury
sano	healthy
la basura	rubbish, junk
el gusto	taste

**Week 2 - El cine y la tele**

ver	to watch
una comedia	a comedy
un concurso	a game show
un dibujo animado	a cartoon
un documental	a documentary
las noticias	the news
una serie policiaca	a crime series
una telenovela	a soap
una película...	a (...)film
...de aventuras	adventure
...de animación	animated
...de amor	love
...de ciencia ficción	science fiction
...extranjera	foreign
los personajes	the characters
la banda sonora	the sound track
agradable	pleasant
desafiante	challenging
emocionante	exciting
entretenido	entertaining

**Week 7 - Una cena especial**

la comida	lunch/food
el huevo	egg
la lata	tin/can
la mantequilla	butter
el perrito caliente	hot dog
el té	tea
las verduras / legumbres	vegetables

**Week 3 - Mis planes**

pienso	I'm thinking of
espero	I hope
voy a	I'm going
quiero	I want
me gustaría	I would like
te gustaría	you would like
asistir	to attend/attending
charlar	to chat/chatting
cocinar	to cook/cooking
ir	to go/going
jugar	to play/playing (sport)
leer	to read/reading
llevar	to take/taking
venir	to come/coming

**Week 8 - El deporte en el futuro**

mañana	tomorrow
este viernes	this Friday
la semana próxima	next week
el año próximo	next year
diré	I will say
entrenaré	I will train
haré	I will do
iré	I will go
pondré	I will put
practicaré	I will practise
querré	I will want
sabré	I will know
tendré	I will have
vendré	I will sell
habrá	there will be
será	it will be

**Weeks 4 & 5 - Comer fuera**

el atún	tuna
el bacalao	cod
la barra	loaf
el bistec	steak
los calamares	squid
la camarera	waitress
el camarero	waiter
el cerdo	pork
la cerveza	beer
los champiñones	mushrooms
la chuleta	chop
la cuchara	knife
el cuchillo	spoon
la cuenta	the bill
los espaguetis	spaghetti
la fresa	strawberry
las gambas	prawns
el gazpacho	chilled soup

**Week 9 - El deporte en el mundo**

el alpinismo	rock climbing
la carrera	race
el concurso	competition
el jugador	player
el partido	match
la salud	health
seguro	sure
contestar	to answer
ganar	to win
probar	to try, to test

**Weeks 4 & 5 - Comer fuera**

los mariscos	seafood
el melocotón	peach
el pescado	fish
la piña	pineapple
el plátano	banana
la ración	portion
la salsa	sauce
el tenedor	fork
el vaso	glass
el vino tinto	red wine
¿cuánto cuesta?	How much is it?
de primero	firstly
de segundo	secondly
de postre	for dessert
voy a tomar	I'm going to have
traer	to bring

**Week 10 - Los beneficios**

empezar	to start
romper	to break
seguir	to follow
el campeón	champion
el esfuerzo	effort
la pelota	ball
la suerte	luck
las zapatillas	trainers
duro	hard
equilibrado	balanced
junto con	together with

**Weeks 11 & 12 - All vocabulary**

Year 9 Sport Studies Cycle Two

Week 1

LO2 SKILLS NEEDED TO DELIVER A SPORTS SESSION

- Application of Skills of a Leader**  
How will you apply the following skills?
- » **Organisation Skills** - having equipment ready, planning the session, knowing your learners
  - » Able to make decisions
  - » **Communication Skills** - Verbal e.g. giving instructions. Non-verbal e.g. gestures, use of whistle etc. Good listener.
  - » **Knowledge of the activity** - high level of sport specific knowledge of technical and tactical/use of technical terms;
  - » Knowledge of rules and regulation
  - » **Use of language** - Have a rapport;
  - » Show respect for performers
  - » **Behaviour Management** (how they deal with behaviour) and self-control and discipline (how they behave themselves).
  - » Able to **plan and structure** activities
  - » Be able to **set realistic targets** to work to
  - » Be able to **evaluate** performance and make decisions
  - » Ability to read the game or sporting situation
  - » Appreciate and acknowledge good performance - give **feedback** and feed forward
  - » Create a **positive and safe atmosphere** for playing and learning  
Think about how these attributes will help you be a good leader.

Week 2

LO2 RESPONSIBILITIES

Responsibilities	Explanation
Knowledge of the Activity	When you know a lot about sports. Experience gained.
Enthusiasm	Being enthusiastic/motivated about what you are doing
Knowledge of safety	Being aware and safety conscious.
Knowledge of child protection	DBS Check, Safeguarding , duty of care.
Knowledge of First Aid	Knowing what to do and how to deal with medical emergencies.

Quality	Explanation
Reliability	Never letting them down; always turn up, count on you.
Punctuality	Arriving on time, set up before the session; setting an example
Confidence	Be confident about what you are doing - plan what you are going to do.
Communication	Different ways of getting messages across. This can be verbal or non-verbal.
Knowledge of First Aid	Knowing what to do and how to deal with medical emergencies.

Plan	Effective planning and personal management skills will enable you to improve on your knowledge and understanding. In planning you need to think about organization, coaching points, types of communication, equipment needed., progression in practices, how you will challenge and differentiate.
Perform	Consider how you are going to show the attributes of effective sports leadership.
Evaluate	When evaluating your performance or the performance of others. Consider all the elements discussed in the planning phase. Setting S.M.A.R.T Targets

Week 3

LO2 LESSON PLANNING

Key considerations:

- » **Aims & Objectives:** What you want them to achieve or do?
- » **Participants:** What do you know about them that you need to plan for?
- » **Tasks or Activities:** What are you going to do with them?
- » **Coaching Points:** What do you need to tell or show them?
- » **Resources:** What equipment/resources do you need to help you?
- » **Organisation:** How are you going to organise/run the activity?
- » **Progression:** How will you develop the practice/session to make sure they are improving/developing?
- » **Differentiation:** How are you going to change it to make it accessible to all learners?

Lesson Structure	Content
Warm Up	1. Pulse raiser 2. Stretching - Dynamic & static 3. Practice actions/skill drill from activity 4. Mental preparation
Skill	New skill: What coaching points and drills needed?
Skill development	Make the skill harder - passive to active drill/conditioned game
Application in the game	Game play



Year 9 Sport Studies Cycle Two

Week 4 and 5

LO2 LESSON PLANNING

Warming up should include:

- >> gradual pulse raising activity
- >> stretching
- >> skill based practices/familiarisation
- >> mental preparation
- >> increase amount of oxygen to the working muscles.

Cooling down should include:

- >> maintain elevated breathing and heart rate, eg walk, jog
- >> gradual reduction in intensity
- >> stretching

The benefits of warming up:

- >> effect on body temperature
- >> range of movement increased
- >> gradual increase of effort to full pace
- >> psychological preparation
- >> practice of movement skills through the whole range of movement
- >> injury prevention.

The benefits of cooling down:

- >> allowing the body to recover
- >> the removal of lactic acid/CO2/waste products
- >> prevent delayed onset of muscle soreness (DOMS) - the pain felt in the muscles the day after exercise.

Week 7

LO2 LESSON PLANNING DIFFERENTIATION

Differentiation by STEP:

**S- SPACE - make the space bigger or smaller to challenge. E.g. Learning grids and channels(1v1, 2v1, 3 3)**

Students are asked to adapt space accordingly either by limiting space or enlarging playing areas depending on experience, confidence or ability. In attack, larger spaces are easier. In defence, larger spaces are more difficult.

**T-TASK - Use different Bronze-Silver-Gold.**

Students either as individuals or groups are given different tasks/starting points based on prior attainment/experience. Able students can be challenged by setting tasks that encourage them to think at higher levels through the inclusion of problem-solving, investigation and use of higher order thinking skills.

**E-EQUIPMENT - Size or weight of equipment**

Students are set a common task but are given different resources, depending on ability and confidence.

**P- PEOPLE - Change the numbers**

Students have a common task to complete but are grouped in a way that ensures success for all able children can sometimes be grouped with peers of similar ability and expected to perform at higher levels or given the role of leader in supporting less able.

Week 8

LO2 AND LO4: FEEDBACK

Giving Feedback to learners

**Positive feedback:** What's good or correct about performance

**Advantage:** Motivating, highlights success

**Disadvantage:** Could suggest performance was better than it was

**Negative feedback:** What's bad or incorrect about performance

**Advantage:** Enables coach to provide guidance on how a skill can be performed better; helps performer to prioritise improvement

**Disadvantage:** demotivating, beginners may struggle to know how to respond

**Knowledge of performance:** Feedback on performance generally and technique.

**Advantage:** Many aspects to one performance so feedback can be detailed for or focused.

**Disadvantage:** Hard to break a performance down to provide detailed feedback

**Think about the feedback you received and how you will use it for evaluation:**

**Peer Feedback** - from your classmates or the learners

**Teacher feedback** - observation sheet

**Video feedback** - for self review

Week 9

LO4: EVALUATION & GOAL SETTING

The use of goal setting and SMART targets to improve and/or optimise performance

**Goal setting (SMART goals)** A method to set appropriate goals, optimise performance, increase motivation and reduce anxiety. Goals should be SMART:

**Specific** - A clear goal specific to the demands of the sport/muscles used/movements used

**Measurable** - it must be possible to measure whether they have been met

**Achievable** - they must be reachable by the performer and within their capabilities

**Recorded** - crucial for monitoring and once achieved can be checked of or deleted improving motivation.

**Time bound** - over a set period of time, short term and progressive being the most effective.

Week 10

LO4: EVALUATION FOR IMPROVEMENT - DIFFERENT WAYS TO IMPROVE

Use of video recordings	Your first way of observing and evaluating yourself is to watch how you carry out your delivery/ teach.
Be open to Criticism	Leaders must be self-critical, but they also have to be open to constructive criticism from others. It is essential to develop the ability to use any feedback you receive to improve your performance.
Peer Observation	Ask your peers to watch you. You get a lot from watching others too. You could also watch some of your teachers delivering lessons and use them to model the type of teaching you want to use.
Ask your teacher/tutor	Always ask your teacher/tutor how well you are doing and do not be afraid to ask for advice and guidance out of lessons.
Practice	Try to practice teaching. Start with smaller groups and gradually build the number of learners up. Practice parts of the lesson and modify if you need to. You could volunteer at a local club so you can pick up ideas from coaches and gain confidence helping a coach
Improve Knowledge	Go on coaching courses to learn new skills. Watch elite players and copy the skills - break skills down then build them up. Get experience as a player yourself by playing regularly. Volunteer as an official to help your understanding of the rules and managing teams on the pitch.
Evaluate and review	Be aware of www and ebi. How would you change the session to make it better? Think about how it might change for a different group of individuals.
Self Observation	Look-back at a videos of yourself from when you first started to see how much you have improved.



Measures of location are single values which describe a position data. Of these, measures of central tendency are to do with the centre of the data, i.e. a notion of 'average'. Measures of spread are to do with how data is spread out.

When comparing two sets of data, two factors should you always include: ALWAYS include an average (mean, median, mode) and a measure of spread or variation (range or IQR)

<b>Mean</b>	Advantages - Includes every item of data Disadvantages - Can be skewed by extreme values (outliers)
<b>Median</b>	Advantages - Not affected by extreme values Disadvantages - It doesn't take into account the value of each piece of data
<b>Mode</b>	Advantages - Is the only average that can be used for qualitative data. E.g. favourite colour Disadvantages - There can be more than one mode. It doesn't always represent the data
<b>Interquartile Range (IQR)</b>	Unlike the range the IQR is less likely to be affected by extreme values. It represents the middle 50% of the data.

FINDING AVERAGES I

	Discrete Data	Continuous Data
<b>Mode</b>	The most commonly occurring term in the set of data.	
<b>Mean</b>	$\bar{x} = \frac{\sum x}{n}$ $\bar{x} = \text{mean}$ $\sum = \text{sum of ...}$ $x = \text{values / frequency}$ $n = \text{number of values}$	An estimated mean For grouped frequency data: $\frac{\sum (f \times \text{midpoint})}{\sum f}$
<b>Median</b>	The middle value when in order. To find the position: $\frac{1}{2}(n+1)$ th position $n = \text{number of values}$	An estimated median. Find the position $\frac{1}{2}(n+1)$ th position Use interpolation: $L + \frac{\frac{n}{2} - F}{f} \times W$
<b>Lower Quartile</b>	The value $\frac{1}{4}$ along the data set. To find the position, $\frac{3}{4}(n+1)$ th position $n = \text{number of values}$	An estimated lower quartile. Find the position, $\frac{1}{4}(n+1)$ th term Use interpolation: $L + \frac{\frac{n}{4} - F}{f} \times W$
<b>Upper Quartile</b>	The value $\frac{3}{4}$ along the data set. To find the position: $\frac{3}{4}(n+1)$ th position $n = \text{number of values}$	An estimated upper quartile. Find the position, $\frac{3}{4}(n+1)$ th term Use interpolation: $L + \frac{\frac{3n}{4} - F}{f} \times W$
<b>Interpolation</b>	$L + \frac{\frac{n}{2} - F}{f} \times W$	<ul style="list-style-type: none"> <li><math>L</math> is the lower boundary of the class containing the median</li> <li><math>n</math> is the total number of values</li> <li><math>F</math> is the cumulative frequency of the intervals before the one containing the median</li> <li><math>f</math> is the frequency of the median class interval</li> <li><math>w</math> is the width of the median class interval</li> </ul>



Year 9 Statistics Cycle Two

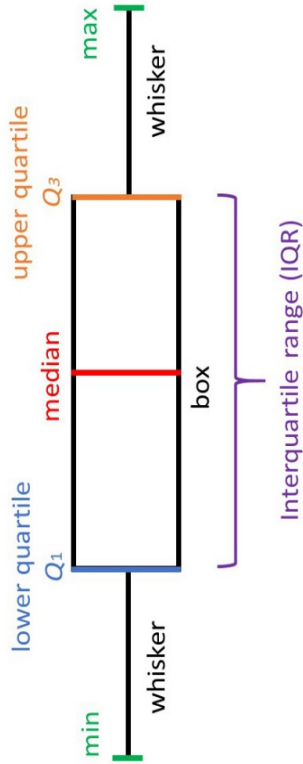
Week 5 and 6

Week 6 and 7

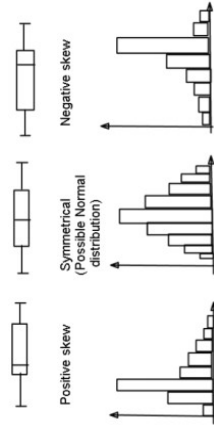
INTERQUARTILE RANGE

**Interquartile Range:**  
Upper quartile - lower quartile

**Box Plots:**



“Skewed” means the data is distorted by certain values (i.e. not normally distributed)



**Positive skew**

mean > median > mode

**Negative skew**

mean > median > mode

**Outliers:**

Outliers are considered outside the expected range of data.

Smaller outlier <  $LQ - (1.5 \times IQR)$

Larger outlier >  $UQ + (1.5 \times IQR)$

AVERAGES 3

Standard deviation is a measure of how much all the values deviate from the mean value, or how spread out they are.

$$\sigma = \sqrt{\frac{1}{n} \sum (x - \bar{x})^2} \text{ or } \sigma = \sqrt{\frac{\sum x^2}{n} - \left(\frac{\sum x}{n}\right)^2}$$

where  $x$  represents each value and  $n$  represents how many values.

SD in frequency tables

$$\sqrt{\frac{\sum f(x - \bar{x})^2}{\sum f}}$$

Weighted mean

For data that has different weightings or values in each group, we use the weighted mean.

$$\frac{\sum (value \times weight)}{\sum weights}$$

Geometric Mean

The geometric mean is the  $n$ th root of the product of  $n$  values.

$$\sqrt[n]{value_1 \times value_2 \times \dots \times value_n}$$

$n$  = number of values

Week 8

SCATTER GRAPHS

**Explanatory**

If you want to investigate how changing one variable affects another variable. The variable you change is the explanatory variable. This is the variable being investigated in the experiment. On a scatter graph, this is labelled on the x-axis.

**Response (dependent) variable**

The other variable is called the response variable because it 'responds to' or 'depends on' the explanatory variable. On a scatter graph, this is labelled on the y-axis.

**Extraneous variable**

Is a variable that you're not investigating that can potentially affect the outcomes of your study.

**CORRELATION AND CAUSATION**

<b>Correlation</b>	<p>is a <b>relationship</b> between two variables, showing an increasing or decreasing <b>trend</b>.                  As one variable increases, the other decreases or increases.                  E.g. As a student's age increases, in general the height will increase. This would show a trend of positive correlation.</p>
<b>Types of correlation</b>	<p><b>Positive correlation</b> is when one variable increases as the other increases.  <b>Negative correlation</b> is when one variable decreases as the other increases.                  When the points lie on or near a straight line, the correlation is <b>linear</b>.</p> <p style="text-align: center;"> <span style="margin-right: 20px;">Strong positive</span> <span style="margin-right: 20px;">Weak positive</span> <span style="margin-right: 20px;">No correlation</span> <span style="margin-right: 20px;">Weak negative</span> <span>Strong negative</span> </p>
<b>Causation</b>	<p>When a change in one variable <b>directly</b> causes a change in another variable, there is a <b>casual relationship</b> between them.                  This is <b>not</b> the same as correlation.                  E.g. The amount of fuel a car uses depends on the size of its engine, since bigger engines use more fuel. The size of the engine <b>causes</b> the car to use more fuel. There is a <b>casual relationship</b> between them both.</p>
<b>Interpolation</b>	<p>Using a <b>line of best fit</b> to estimate data values from within the range of data is called <b>interpolation</b>.</p>
<b>Extrapolation</b>	<p>Using a <b>line of best fit</b> to estimate data values from within the range of data is called <b>interpolation</b>.</p>

**LINE OF BEST FIT**

A line of best fit is a straight line drawn so that the plotted points on a scatter diagram are evenly scattered either side of the line, passing through as many points as possible.  
 By drawing a line of best fit, it helps make estimations from the trend of data.

The line of best fit can be created by:

- The line of best fit can be drawn by eye
- To get a better fit, draw your line through the mean point (x, y). This is done by calculating the mean of both variables (e.g. shoe size and height). Creating a co-ordinate from these values.

**Equation of line of best fit**  
 The equation of the line **y = ax + b**  
 With gradient **a**, and its intercept on the y-axis is **(0, b)**.

The **gradient** can be found by:

$$\frac{\text{change in } y}{\text{change in } x} = \frac{y_2 - y_1}{x_2 - x_1}$$

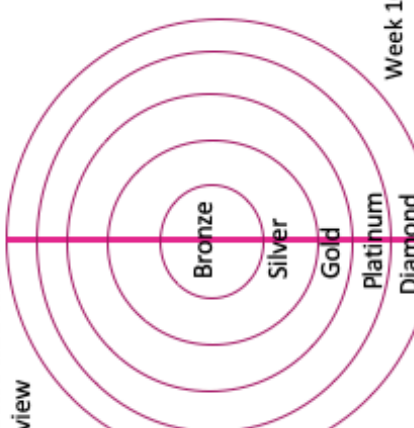
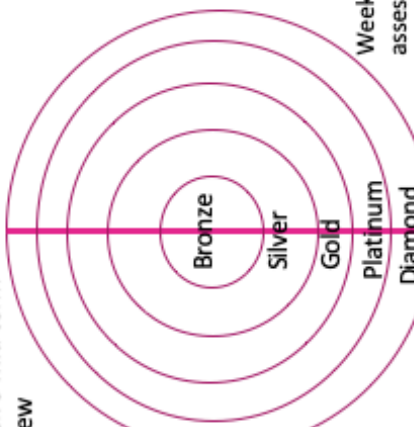
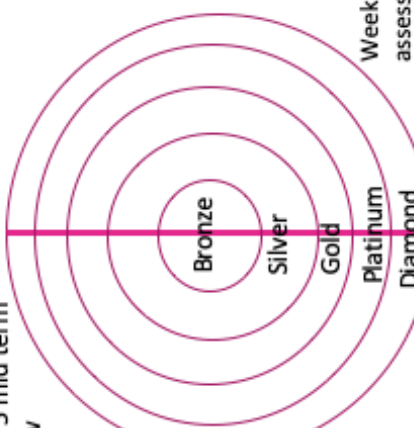

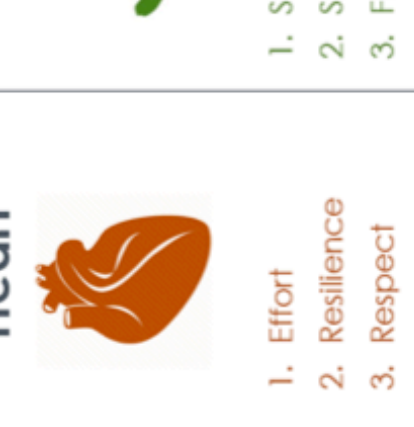




The gradient, **a**, of the line of best fit is the **rate of increase of the response variable in relation to the explanatory variable**.  
 The **y-intercept b** is the value of the response variable when the **explanatory variable** is 0.

Year 9 Physical Education Cycle Two

**PE Assessment**

In PE we assess using Head, Heart, Hands. Across the year you will self assess along with being given a summative level. At the end of term we will spend time to reflect each area and then using the assessment wheel (below) you will shade in your current level for each of the 3 stands in PE. Once you have completed this reflect on the following three questions:

1. What level am I currently at?
2. Where do I want to be?
3. How do I get there?

<p><b>Week 5 mid term review</b></p>  <p><b>Week 5 mid term review</b></p>	<p><b>Week 5 mid term review</b></p>  <p><b>Week 5 mid term review</b></p>	<p><b>Week 5 mid term review</b></p>  <p><b>Week 5 mid term review</b></p>
<p><b>Week 10 Self assessment</b></p>  <p><b>Week 10 Self assessment</b></p>	<p><b>Week 10 Self assessment</b></p>  <p><b>Week 10 Self assessment</b></p>	<p><b>Week 10 Self assessment</b></p>  <p><b>Week 10 Self assessment</b></p>
<p><b>Head</b></p>  <ol style="list-style-type: none"> <li>1. Leadership</li> <li>2. Knowledge</li> <li>3. Analysis</li> <li>4. Decision Making</li> <li>5. Tactical</li> </ol>	<p><b>Heart</b></p>  <ol style="list-style-type: none"> <li>1. Effort</li> <li>2. Resilience</li> <li>3. Respect</li> <li>4. Motivation</li> <li>5. Commitment</li> </ol>	<p><b>Hands</b></p>  <ol style="list-style-type: none"> <li>1. Skill Development</li> <li>2. Skill Application</li> <li>3. Fitness Levels</li> <li>4. Technique</li> <li>5. Competitive</li> </ol>

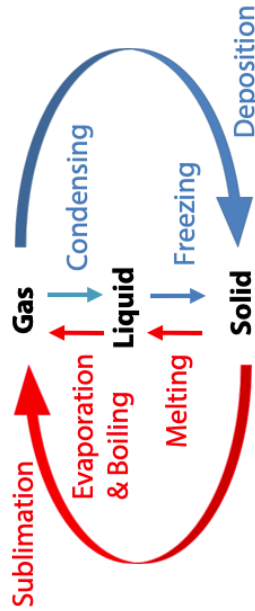
Year 9 Combined Science Cycle Two

Key Vocabulary:

- 1. Activation Energy** - the minimum amount of energy needed by colliding particles for a reaction to happen.
- 2. Catalyst** - a substance that speeds up the rate of a reaction without altering the products, being used up itself or affecting the final mass of the products.
- 3. Crystallisation** - separating the solute from a solution by evaporation the solvent.
- 4. Endothermic reaction** - a reaction where heat energy is given out.
- 5. Enzymes** - are biological catalysts. They can be used in the production of alcoholic drinks.
- 6. Exothermic reaction** - a reaction where heat energy is taken in.
- 7. Filtration** - Using a filter to separate an insoluble solid from a liquid.
- 8. Gas Pressure** - the force generated by particles colliding with the container walls.
- 9. Insoluble** - cannot dissolve in that solvent.
- 10. Isotope** - a different version of an atom with the same number of electrons and protons but a different neutron number.
- 11. Mixture** - contains one or more elements/compounds that are not chemically joined. Can be separated into its components. Has sharp changes in boiling point due to its different components.
- 12. Pure substance** - composition cannot be changed, is the same in all parts of the substance so it has gradual changes in its properties. I.e. Boiling point.
- 13. Soluble** - can dissolve.
- 14. Solute** - the thing being dissolved.
- 15. Solvent** - the liquid the solute dissolves in.

Week 1

- 1. Solid** - Particles in fixed positions, regular arrangement, vibrate in fixed positions when heated. Lowest energy.
- 2. Liquid** - Particles are touching but can flow past each other & take the shape of an object. Has more energy than a solid but less than a gas.
- 3. Gas** - Random arrangement of particles, not touching, moving fast in all directions.
- 4. Changes between the states are known as physical changes.**



Week 3

1. Atomic structure

Particle	Charge	Mass
Proton	+ 1	1
Neutron	0	1
Electron	- 1	1/1835

- There is always the same number of protons & electrons in an atom.
- 3. Atomic mass** = protons + neutrons
- 4. Atomic number** = protons
- 5. Mendeleev** arranged the Periodic Table in order of increasing atomic mass but this isn't true in some cases because of the masses of some of the **isotopes**.

Week 2

- 1. Simple distillation** - separating a mixture from a liquid by heating to cause evaporation and then cooling to cause condensation. The least efficient form of distillation. **Used to make sea water drinkable.**
- 2. Fractional distillation** - evaporation followed by condensation. A method to separate a mixture from liquids with different boiling points into different fractions.
- 3. Paper chromatography** - the separation of mixtures of soluble substances by running a solvent (mobile phase) through the mixture on the paper (stationary phase) which causes the substances to move at different rates over the paper.  
4.  $R_f = \frac{\text{distance moved by the spot}}{\text{distance moved by the solvent}}$

Week 4

- Electrons occupy shells in order and fill the shell closes to the nucleus first. There is a limit to the number of electrons:
  - 1st shell - 2 electrons
  - 2nd shell - 8 electrons
  - 3rd shell - 8 electrons
- You can work out which group an element is in by the number of electrons in the outer shell:
  - Group 4 - 4 electrons in outer shell
  - Group 1 - 1 electron in the outer shell
- You can work out which period an element is in by the number of shells the electrons occupy
  - 1 shell - period 1
  - 2 shells - period 2

Year 9 Combined Science Cycle Two		
Week 5	Week 6	Week 7
<p>1. Conservation of mass states that the mass of reactants will always be equal to the mass of the products (symbol equations must be balanced).</p> <p>2. This can be shown during a precipitate reaction (a closed system) - a solid will form with the same mass as the 2 reactants or when a gas is formed/taken in (a non-enclosed system).</p> <p>3. Empirical formulae - simplest whole number ratio of elements in a compound.</p> <p>4. Write the mass for each element in the question.</p> <p>5. Record the RAM for each element.</p> <p>6. Calculate the number of moles (No of moles = question mass/RAM)</p> <p>7. Divide all elements by the smallest No of moles.</p>	<p><b>1. Group 1 (Alkali metals) - all have:</b></p> <ol style="list-style-type: none"> <li>1 electron in their outer shell,</li> <li>form 1+ ions,</li> <li><b>reactivity increases</b> as you go down the group because the <b>force of attraction</b> between the + nucleus and the - outer electron decreases so it is easier to remove the electron,</li> <li>are soft, float on water</li> <li>relatively low melting points.</li> </ol> <p><b>2. Group 7 (Halogens) - all have:</b></p> <ol style="list-style-type: none"> <li>7 electrons in their outer shell,</li> <li>form a 1- ion,</li> <li><b>reactivity decreases</b> as you go down the group. <b>The force of attraction</b> between the + nucleus and the - outer electron decreases making it harder to attract extra electrons,</li> <li>are all diatomic (travel in pairs, Cl<sub>2</sub>)</li> </ol>	<p><b>1. Group 0 (Noble gases)</b></p> <ol style="list-style-type: none"> <li>are inert (unreactive) because they have a full outer shell,</li> <li>have a low density,</li> <li>colourless,</li> <li>poor conductors of heat</li> <li>are non-flammable.</li> </ol> <p><b>2. Rates of reaction -</b> Reactions occur what reactant particles collide at the correct orientation and with enough energy (activation energy) to successfully produce products. (<b>collision theory</b>)</p> <p><b>3. Factors that affect the rate of reaction</b></p> <ol style="list-style-type: none"> <li>Temperature</li> <li>Pressure</li> <li>Catalyst</li> <li>Surface Area :Volume ratio</li> <li>Concentration</li> </ol>
Week 8	Week 9	Week 10
<p><b>FACTORS THAT AFFECT RATES OF REACTIONS</b></p> <ol style="list-style-type: none"> <li>Temperature: Higher temperatures lead to greater kinetic energy of particles, increasing the frequency of successful collisions.</li> <li>Pressure: Compressing a gas increases the frequency of successful collisions, because the particles are squashed into a smaller area.</li> <li>Catalyst: Provides an alternative reaction route with a lower activation energy, so more successful collisions occur.</li> <li>Surface Area : Volume ratio: Powders have a greater SA:V ratio so there are more reactant particles available to collide.</li> <li>Concentration: More reactant particles increases the frequency that particles will collide causing a faster rate.</li> </ol>	<p><b>RATE OF REACTION CORE PRACTICAL</b></p> <p><b>1. Effect of surface area on rate of reaction</b></p> <ol style="list-style-type: none"> <li>Independent variable: size of marble chip</li> <li>Dependent variable: time taken</li> <li>Control variable: concentration &amp; type of acid, temperature, mass of marble chips</li> </ol> <p><b>2. Effect of temperature on rate of reaction</b></p> <ol style="list-style-type: none"> <li>Independent variable: temperature of sodium thiosulfate &amp; hydrochloric acid</li> <li>Dependent variable: time taken for cross to disappear</li> <li>Control variable: concentration &amp; type of acid, volume of reactants, strength of cross</li> </ol>	<p><b>CATALYST</b></p> <ol style="list-style-type: none"> <li><b>Catalysts</b> are substances that speeds up the rate of a reaction without altering the products, being used up itself or affecting the final mass of the products.</li> <li>They lower the amount of activation energy required for a reaction to start</li> <li>More reactant particles with have enough energy so more successful collisions will take place, speeding up the rate of reaction.</li> <li>Enzymes are an example of a catalyst as they help speed of digestion.</li> </ol>

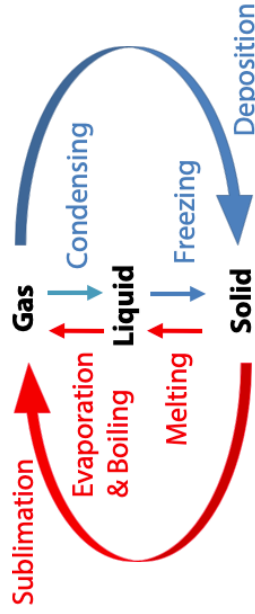
Year 9 Separate Science Cycle Two

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Week 3

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Year 9 Combined Science Cycle Two		
Week 5	Week 6	Week 7
<p><b>1. Group 1 (Alkali metals)</b> - all have:</p> <ol style="list-style-type: none"> <li>1 electron in their outer shell,</li> <li>form <math>1+</math> ions,</li> </ol> <p><b>c. reactivity increases</b> as you go down the group because the <b>force of attraction</b> between the <math>+</math> nucleus and the <math>-</math> outer electron decreases so it is easier to remove the electron,</p> <ol style="list-style-type: none"> <li>are soft, float on water</li> <li>relatively low melting points.</li> </ol> <p><b>2. Group 7 (Halogens)</b> - all have:</p> <ol style="list-style-type: none"> <li>7 electrons in their outer shell,</li> <li>form a <math>1-</math> ion,</li> </ol> <p><b>c. reactivity decreases</b> as you go down the group. The <b>force of attraction</b> between the <math>+</math> nucleus and the <math>-</math> outer electron decreases making it harder to attract extra electrons,</p> <ol style="list-style-type: none"> <li>are all diatomic (travel in pairs, <math>Cl_2</math>)</li> </ol>	<p><b>1. Group 0 (Noble gases)</b></p> <ol style="list-style-type: none"> <li>are inert (unreactive) because they have a full outer shell,</li> <li>have a low density,</li> <li>colourless,</li> <li>poor conductors of heat</li> <li>are non-flammable.</li> </ol> <p><b>2. Rates of reaction -</b> Reactions occur what reactant particles collide at the correct orientation and with enough energy (activation energy) to successfully produce products: (<b>collision theory</b>)</p> <p><b>3. Factors that affect the rate of reaction</b></p> <ol style="list-style-type: none"> <li>Temperature</li> <li>Pressure</li> <li>Catalyst</li> <li>Surface Area :Volume ratio</li> <li>Concentration</li> </ol>	<p><b>RATE OF REACTION CORE PRACTICAL</b></p> <p><b>1. Effect of surface area on rate of reaction</b></p> <ol style="list-style-type: none"> <li>Independent variable: size of marble chip</li> <li>Dependent variable: time taken</li> <li>Control variable: concentration &amp; type of acid, temperature, mass of marble chips</li> </ol> <p><b>2. Effect of temperature on rate of reaction</b></p> <ol style="list-style-type: none"> <li>Independent variable: temperature of sodium thiosulfate &amp; hydrochloric acid</li> <li>Dependent variable: time taken for cross to disappear</li> <li>Control variable: concentration &amp; type of acid, volume of reactants, strength of cross</li> </ol>
Week 8	Week 9	Week 10
<p><b>CATALYST</b></p> <ol style="list-style-type: none"> <li><b>Catalysts</b> are substances that speeds up the rate of a reaction without altering the products, being used up itself or affecting the final mass of the products.</li> <li>They lower the amount of activation energy required for a reaction to start.</li> <li>More reactant particles with have enough energy so more successful collisions will take place, speeding up the rate of reaction.</li> <li>Enzymes are an example of a catalyst as they help speed of digestion.</li> </ol>  <p>The reaction profile shows that a catalyst lowers the activation energy.</p>	<p><b>BOND ENERGY CALCULATIONS</b></p> <p>Bond energy is the amount of <b>energy</b> needed to break one mole of a particular covalent bond.</p> <ol style="list-style-type: none"> <li>Add together the bond energy of the reactants. (energy in)</li> <li>Add together the bond energy of the products. (energy out)</li> <li>Energy change = energy in - energy out</li> <li>A negative energy change shows the reaction is <b>exothermic</b>.</li> <li>A positive energy change shows the reaction is <b>endothermic</b>.</li> <li>Exothermic reactions transfer energy to the surroundings and the temperature increases.</li> <li>Endothermic reactions take in energy &amp; the temperature of the surroundings decreases.</li> </ol>	<p><b>MOLE CALCULATIONS</b></p> <ol style="list-style-type: none"> <li>Number of moles (mol) = mass (g) / Molar mass</li> <li>Mass (g) = number of moles (mole) x molar mass</li> <li>Molar mass = mass (g) / number of moles (mol)</li> </ol> 









# Support available to you

## If you feel at immediate risk of harm call 999 Police

### Safeguarding Concern - Help from our St James Safeguarding Team

You can email: [safeguarding@stjamesexeter.co.uk](mailto:safeguarding@stjamesexeter.co.uk)

If worried/anxious/ or just want to talk contact...

### Food Support

If your family need foodbank vouchers or help with free school meals please email

[foodsupport@stjamesexeter.co.uk](mailto:foodsupport@stjamesexeter.co.uk)

### Self-Isolating Support (families with vulnerable members/with symptoms)

If you need support for picking up prescriptions/ shopping or support for your parents/carers by a community volunteer due to your family self-isolating, please email [foodsupport@stjamesexeter.co.uk](mailto:foodsupport@stjamesexeter.co.uk)

### Mental Health Support Team

If you have concerns over your own or your family's mental health of you own or your family. Please complete a referral on additional form or call **07866159124**

### MASH

If you have any safeguarding concerns about a child, you can call MASH on **0345 155 1071**

### Childline

**0800 1111**

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

Free, 24-hour telephone helpline for children and young people anywhere in the UK. Get help and advice about a wide range of issues, talk to a counsellor online, send Childline an email or post on the message boards.

### The Mix

**0808 808 4994**

[www.themix.org.uk](http://www.themix.org.uk)

Essential support for under 25s. Phone, Email, Web support and Counselling.

[www.themix.org.uk/get-support/speak-to-our-team/crisis-messenger](http://www.themix.org.uk/get-support/speak-to-our-team/crisis-messenger) - The Mix's Crisis Messenger text service is available 24/7 and open to anyone aged 25 or under living in the UK.

If you're in crisis and need to talk, text

**THEMIX to 85258**

### Samaritans:

Helpline: **116 123**

Email [jo@samaritans.org](mailto:jo@samaritans.org)

[www.samaritans.org](http://www.samaritans.org)

24hr service offering emotional support

### Runaway Helpline:

**116 000**

Email - [116000@runawayhelpline.org.uk](mailto:116000@runawayhelpline.org.uk)

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

Runaway Helpline is here if you are thinking about running away, if you have already run away, or if you have been away and come back. You can also contact the Helpline if you are worried that someone else is going to run away or if they are being treated badly or abused. You can call or text for free, 24 hours a day. It's all confidential.

## Shout

is an affiliate of Crisis Text Line® in the UK that provides free, confidential support, 24/7 via text. It's a free 24/7 texting service in the UK for anyone in crisis anytime. Text **85258**

## Kooth

[www.kooth.com](http://www.kooth.com)

Free, safe and anonymous support for young people.

Monday - Friday 12pm-10pm

Saturday - Sunday 6pm - 10pm

## YMCA - Children and Young People's Wellbeing Service

Wellbeing Practitioners provide uses CBT (Cognitive Behavioural Therapy) techniques and goal-setting to build up emotional wellbeing and resilience in young people and their families.

Self-referral:

<https://www.ymcaexeter.org.uk/cwpwellbeing/>

## Young Devon

Young Devon run a homelessness prevention scheme in Exeter; they can help 16 & 17yr olds and care leavers.

**01392 331666** and ask to speak to the Homeless Prevention Team or email [yes.exeter@youngdevon.org](mailto:yes.exeter@youngdevon.org)

If you are under 18 call the Social Service Emergency Duty team **0345600 0388**

## Online support and advice:

<https://www.thinkuknow.co.uk/>

# Key things to remember:

- **Think before you post**

Don't upload or share anything you wouldn't want your parents, carers, teachers or future employers seeing. Once you post something, you lose control of it, especially if someone else screenshots or shares it.

- **Don't share personal details**

Keep things like your address, phone number, full name, school and date of birth private, and check what people can see in your privacy settings. Remember that people can use small clues like a school logo in a photo to find out a lot about you.

- **Watch out for phishing and scams**

Phishing is when someone tries to trick you into giving them information, like your password. Someone might also try to trick you by saying they can make you famous or that they're from a talent agency. Never click links from emails or messages that ask you to log in or share your details, even if you think they might be genuine. If you're asked to log into a website, go to the app or site directly instead.

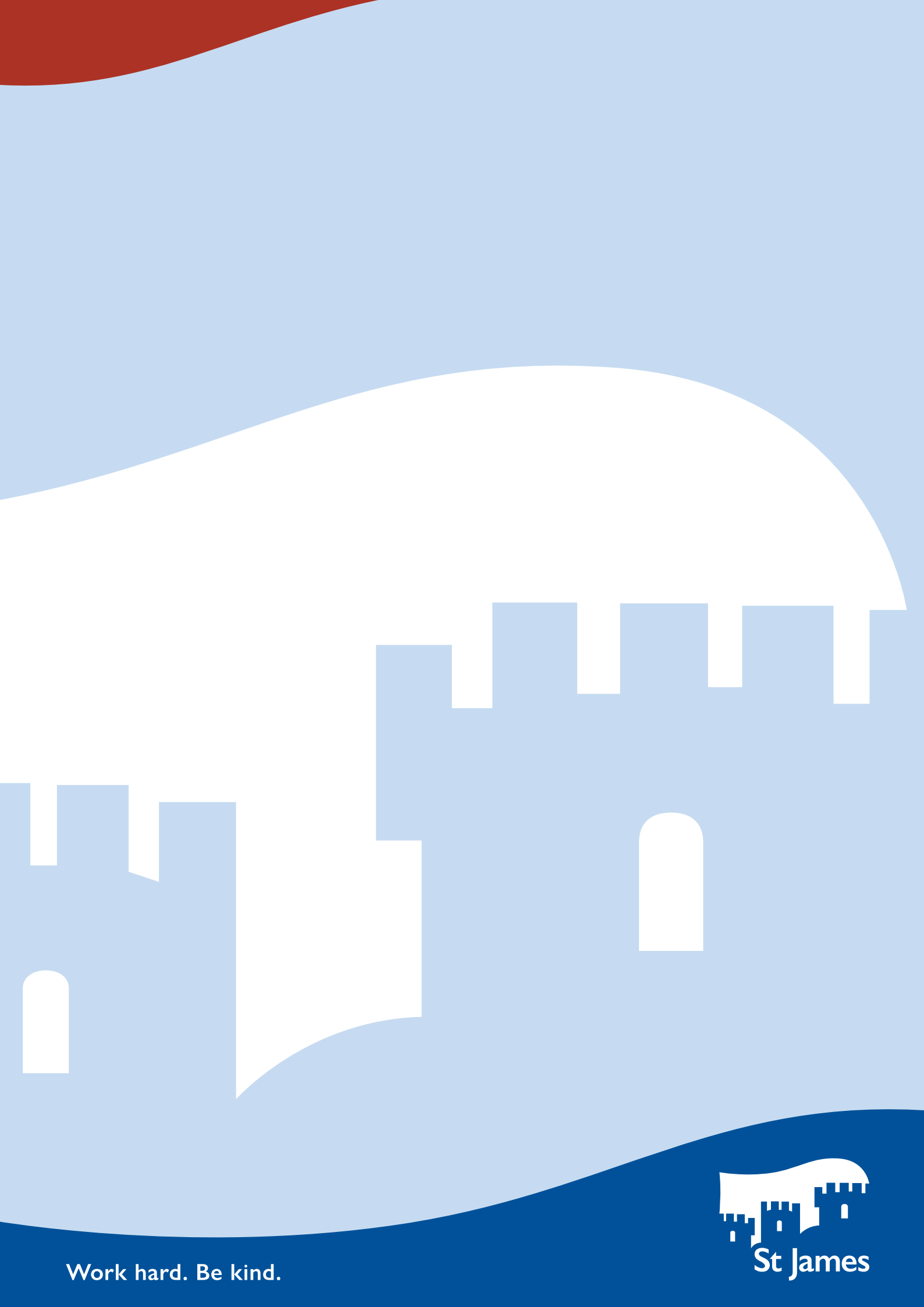
- **Think about who you're talking to**

There are lots of ways that people try to trick you into trusting them online. Even if you like and trust someone you've met online, never share personal information with them like your address, full name, or where you go to school. Find out more about grooming.

- **Keep your device secure**

Make sure that you're keeping your information and device secure.

**More information can be found on our website: <https://www.stjamesexeter.co.uk/about/safeguarding/>**



Work hard. Be kind.

