

Name:

Form:



**“Let us pick up our books and our pens,” I said.**

**“They are our most powerful weapons. One child, one teacher, one book and one pen can change the world.”**

Malala Yousafzai

**YEAR 7**

**KNOWLEDGE ORGANISER:**

**Spring Term 2024**



**Bluecoat Wollaton**  
believe in yourself, in others, in God

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# Instructions for using your Knowledge Organiser

Every school day you should be studying at least **1** section of your Knowledge Organiser (KO) for home-work.

The timetable on the next page tells you which subjects you should be studying on which days (it doesn't matter if you have that subject on that day or not, you should follow the timetable).

You are to use your exercise book to show the work you have done. Each evening you should start a new page and put the date clearly at the top.

You need to bring your KO and exercise book with you **EVERYDAY** to the academy.

Your parents should tick off your homework every evening using the grid in your KO on page 4. Parents should also sign off your reading using the reading log on page 5, this will be checked in your library lesson.

Your KO and exercise book will be checked regularly in form time, failure to show homework for **ALL FIVE** days of the week will result in an after school detention that day.

You will also be tested in your lessons on knowledge from the organisers.

## Self-testing

You can use your KOs and book in a number of different ways but you **should not just copy** from the Knowledge Organiser into your book. Use the '*How to self-test with the Knowledge Organiser*' booklet to help you. It can also be found here:

<http://www.bluecoatwollaton.co.uk/learning/knowledge-organisers/>

Below are some possible tasks you could do in your workbooks, **no matter which task you do you should always check and correct your work in a different coloured pen.**

- Ask someone to write questions for you
- Write your own challenging questions and then leave it overnight to answer them the next day
- Create mind maps
- Create flashcards
- Put the key words into new sentences
- Look, cover, write and check
- Mnemonics
- Draw a comic strip of a timeline
- Use the 'clock' template to divide the information into smaller sections. Then test yourself on different sections
- Give yourself spelling tests
- Definition tests
- Draw diagrams of processes
- Draw images and annotate/label them with extra information
- Create fact files



## Presentation

You should take pride in how you present your work:

- Each page should be clearly dated at the top left hand side with Subject 1 written in the middle.
- Half way down the page a line should divide it in two with Subject 2 written above the dividing line.
- Each half of the page should be neatly filled with evidence of self-testing. There should be an appropriate amount of work.
- Failure to show pride in your presentation or wasting space on your page with large writing or starting a number of lines down will result in a **negative point**.



## How do I self-quiz?

### How to use... Flashcards

1. On one side of the flash card, write the word or question.
2. On the other side, write the definition for the word, or answer to the question.
3. Once you have completed your set of cards, put them in a pile. Then for each card, see if you can remember the definition or answer to the question. Tick or cross when you get it right or wrong.
4. When you get the card right, place it in the 'correct' pile. When you get it wrong, place it in the 'wrong' pile. Repeat until all cards are in the 'correct' pile.

You can also use the Leitner Method: <https://www.youtube.com/watch?v=C20EvKtdJwQ>

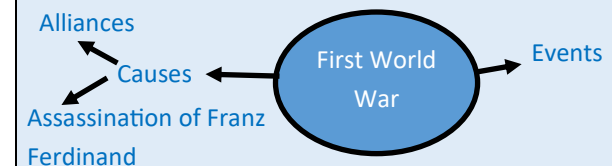
### How to use... Look, Cover, Write, Check and Correct

1. Write your key words into the 'Look, Cover' column and then cover it.
2. Write out the meaning, definition or spelling in the 'Write' column.
3. Put a 'tick' or 'cross' in the 'Check' column depending on if you got the answer right.
4. If you got the answer incorrect, write the correct answer in the 'Correct' column.

Look , Cover	Write	Check	Correct
Noun	A person, place or	✓	
Algorithm	Algorithm	X	Algorithm

### How to use... Mind Maps

1. Write out your topic or idea in the centre. E.g. The First World War.
2. Off of the main bubble, write out important categories to organise your ideas. E.g. causes of WWI and events in WWI
3. Then add your knowledge off of these branches. You might even be able to make connections between them.
4. Once made, then redraw as many of the connections as possible from memory. Correct any errors.



### How to use... Explaining a process/ idea further

Your teacher might ask you to explain a key idea, process or event from your learning. This could be the water cycle (Geography), photosynthesis (Science) or something else. In your answer, try to use the words **because**, **but**, and **so**. These will help you to:

1. **Because:** helps to explain a reason, cause or why something works.
2. **But:** helps to explain a limitation or problem.
3. **So:** helps to explain what happens next in a sequence, process or event.

Check your sentences to see if your explanations or right or wrong. Correct any errors.

### How to... Summarise a process/idea

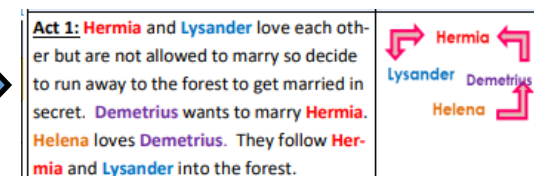
Rather than expand or explain a process, your teacher might ask you to summarise it into its key parts. E.g. summarising the plot 'A Midsummer Night's Dream' in English.

1. Read through the relevant part of your knowledge organiser as directed by your teacher.
2. Write out the (up to) 5 most important parts in your KO book, leaving a two lines in-between.
3. For each part, add **one** main idea.
4. E.g. here, the 4 key characters are picked out, and the direction of love is shown through the arrows. Check and correct any errors.

### How to use... Subject Specific Tasks or Questions

Your teacher might choose to set a task that is not outlined here, and which is specific to that topic or their subject.


In this case, your teacher will outline specifically what it is you need to do, and how. This will still include you checking and correcting any errors.





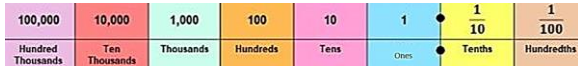

## Year 7 Spring Term 1

You are expected to study the subject(s) shown on your timetable each day. Each day use **one page** of your exercise book to evidence your work.

Date	Subjects and Tasks	Signed by parents/ carers once complete
08/01/2024 Monday	<b>English:</b> A Monster Calls: Read through the information about the key characters in the story and write down an example from your reading so far that supports an idea in each summary. For example, Conor's Grandma is summarised as being 'cold'. How could you prove this description to be true?	
	<b>Art:</b> Read <b>Section C</b> and answer the following questions in full sentences, you should also write out the question: 1.What are the three complementary colour pairs? 2.What are the three primary colours? 3.What are the three secondary colours? 4.What is a Tertiary colour? 5.How do you mix purple?	
09/01/2024 Tuesday	<b>Music:</b> : Learn all the definitions in <b>Section A Tier 3</b> using <b>Look-cover-write-check and correct</b> . Make sure you draw out a neat table for this.	
	<b>Drama:</b> Learn all the key words and definitions in <b>Section A</b> using <b>Look-cover-write-check and correct</b> . Make sure you draw out a neat table for this.	
10/01/2024 Wednesday	<b>Maths:</b> Look back at the key terms in Section A: What is the difference between <b>median</b> and <b>range</b> ? What is the difference between a <b>place holder</b> and a <b>place value</b> ? Write 3 examples of an <b>integer</b> . Write 3 non-examples of an <b>integer</b> .	
	<b>DT: DT Ping Pong:</b> Choose 8 keywords and produce flashcards. Include pictures to help explain them. <b>DT CAD Rule</b> Draw your own safety poster on A4 that could be used in the workshop.	
	<b>Food:</b> For the Tier 2 words, use read cover, write check and correct to learn the words and their definitions	
11/01/2024 Thursday	<b>Bedrock:</b> Complete either one Bedrock lesson OR pre-tests/post tests activities until you earn an additional 20 points = a green  THEN write down <u>two words</u> you have been learning and a short definition OR synonym.	
	<b>Spanish:</b> Make flashcards for the weather phrases in Spanish (Section 3 column – Spring Page 1). Write the Spanish on one side and the English on the other side. Learn these phrases ready for a vocab test in next week's lesson. Make sure you revisit these every day during the week, little and often, so that you don't forget them. Ask someone at home to test you on them.	
12/01/2024 Friday	<b>Science: Reproduction (Section A):</b> Look, Cover, Write, Check the words in the Tier 2 vocabulary list. Record the word and meaning 5 times from memory.	
	<b>Principal's Reading:</b> English	

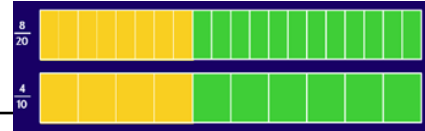

## Year 7 Spring Term 1

You are expected to study the subject(s) shown on your timetable each day. Each day use **one page** of your exercise book to evidence your work.

Date	Subjects and Tasks	Signed by parents/ carers once complete
15/01/2024 Monday	<b>English:</b> Look at Section 3 of your KO and read about the allusions that we see in the story. You might need to recap the definition of this word in the Tier 3 section. Explain which allusion you believe has been the most important in the story so far and why. If you want to challenge yourself you can choose one of the allusions to research in more detail.	
	<b>History: Section A: Key Vocabulary</b> <b>TASK:</b> Use these key words in a sentence. Tier 3—> Middle Ages, peasant and Mappa Mundi. Tier 2—> Taxation,trade and Pope. <b>CHECK:</b> Check the definition, Have you used them correctly?	
16/01/2024 Tuesday	<b>RE: Section A:</b> Create a set of 5 flash cards based on the tier 3 vocabulary words in section A. Leave them for a few days then test yourself or ask a family member to test you on their definitions.	
	<b>PE:</b> Create a set of Flashcards for all the keywords in Section A & B. Then Self test yourself and create a learnt and ‘developing knowledge’ set of flashcards.	
17/01/2024 Wednesday	<b>Maths:</b> Write the place value of the underlined digit. Write down the answers in words. E.g. a) four tens b) nine hundreds c) three ones. You can use this place value grid if you need help.	(a) 548 (b) 202 (c) 623 (d) 3841 (e) 87902 (f) 48213 (g) 32154 (h) 24103 (i) 294875 (j) 940000 (k) 2500000 (l) 4920000000 (m) 0.53 (n) 0.22 (o) 1.395 (p) 29.4827
		
	<b>Computing: READ Your KO.</b> Answer the following questions, in your own words, without copying from your knowledge organiser: 1. Give THREE examples of personal information online, 2. What is cyberbullying?, 3. What is trolling?, 4. What is your digital footprint?, 5. What would you do to make sure you keep yourself safe online?	
18/01/2024 Thursday	<b>Bedrock:</b> Complete either one Bedrock lesson OR pre-tests/post tests activities until you earn an additional 20 points = a green  THEN write down <u>two words</u> you have been learning and a short definition OR synonym.	
	<b>Geography: Weather and Climate - Section 1: Key Vocabulary</b> Pick 3 words from tier 3 and create a sentence using each of them. Pick 3 words from tier 2 and create a sentence using each of them. E.g. Abrasion on the bed and banks of a river caused soil to wear away.	
19/01/2024 Friday	<b>Science: Reproduction (Section C):</b> What is the function of each of the labels of the Female reproductive system (Oviduct, Ovary, Uterus, Cervix, Bladder, Urethra, Vagina)?	
	<b>Principal's Reading:</b> Science	



## Year 7 Spring Term 1

You are expected to study the subject(s) shown on your timetable each day. Each day use **one page** of your exercise book to evidence your work.

Date	Subjects and Tasks	Signed by parents/ carers once complete
22/01/2024 Monday	<b>English:</b> This week we're going to think about the key concepts in the story. Explain, in full sentences, how the concepts of 'love', 'loss', 'adversity' and 'conflict' have been presented in the story so far. For each concept write three sentences to explain your ideas. Here is an example about a different concept of 'heritage'. <i>Heritage is a really important concept in this novel because the writer shows us how stories form a part of our heritage, and that this can help us to understand ourselves. For example, the Monster uses stories as moral lessons for Conor. This helps him to understand more about his past and his life, helping him come to terms with difficult parts of his family heritage such as separation, estrangement and grief.</i>	
	<b>Art:</b> Read <b>Section A:</b> Learn the last 6 keywords and definitions. Use Look, cover, write, check and correct. Make sure you draw out a neat table for this.	
23/01/2024 Tuesday	<b>Music:</b> : Learn all the definitions in <b>Section B</b> using <b>Look-cover-write-check and correct.</b>	
	<b>Drama:</b> Read through <b>Section A</b> Create a <b>set of flashcards</b> with the keyword and symbol on one side and definition on the other. Once created, test yourself. When you get a date correct put it in the 'correct' pile. If you get it wrong, put it in the 'check again' pile. Repeat until all cards are in the 'correct' pile.	
24/01/2024 Wednesday	<b>Maths:</b> Give <b>three examples</b> of equivalent fraction pairs. In your knowledge organiser book draw a diagram for each fraction to show their equivalence. Across is an example; eight twentieth is equivalent to four tenths. Use colour to show the fraction if needed.	
	 <p><b>DT: DT Ping Pong:</b> For the Tier 2 words, use read cover, write check and correct to learn the words and their definitions.</p> <p><b>DT CAD Rule</b> Find at least 4 products in your home they have different packaging labels similar to the ones on the KO sheet , research and then draw them and describe what that mean.</p> <p><b>Food:</b> Use the information to create a fact sheet to inform people how to store and prepare food safely. Include diagrams and the consequences of not storing food correctly.</p>	
25/01/2024 Thursday	<b>Bedrock:</b> Complete either one Bedrock lesson OR pre-tests/post tests activities until you earn an additional 20 points = a green  THEN write down <u>two words</u> you have been learning and a short definition OR synonym.	
	<b>Spanish:</b> Using the verbs ' <i>juego</i> ' (I play) and ' <i>hago</i> ' (I do), write a paragraph about sports you play and do, using the Tier 1 nouns to help you. <b>Challenge:</b> Use some time phrases at the start of the sentences to help you E.g. <i>normalmente</i> (normally) and <i>a veces</i> (sometimes).	
26/01/2024 Friday	<b>Science: Reproduction (Section C):</b> Male reproductive system: what is the function of: (Sperm ducts, Penis, Scrotum, Prostate gland, Urethra, Testes)	
	<b>Principal's Reading:</b> Religious Studies	

## Year 7 Spring Term 1

You are expected to study the subject(s) shown on your timetable each day. Each day use **one page** of your exercise book to evidence your work.

Date	Subjects and Tasks	Signed by parents/ carers once complete
29/01/2024 Monday	<b>English:</b> Revisit the Tier 3 vocabulary that is in your Knowledge Organiser. You should now be able to use this vocabulary confidently. Write a sentence that includes each of these Tier 3 words that shows your knowledge of the story. For example: Patrick Ness uses frame narrative when the monster tells Conor the 'First Tale.'	
	<b>History: Section B: Important Ideas.</b> <b>TASK:</b> Draw a diagram to represent the Silk Roads. Make sure you include: The goods that were traded, where they were traded, the direction of trade. <b>CHECK:</b> Check the map on Section B. Does yours look similar to this?	
30/01/2024 Tuesday	<b>RE:</b> Create a set of 10 quiz questions based on <b>sections B and C (Jesus' life and key teachings)</b> . Leave them for a few hours or over night then try to answer them. Can you answer them without looking at the information? Check your answers- correct or add any detail missed with another colour pen.	
	<b>PE:</b> Create 3 Frayer Diagrams for 3 keywords in Section A. You should choose a minimum of 2 from each tier of vocabulary.	
31/01/2024 Wednesday	<b>Maths: Convert</b> these decimals to fractions and percentages and <b>draw diagrams to show the fractions</b> . Watch these Sparx videos if you need help:- M958, M264 and M922. <b>Q1) 0.3 Q2) 0.25 and Q3) 0.8</b>  EXAMPLE) Convert 0.4 --> 	
	<b>Computing:</b> Make a mind map for all the words within <b>section B</b> . This should include the word, definition and an example of how it could be used within a sentence.	
01/02/2024 Thursday	<b>Bedrock:</b> Complete either one Bedrock lesson OR pre-tests/post tests activities until you earn an additional 20 points = a green  THEN write down <u>two words</u> you have been learning and a short definition OR synonym.	
	<b>Geography: Weather and climate - Section 2: Development measures</b> Look at Section B. Use the Look, Cover, Write Check method to learn the two factors which affect.	
02/02/2024 Friday	<b>Science: Elements and Compounds (Section B):</b> Draw the structure of the atom labelling the subatomic particles. Use your knowledge from your classes to add the charges and the relative masses for each of them.	
	<b>Principal's Reading:</b> History	

## Year 7 Spring Term 1

You are expected to study the subject(s) shown on your timetable each day. Each day use **one page** of your exercise book to evidence your work.

Date	Subjects and Tasks	Signed by parents/ carers once complete
05/02/2024 Monday	<b>English:</b> You will need to use the full Knowledge Organiser to complete this task. A writer in a local newspaper said that the novel is 'full of hope, empathy and how it feels to be human.' Explain your own opinion of the story and whether you agree or disagree with this review. Make sure you explain why you believe this in as much detail as you can.	
	<b>Art:</b> Read <b>Section B</b> - using art keywords, answer the following questions in full sentences, you should also write out the question: 1. What type of art does Clare Youngs make? , 2. What media does she create her illustrations with?, 3. What did she train as?	
06/02/2024 Tuesday	<b>Music:</b> Ensembles can take many forms. Choose 3 from the following to find out more about and present in any way you prefer. String quartet, string quintet, piano trio, wind band, jazz band, recorder consort, brass band, flute choir.	
	<b>Drama:</b> Look at the key information about pantomime and in <b>Section B</b> . <b>Research</b> a pantomime and write out how it follows the characteristics and characters– mentioned in <b>Section B</b> . <i>cbeebies pantomime can be found on <b>iplayer</b>. There are also lots of other pantomime available on YouTube search <b>ITV Panto</b></i>	
07/02/2024 Wednesday	<b>Maths:</b> Explain why multiplying by 10 is <b>not the same</b> as “adding a zero”. Include in your explanation why you think some people might believe in just “adding a zero” all the time. Give examples. Next, answer these questions. <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div>1) <math>3.5 \times 10 =</math> _____</div> <div>2) <math>100 \times 0.6 =</math> _____</div> <div>3) <math>180 \div 100 =</math> _____</div> <div>4) <math>160 \div 10 =</math> _____</div> <div>5) <math>3.2 \times 100 =</math> _____</div> <div>6) <math>39 \div 10 =</math> _____</div> </div>	
	<b>DT Ping Pong:</b> Try to connect/ link each of the words in Section B. You could write a paragraph to include all of the keywords. Add images to help explain. <b>DT Keyring</b> Design and draw your own design for a workshop Apron to encourage the user to follow health and safety rules. <b>Food:</b> Create flash cards for the Tier 3 words. Test yourself, when you are confident you understand the word then focus on learning the ones that you are unsure of.	
08/02/2024 Thursday	<b>Bedrock:</b> Complete either one Bedrock lesson OR pre-tests/post tests activities until you earn an additional 20 points = a green 🟢 THEN write down <u>two words</u> you have been learning and a short definition OR synonym.	
	<b>Spanish:</b> Using Spring Page 1, answer the two questions in the Tier 1— Key Questions section in Spanish. Use the verbs/vocab provided in the tables to help you. Always include a verb to make your sentences complete. <u>Challenge:</u> Use some of the connectives to link your sentences together to make a short paragraph.	
09/02/2024 Friday	<b>Science: Reproduction (Section A):</b> Look, Cover, Write, Check the words in the Tier 3 vocabulary list.	
	<b>Principal's Reading:</b> PE	

## Year 7 Spring Term 2

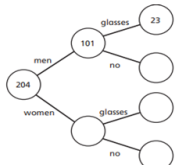

You are expected to study the subject(s) shown on your timetable each day. Each day use **one page** of your exercise book to evidence your work.

Date	Subjects and Tasks	Signed by parents/ carers once complete
19/02/2024 Monday	<b>English:</b> Before we move on to our next unit you should consolidate your understanding of 'A Monster Calls.' Write a mini book review to explain your thoughts and ideas about the story. Your review should include the following: A summary of the story, your opinions on the plot and characters and a mark out of 10 alongside an explanation. Try to include as many of the Tier 2 and 3 pieces of vocabulary as you can – highlight them to show where you've used them.	
	<b>History: Section C: Subject Specific</b> <b>TASK:</b> Use the timeline to create 4 flash cards on 4 of the key events mentioned. Stick them in your book in chronological (time) order. <b>CHECK:</b> Do your cards match the timeline?	
20/02/2024 Tuesday	<b>RE:</b> Choose 5 words from the tier 3 vocabulary list in <b>section A</b> for <b>Religious Studies</b> — <b>Is it possible to follow Prophet Muhammad's teachings in 21st century Britain? —Spring Term 2—</b> then put them into sentences to show you understand the definitions.	
	<b>PE:</b> Looking at Section B, create a 'Health Diary' that identifies everything you have done to improve your health & Fitness over the past week. Write each day in to the column and list what you did.	
21/02/2024 Wednesday	<b>Maths:</b> Look at Section A, write down the difference between <b>Commutative</b> and <b>Associative</b> . <b>Why is 30</b> not a factor of 10. List the <b>factors</b> of 10. List the first 4 <b>multiples</b> of 10. How do you find the <b>Quotient</b> in a number sentence/calculation? Can a cuboid be a <b>Polygon</b> ? Write down your reason for or against. Write three other words that mean <b>Frequency</b> . <i>Test yourself to make sure you know the meanings of these words, as your teacher will check your knowledge in the lesson.</i>	
	<b>Computing:</b> Create a <b>look cover write check</b> table for <b>FOUR</b> words of your choice from section A. Make sure you have learnt all definitions by the end.	
22/02/2024 Thursday	<b>Bedrock:</b> Complete either one Bedrock lesson OR pre-tests/post tests activities until you earn an additional 20 points = a green 🟢 THEN write down <u>two words</u> you have been learning and a short definition OR synonym.	
	<b>Geography: Weather and climate - Section 3: Key diagrams</b> Use two diagrams to explain how two types of rainfall occur.	
23/02/2024 Friday	<b>Science: Elements and Compounds (Section C):</b> The symbol for He is used as an example to show how to work out the number of subatomic particles. Please choose 5 other elements from the periodic table and state the number of protons, electrons and neutrons.	
	<b>Principal's Reading:</b> Art	



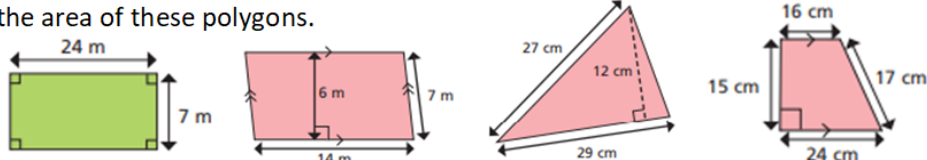
## Year 7 Spring Term 2

You are expected to study the subject(s) shown on your timetable each day. Each day use **one page** of your exercise book to evidence your work.

Date	Subjects and Tasks	Signed by parents/ carers once complete												
26/02/2024 Monday	<b>English SHAKESPEARE COMEDY. Section 1:</b> Create flashcards for the Tier 3 vocabulary with the definition on the back. On your flashcard, write down your own example or image to help you remember this key information. Once created, test yourself. When you get a definition correct put it in the ‘correct’ pile. If you get it wrong, put it in the ‘check again’ pile. Repeat until all cards are in the ‘correct’ pile. Flashcards should be stuck into your KO using an envelope.													
	<b>Art:</b> Read <b>Section A:</b> Make <b>flashcards</b> to remember the definition for the first 8 keywords. Once created, test yourself. When you get a date correct put it in the ‘correct’ pile. If you get it wrong, put it in the ‘check again’ pile. Repeat until all cards are in the ‘correct’ pile. Flashcards should be stuck into your KO using an envelope.													
27/02/2024 Tuesday	<b>Music:</b> : Read through <b>Section A</b> Create a set of flashcards with the keyword and symbol on one side and definition on the other. Once created, test yourself. When you get a date correct put it in the ‘correct’ pile. If you get it wrong, put it in the ‘check again’ pile. Repeat until all cards are in the ‘correct’ pile.													
	<b>Drama:</b> Learn the areas of the stage, then <b>draw from memory</b> labelling each area including the strongest and weakest positions, make sure you then <b>check and correct</b> .													
28/02/2024 Wednesday	<div><div><b>Maths:</b></div><div><div>Fill in the missing values on the Frequency Tree using the table.</div><div><table><tr><td></td><td>Men</td><td>Women</td></tr><tr><td>Glasses</td><td>23</td><td>31</td></tr><tr><td>No glasses</td><td>78</td><td>72</td></tr><tr><td>Total</td><td>101</td><td>103</td></tr></table></div><div>How many people do not wear glasses?</div></div><div><div></div><div><div><b>Do you need support?</b> Come to IT04 at lunch time and/or Log unto Sparx and type in the codes in SECTION C then watch the videos.</div></div></div></div>		Men	Women	Glasses	23	31	No glasses	78	72	Total	101	103	
		Men	Women											
Glasses	23	31												
No glasses	78	72												
Total	101	103												
<div><b>DT Ping Pong:</b> Draw 6 different handheld projects. ACCESS FM to do a product analysis looking at the difference in the handles.</div> <div><b>DT Keyring</b> Research and describe what the different types of saws are used for. Tenon Saw, Hack saw and Junior Hacksaw.</div> <div><b>Food:</b> For each section of the Eatwell Guide select 5 examples and explain which grip (section 2) you would use to cut that food. Give reasons why, add drawings to help you remember.</div>														
29/02/2024 Thursday	<b>Bedrock:</b> Complete either one Bedrock lesson OR pre-tests/post tests activities until you earn an additional 20 points = a green  THEN write down <u>two words</u> you have been learning and a short definition OR synonym.													
	<b>Spanish:</b> Using the Spring Page 2, make a word search for the Tier 1 nouns—aim to include 10+ of these words into your word search. Write the words into the word search in Spanish and then list the vocabulary in English at the side. See if a friend can then find your words! <u>Challenge:</u> Include the nouns from the previous page too!													
01/03/2024 Friday	<b>Science: Elements and Compounds (Section C):</b> Read through the information on number of formula. CO <sub>2</sub> is made up from 1 carbon and 2 oxygen. Please work out the number and name of each element for the following compounds: HCl, H <sub>2</sub> SO <sub>4</sub> , MgO, Li <sub>2</sub> O CaCl <sub>2</sub>													
	<b>Principal's Reading:</b> Spanish													


## Year 7 Spring Term 2

You are expected to study the subject(s) shown on your timetable each day. Each day use **one page** of your exercise book to evidence your work.

Date	Subjects and Tasks	Signed by parents/ carers once complete
04/03/2024 Monday	<b>English: Section 1 Key Vocabulary</b> For each Tier 2 word, create a frayer diagram with 1. definition 2. synonyms 3. draw an image 4. put it in an example sentence	
	<b>History: Section A: Key Vocabulary</b> <b>TASK:</b> Pick three tier 2 terms. For each one write three synonyms and three antonyms. E.g. <b>Peasant:</b> <i>Synonyms</i> —> farmer, worker, lower class <i>Antonyms</i> —> Knight, nobles, wealthy <b>CHECK:</b> Have you used the synonyms and antonyms correctly? Add any that you could not think of and correct spelling.	
05/03/2024 Tuesday	<b>RE:</b> 1) Read through section B ( <b>What were the key events in Prophet Muhammad's life?</b> ) - summarise each event into a maximum of 10 words. Choose your words carefully. Do not include words such as 'the, is, and, a, of' and similar words. Consider what the key events are in the Prophet's life. 2) Now <b>check your summary</b> of key events. Have you included words such as 'the, is, a, of'? If so, replace them with more meaningful key words in a different colour pen.	
	<b>PE:</b> Create a Poster advertising the benefits of exercise. It should include information, examples of good practice and maybe even a picture!	
06/03/2024 Wednesday	<b>Maths:</b> Find the area of these polygons. 	If you need support, log unto Sparx, click 'independent learning' and type in codes M390 M291 M610 M996
	<b>Computing:</b> Create a <b>look cover write check</b> table for <b>FOUR</b> words of your choice from <b>section A</b> . Make sure you by the end of your check you have learnt all four definitions.	
07/03/2024 Thursday	<b>Bedrock:</b> Complete either one Bedrock lesson OR pre-tests/post tests activities until you earn an additional 20 points = a green ? THEN write down <u>two words</u> you have been learning and a short definition OR synonym.	
	<b>Geography: Coasts - Section A: Key Vocabulary</b> Pick 3 words from tier 3 and create a sentence using each of them. Pick 3 words from tier 2 and create a sentence using each of them. E.g. Abrasion on the bed and banks of a river caused soil to wear away.	
08/03/2024 Friday	<b>Science: Elements and Compounds (Section A):</b> Look, Cover, Write, Check the words in the Tier 3 vocabulary list.	
	<b>Principal's Reading:</b> Maths	

## Year 7 Spring Term 2

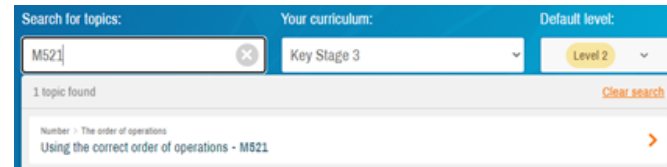
You are expected to study the subject(s) shown on your timetable each day. Each day use **one page** of your exercise book to evidence your work.

Date	Subjects and Tasks	Signed by parents/ carers once complete
11/03/2024 Monday	<b>English: Section 2 Key Knowledge</b> Create a bullet point list of key facts from the Elizabethan Era. Then answer the following questions: 1) which religious groups were in conflict? 2) what are privateers? 3) what was beginning that was making money for Britain at this time?	
	<b>Art: Read Section A and B key words:</b> Make <b>flashcards</b> to remember the definition for the last 3 keywords in <b>section A</b> and the 4 words in <b>section B</b> . Once created, test yourself. When you get a date correct put it in the 'correct' pile. If you get it wrong, put it in the 'check again' pile. Repeat until all cards are in the 'correct' pile. Flashcards should be stuck into your KO using an envelope.	
12/03/2024 Tuesday	<b>Music:</b> Find out the names of all the 'extra' woodwind instruments that you may see in an orchestra, in addition to the 4 that we have mentioned. See if you can see a link between the ones that don't feature all the time.	
	<b>Drama:</b> Writing in full sentences describing what the role (purpose) of the <b>Keywords</b> in <b>Tier 3 Section A</b> would have a in rehearsal or performance.	
13/03/2024 Wednesday	<b>Maths:</b> Calculate the mean of each set of data. Q1) 11 13 13 11      Q2) 11 13 17 11      Q3) 11 13 17 11 8      Q4) 1.2 1.4 1.4 1.5 1.0 1.8	
	<b>DT Ping Pong:</b> Design 4 different products made from smart materials and the information in <b>Section C</b> . <b>DT Keyring:</b> For the Tier 2 words, use read cover, write check and correct to learn the words and their definitions. <b>Food:</b> Link all the key vocabulary in section 1 the Eatwell Guide. Write this as a short paragraph. Challenge; include the information in section 3	
14/03/2024 Thursday	<b>Bedrock:</b> Complete either one Bedrock lesson OR pre-tests/post tests activities until you earn an additional 20 points = a green  THEN write down <u>two words</u> you have been learning and a short definition OR synonym.	
	<b>Spanish:</b> Using the Spring Page 2, learn the six conjugations of 'to study'. Write the verb out in Spanish and English. Then use the method Look/Cover/Write/Check to learn them from memory. <b>Challenge:</b> Use this verb in sentences along with the time – say when you study different subjects! E.g. <i>A las diez estudio inglés y a las once estudio arte.</i>	
15/03/2024 Friday	<b>Science: Energy (Section B):</b> Record what an energy store is. Make a song/rhyme/poem to help you remember the 8 energy stores.	
	<b>Principal's Reading:</b> Drama	

## Year 7 Spring Term 2


You are expected to study the subject(s) shown on your timetable each day. Each day use **one page** of your exercise book to evidence your work.

Date	Subjects and Tasks	Signed by parents/ carers once complete
18/03/2024 Monday	<b>English: Tier 2 Vocabulary</b> —Using your knowledge of the play so far, write 3 sentences about the play using all three words. Try to link to what you know of the society and characters in 'The Tempest'.	
	<b>History: Section A: Key Vocabulary</b> <b>TASK:</b> Pick three words from Tier 3, and two words from Tier 2. Write the definition then dual code them ( <i>add an image that represents what it is</i> ) <b>CHECK:</b> Cover the definitions and try to write them from memory using only your dual coding as a guide. Correct any errors.	
19/03/2024 Tuesday	<b>RE: Section C- Read this section.</b> Close your KO and create a mind map on the <b>5 pillars of Islam</b> . Once you have done this use the KO page to see if you have missed any information. Add any missing information in in a different colour pen.	
	<b>PE:</b> Research Task— Choose an activity from Section C. Research your chosen topic and write a speech, two thirds of an A4 page, that promotes the benefits of your choice.	
20/03/2024 Wednesday	<b>Maths:</b> Log onto Sparx. Click 'independent learning' on the bottom left of the page. Search 'M521' Complete the questions in your KO books. This is separate from your weekly maths homework. You must still complete your normal weekly Sparx homework.	
	<b>Computing:</b> Create flashcards for all the words in <b>section B</b> . Learn the definitions using the flashcards you have created.	
21/03/2024 Thursday	<b>Bedrock:</b> Complete either one Bedrock lesson OR pre-tests/post tests activities until you earn an additional 20 points = a green ? THEN write down <u>two words</u> you have been learning and a short definition OR synonym.	
	<b>Geography: Coast Section A: Key vocabulary</b> Select three barriers– one socio-economic, one historical and one physical. Explain why each would have an impact on the Gross National Income (GNI).	
22/03/2024 Friday	<b>Science: Energy (Section C):</b> Write a definition of renewable and non renewable. Give three examples of each. Write which you think is better and why.	
	<b>Principal's Reading:</b> Geography	



## Year 7 Spring Term 2

You are expected to study the subject(s) shown on your timetable each day. Each day use **one page** of your exercise book to evidence your work.

Date	Subjects and Tasks	Signed by parents/ carers once complete
25/03/2024 Monday	<b>English: Section 3 Key Connections.</b> Read the 'Characters are constructs' section. Think back to your study of 'A Monster Calls'. Use the checklist to write a sentence about Conor or the Monster.	
	<b>Art:</b> Create a <b>fact file</b> about colour theory. Use as many keywords from section A as you can.	
26/03/2024 Tuesday	<b>Music:</b> : Write a paragraph explaining how you predict the violin may change and develop in the future. Consider it's shape and any advancements that might be made in terms of improving the sound.	
	<b>Drama:</b> Write a detailed paragraph about how your group rehearsed and staged your extract from <b>Alice in Wonderland</b> . How did you use the stage space? How did you show your character?	
27/03/2024 Wednesday	<b>Maths:</b> Answer these questions in your KO. 1) State the highest common factor of 30 and 20    2) State the lowest common multiple of 30 and 20 3) State the highest common factor of 45 and 30 and 60	
	<b>DT Ping Pong:</b> Use the tier 3 vocabulary and section 2 to explain how anthropometrics and ergonomics affect your travel to school. It could be the car door handle, the car seat, the bus stop seat etc. How many times does your body physically interact with its surroundings? <b>DT Keying:</b> Write a sentence to describe what the difference is between a ferrous and none ferrous metal and give examples of each type. <b>Food:</b> Try to connect/ link each of the Tier 3 words together from both Autum1 and Autumn 2 knowledge organisers. You could write a paragraph to include all of the keywords. e.g.; <u>Nutrients</u> can be <u>micro-nutrient</u> or <u>macro-nutrient</u> . <u>Macronutrients</u> are <u>protein</u> ...	
28/03/2024 Thursday	<b>Bedrock:</b> Complete either one Bedrock lesson OR pre-tests/post tests activities until you earn an additional 20 points = a green  THEN write down <u>two words</u> you have been learning and a short definition OR synonym.	
	<b>Spanish: Using Spring Page 2,</b> answer all three of the questions in the Tier 1—Key Questions section in Spanish. Use the verbs/vocab provided in the tables to help you. Always include a verb to make your sentences complete. Use some of the connectives to link your sentences together to make a short paragraph. <b>Challenge:</b> Refer to the 3rd person and describe a friend too!	
29/03/2024 Friday	<b>Science: Energy (Section B):</b> Answer these questions: What do we mean by a device? What does energy efficiency mean? Draw the useful and non useful energy transfers that happen in a car.	
	<b>Principal's Reading:</b> Computing	

# Reading Log

Use this reading log to record the books you read, how long you have spent reading and Bedrock lessons.

Week starting	Mon	Tues	Weds	Thurs	Fri	Sat	Sun	Total no. of minutes read	Bedrock lesson complete?	Parent/Carer Signature
08/01/2024										
15/01/2024										
22/01/2024										
29/01/2024										
05/02/2024										
19/02/2024										
26/02/2024										
04/03/2024										
11/03/2024										
18/03/2024										
25/03/2024										

**'The more that you read, the more things you will know.  
The more that you learn, the more places you'll go.'**





# Bedrock

Use this page to note down what days you have your Library lesson and what days you can access Bedrock without being locked out by the 24 hour drip feed...

Don't forget the drip feed! **24 hour block** between lessons



Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Monday morning  
Bedrock reports  
sent to your  
English teacher(s)  
to check your  
progress

Add to the grid when you have your Library lesson  
Shade with a pencil the days you can't do Bedrock due to the 24 hour block  
Highlight/colour the days you can complete your Bedrock

Remember that the weekly minimum is:

1 x Bedrock Lesson (ideally during library lesson)

1 x Bedrock homework

= 2 per week

**Aim to get everything done in plenty of time to grow your brain and get plenty of prizes for your progress :)**

# The Periodic Table of Elements

1		2												3		4	5	6	7	0
<div>Key</div> <div>relative atomic mass</div> <div>atomic symbol</div> <div>name</div> <div>atomic (proton) number</div>																	<div>1</div> <div>H</div> <div>hydrogen</div> <div>1</div>	<div>4</div> <div>He</div> <div>helium</div> <div>2</div>		
<div>7</div> <div>Li</div> <div>lithium</div> <div>3</div>	<div>9</div> <div>Be</div> <div>beryllium</div> <div>4</div>											<div>11</div> <div>B</div> <div>boron</div> <div>5</div>	<div>12</div> <div>C</div> <div>carbon</div> <div>6</div>	<div>14</div> <div>N</div> <div>nitrogen</div> <div>7</div>	<div>16</div> <div>O</div> <div>oxygen</div> <div>8</div>	<div>19</div> <div>F</div> <div>fluorine</div> <div>9</div>	<div>20</div> <div>Ne</div> <div>neon</div> <div>10</div>			
<div>23</div> <div>Na</div> <div>sodium</div> <div>11</div>	<div>24</div> <div>Mg</div> <div>magnesium</div> <div>12</div>											<div>27</div> <div>Al</div> <div>aluminium</div> <div>13</div>	<div>28</div> <div>Si</div> <div>silicon</div> <div>14</div>	<div>31</div> <div>P</div> <div>phosphorus</div> <div>15</div>	<div>32</div> <div>S</div> <div>sulfur</div> <div>16</div>	<div>35.5</div> <div>Cl</div> <div>chlorine</div> <div>17</div>	<div>40</div> <div>Ar</div> <div>argon</div> <div>18</div>			
<div>39</div> <div>K</div> <div>potassium</div> <div>19</div>	<div>40</div> <div>Ca</div> <div>calcium</div> <div>20</div>	<div>45</div> <div>Sc</div> <div>scandium</div> <div>21</div>	<div>48</div> <div>Ti</div> <div>titanium</div> <div>22</div>	<div>51</div> <div>V</div> <div>vanadium</div> <div>23</div>	<div>52</div> <div>Cr</div> <div>chromium</div> <div>24</div>	<div>55</div> <div>Mn</div> <div>manganese</div> <div>25</div>	<div>56</div> <div>Fe</div> <div>iron</div> <div>26</div>	<div>59</div> <div>Co</div> <div>cobalt</div> <div>27</div>	<div>59</div> <div>Ni</div> <div>nickel</div> <div>28</div>	<div>63.5</div> <div>Cu</div> <div>copper</div> <div>29</div>	<div>65</div> <div>Zn</div> <div>zinc</div> <div>30</div>	<div>70</div> <div>Ga</div> <div>gallium</div> <div>31</div>	<div>73</div> <div>Ge</div> <div>gemanium</div> <div>32</div>	<div>75</div> <div>As</div> <div>arsenic</div> <div>33</div>	<div>79</div> <div>Se</div> <div>selenium</div> <div>34</div>	<div>80</div> <div>Br</div> <div>bromine</div> <div>35</div>	<div>84</div> <div>Kr</div> <div>krypton</div> <div>36</div>			
<div>85</div> <div>Rb</div> <div>rubidium</div> <div>37</div>	<div>88</div> <div>Sr</div> <div>strontium</div> <div>38</div>	<div>89</div> <div>Y</div> <div>yttrium</div> <div>39</div>	<div>91</div> <div>Zr</div> <div>zirconium</div> <div>40</div>	<div>93</div> <div>Nb</div> <div>niobium</div> <div>41</div>	<div>96</div> <div>Mo</div> <div>molybdenum</div> <div>42</div>	<div>[98]</div> <div>Tc</div> <div>technetium</div> <div>43</div>	<div>101</div> <div>Ru</div> <div>ruthenium</div> <div>44</div>	<div>103</div> <div>Rh</div> <div>rhodium</div> <div>45</div>	<div>106</div> <div>Pd</div> <div>palladium</div> <div>46</div>	<div>108</div> <div>Ag</div> <div>silver</div> <div>47</div>	<div>112</div> <div>Cd</div> <div>cadmium</div> <div>48</div>	<div>115</div> <div>In</div> <div>indium</div> <div>49</div>	<div>119</div> <div>Sn</div> <div>tin</div> <div>50</div>	<div>122</div> <div>Sb</div> <div>antimony</div> <div>51</div>	<div>128</div> <div>Te</div> <div>tellurium</div> <div>52</div>	<div>127</div> <div>I</div> <div>iodine</div> <div>53</div>	<div>131</div> <div>Xe</div> <div>xenon</div> <div>54</div>			
<div>133</div> <div>Cs</div> <div>caesium</div> <div>55</div>	<div>137</div> <div>Ba</div> <div>barium</div> <div>56</div>	<div>139</div> <div>La*</div> <div>lanthanum</div> <div>57</div>	<div>178</div> <div>Hf</div> <div>hafnium</div> <div>72</div>	<div>181</div> <div>Ta</div> <div>tantalum</div> <div>73</div>	<div>184</div> <div>W</div> <div>tungsten</div> <div>74</div>	<div>186</div> <div>Re</div> <div>rhenium</div> <div>75</div>	<div>190</div> <div>Os</div> <div>osmium</div> <div>76</div>	<div>192</div> <div>Ir</div> <div>iridium</div> <div>77</div>	<div>195</div> <div>Pt</div> <div>platinum</div> <div>78</div>	<div>197</div> <div>Au</div> <div>gold</div> <div>79</div>	<div>201</div> <div>Hg</div> <div>mercury</div> <div>80</div>	<div>204</div> <div>Tl</div> <div>thallium</div> <div>81</div>	<div>207</div> <div>Pb</div> <div>lead</div> <div>82</div>	<div>209</div> <div>Bi</div> <div>bismuth</div> <div>83</div>	<div>[209]</div> <div>Po</div> <div>polonium</div> <div>84</div>	<div>[210]</div> <div>At</div> <div>astatine</div> <div>85</div>	<div>[222]</div> <div>Rn</div> <div>radon</div> <div>86</div>			
<div>[223]</div> <div>Fr</div> <div>francium</div> <div>87</div>	<div>[226]</div> <div>Ra</div> <div>radium</div> <div>88</div>	<div>[227]</div> <div>Ac*</div> <div>actinium</div> <div>89</div>	<div>[261]</div> <div>Rf</div> <div>rutherfordium</div> <div>104</div>	<div>[262]</div> <div>Db</div> <div>dubnium</div> <div>105</div>	<div>[266]</div> <div>Sg</div> <div>seaborgium</div> <div>106</div>	<div>[264]</div> <div>Bh</div> <div>bohrium</div> <div>107</div>	<div>[277]</div> <div>Hs</div> <div>hassium</div> <div>108</div>	<div>[268]</div> <div>Mt</div> <div>meitnerium</div> <div>109</div>	<div>[271]</div> <div>Ds</div> <div>dametadtium</div> <div>110</div>	<div>[272]</div> <div>Rg</div> <div>roentgenium</div> <div>111</div>	<div>[285]</div> <div>Cn</div> <div>copernicium</div> <div>112</div>	<div>[286]</div> <div>Nh</div> <div>nihonium</div> <div>113</div>	<div>[289]</div> <div>Fl</div> <div>ferovium</div> <div>114</div>	<div>[289]</div> <div>Mc</div> <div>moscovium</div> <div>115</div>	<div>[293]</div> <div>Lv</div> <div>livemorium</div> <div>116</div>	<div>[294]</div> <div>Ts</div> <div>tennessine</div> <div>117</div>	<div>[294]</div> <div>Og</div> <div>oganesson</div> <div>118</div>			

## A Monster Calls: The Green Man *by Ellen Castelow (Historic UK.com)*

**Year 7 English Principal's Reading**  
**Week Beginning 08/01/24**

Glance upwards as you approach or enter many of Britain's great cathedrals and churches, and it is more than likely you will catch sight of the Green Man gazing looking down at you.

But who is this strange green figure, surrounded by foliage, often with leaves spilling forth from his mouth?

The name 'Green Man' was first used by Lady Raglan in March 1939 in an article she wrote for the 'Folklore' journal; before this, they had been known just as 'foliate heads' and no-one had paid them any particular attention. Green Men are usually found on religious buildings but not always: the Green Man is also a popular name for English inns and pubs! However the Green Man is an example of how images from the Old Religion were brought into Christian churches before the Reformation, and is one of the most ancient, pagan symbols to be found in the Christian church.

Pre-Christian pagan traditions and superstitions, particularly those related to nature and tree worship, were still influential in the early Middle Ages. It is therefore perhaps not surprising that the Green Man seems to appear most often in places where there are stretches of ancient woodland, for example in Devon

and Somerset and on the edges of the forest areas of Yorkshire and the Midlands.

Lady Raglan suggested that in antiquity, the Green Man was 'the central figure in the May Day celebrations throughout Northern and Central Europe'. As the Green Man is also portrayed with acorns and hawthorn leaves, symbols of fertility in medieval times, this would seem to reinforce the association with spring.

Related figures such as Jack in the Green and Green George appear much later in our folklore. The earliest record of a Jack in the Green appears in The Morning Chronicle and London Advertiser in 1775. However the common theme which runs through these figures would seem to be that of death and rebirth, and the Green that means life.

Perhaps then, the Green Man appears on our medieval churches as a symbol of rebirth and resurrection, tying together the old ancient pagan symbols associated with spring with the Christian faith. Or perhaps the medieval stonemasons were just hedging their bets and incorporating the Green Man into the fabric of the religious buildings as a safety measure, to make doubly sure of the coming of spring and a plentiful harvest!



### Questions to answer:

1. Where are many depictions of the Green Man found in Britain today?
2. What did Lady Raglan suggest that in antiquity the green man was?
3. What might the Green Man symbolise?



## Amazon rainforest reaching tipping point, researchers say

The Amazon rainforest is moving towards a "tipping point" where trees may die off en masse, say researchers.

A study suggests the world's largest rainforest is losing its ability to bounce back from damage caused by droughts, fires and deforestation.

Large swathes could become sparsely forested savannah, which is much less efficient than tropical forest at sucking carbon dioxide from the air. The giant forest traps carbon that would otherwise add to global warming.

But previous studies have shown that parts of the Amazon are now emitting more carbon dioxide than can be absorbed. "The trees are losing health and could be approaching a tipping point - basically, a mass loss of trees," said Dr Chris Boulton of the University of Exeter. The findings, based on three decades of satellite data, show alarming trends in the "health" of the Amazon rainforest. There are signs of a loss of resilience in more than 75% of the forest, with trees taking longer to recover from the effects of droughts largely driven by climate change as well as human impacts such as deforestation and fires.

A vicious cycle of damage could trigger "dieback", the scientists said. And while it's not clear when that critical point might be reached, the implications for climate change, biodiversity and the local community would be "devastating". Once the process begins they predict it could be a matter of decades before a "significant chunk" of the Amazon is transformed into savannah - a vastly different ecosystem made up of a mixture of grassland and trees.

"The Amazon stores lots of carbon and all of that would be released into the atmosphere, which would then further contribute to increasing temperatures and have future effects on global mean temperatures," Dr Boulton said, adding that stopping deforestation would go some way to addressing the problem. Around a fifth of the rainforest has already been lost, compared to pre-industrial levels, they said.

The research was carried out by the University of Exeter, the Potsdam Institute for Climate Impact Research (PIK) and Technical University of Munich.

"Deforestation and climate change are likely to be the main drivers of this decline," said Prof Niklas Boers of PIK and the Technical University of Munich.

Year 7 Science Principal's Reading  
Week Beginning 15/01/24



### Questions to answer:

1. What is causing damage to the world's largest rainforest?
2. How long has it been predicted before a chunk of the Amazon rainforest is transformed into a savannah?
3. How many species is the Amazon rainforest home to?



## The Last Supper

Jesus entered Jerusalem on a donkey during the Feast of Unleavened Bread, or Passover (a Jewish celebration of the freedom of the Israelites). He was welcomed by large crowds, although there were also many people who wanted to see him dead because he claimed to be the Son of God and challenged religious authority.



Jesus sent two disciples, Peter and John, ahead with instructions on how to prepare the special meal. Following his entry into the city, Jesus and the ten remaining disciples went to the room where they all sat around the large table to share the Last Supper.

It was a very dangerous time for Jesus because of the bad feeling towards him so the disciples felt anxious; this caused them to remain quiet during the meal until Jesus broke the silence and said, "Truly I tell you, one of you will betray me." All of his disciples were aghast, wondering which of them it would be – each believing that it could not possibly be them.

Jesus continued to say, "The one who dips his bread into the bowl with me will betray me. I will die, just as is written, but the man who betrays me will feel sorry forever." Then Judas, the one who would betray him, said, "Surely you don't mean me, Rabbi?" to which Jesus replied, in a hushed voice, "You have said so."

Judas, feeling discomfited and nervous, was pleased that the other disciples had not heard the conversation. He did not wish to think of the consequences.



At this point, Jesus thanked God for the bread and broke it to share, explaining,

"This is my body which is for you: this do in remembrance of me." Following this, he took a chalice (a large cup or goblet) of red wine and announced,

"This is my blood: this do in remembrance of me."

Everyone took a sip as the cup was passed around. This act is commemorated in the Christian Church today in the form of the Eucharist, a sacrament (regarded in the Christian Church as imparting spiritual grace) in which bread and wine are consecrated (made sacred) and consumed.

The meal continued with Jesus talking and celebrating with his disciples. After some time, Jesus moved to a different area of the room where he exchanged his clothing for uncomplicated servant clothes – a simple towel wrapped around his body – before filling a bowl with water. In an act of servitude to them, he used this to wash his disciple's feet before drying them with the towel he was wearing.

The disciples were astounded by this lowly act, because to them, Jesus was the King of Kings not a servant as his actions were suggesting. Due to this,

**Year 7 Religious Studies Principal's Reading**

**Week Beginning 22/01/24**

Peter fused to let Jesus wash his feet. "If you don't allow me to wash your feet, you can no longer be with me," Jesus explained. Peter replied that, if that was the case, then Jesus could wash his hands and head as well as his feet. Jesus responded that he only needed to wash his feet for his whole body to become clean so Peter conceded and agreed to let Jesus wash his feet. As Jesus completed his task of washing the disciples' feet, he asked them, "to love one another as I have loved you," before changing back into his normal clothes. He returned to the table where the disciples waited, eager to understand the unusual deed they had just witnessed.

As they prayed together, Jesus prepared the disciples for his departure, telling them that they were his, "friends and not servants." Jesus then asked them, "Do you understand what I have done for you? You call me 'Teacher' and 'Lord' and that is who I am. Now that I have washed your feet, you can wash one another's feet." Through the significance of his actions, Jesus tried to share an important lesson with his disciples about the importance of acting compassionately towards one another and that everyone should be treated equally.



Questions: 1) How did Jesus enter Jerusalem and why was he received in different ways by different people?

2) What did Jesus tell the disciples during the meal that was so important?

3) Why do Christians take part in Holy Communion services today and how do you think it impacts their lives?

## Is Mansa Musa the richest man who ever lived?

While Europe was trading with the East along the Silk Road, the wealthiest man in history was coming into power in Africa. Learn more about him in the article below.

### Is Mansa Musa the richest man who ever lived?

Amazon founder Jeff Bezos is the richest man in the world, according to the 2019 Forbes billionaires' list with an estimated fortune of £99bn. But he is by no means the richest man of all time. That title is believed to belong to **Mansa Musa**, the 14th Century West African ruler who was so rich his generous handouts wrecked an entire country's economy. "Contemporary accounts of Musa's wealth are so breathless that it's almost impossible to get a sense of just how wealthy and powerful he truly was," Rudolph Butch Ware, associate professor of history at the University of California, told the BBC. "In 2012, his wealth was estimated to have been worth \$400bn if converted into today's currency. Some historians even say it is impossible to put a number on the wealth as it is even larger.

Mansa Musa was born in 1280 into a family of rulers. His brother, Mansa Abu-Bakr, ruled the empire until 1312, when he abdicated to

go on an expedition. According to 14th Century Syrian historian Shibab al-Umari, Abu-Bakr was obsessed with the Atlantic Ocean and what lay beyond it. He reportedly embarked on an expedition with a fleet of 2,000 ships and thousands of men, women and slaves. They sailed off, never to return. In any case, Mansa Musa inherited the kingdom he left behind. Under his rule, the kingdom of Mali grew significantly. He took over 24 cities, including Timbuktu. The kingdom stretched for about 2,000 miles, and during his reign the empire of Mali accounted for half of the world's gold according to the British Museum.

There is no doubt that Mansa Musa spent, or wasted, a lot of gold during his pilgrimage to Cairo during his reign. But it was this excessive generosity that also caught the eyes of the world. Mansa Musa had put Mali and himself on the map, quite literally. In a Catalan Atlas map from 1375, a drawing of an African king sits on a golden throne atop Timbuktu, holding a piece of gold in his hand. Mansa Musa returned from his pilgrimages with several Islamic scholars, including direct descendants of the prophet Muhammad and an Andalusian poet and architect by the

**Year 7 History Principal's Reading**  
**Week Beginning 29/01/24**

name of Abu Es Haq es Saheli, who is widely credited with designing the famous Djinguereber mosque. The king reportedly paid the poet 200 kg (440lb) in gold, which in today's money would be £6.3m! In addition to encouraging the arts and architecture, he also funded literature and built schools, libraries and mosques. Timbuktu soon became a centre of education and people travelled from around the world to study at what would become the Sankore University.

After his death, his sons rule the empire but it had become too large and so they broke it down into smaller empires which made it much weaker. The empire however did not last, and was finally brought to a close with the increase of European traders.

### Questions to answer:

1. What is the text about? Summarise it in 20 words.
2. What does the word empire mean? What does it make you think of Mansa Musa?
3. How do you picture the setting and atmosphere of the Mali Empire?
4. Why did the Mali Empire lose its power?



## Gender and Sport

At the first modern Olympic Games, held in 1896 in Athens, there wasn't a single female competitor. When the 2020 Games kicked off in Tokyo, nearly half of the athletes were women.

Tokyo marks a "turning point" for the elite international sporting competition as the most gender-equal Olympics in the games' history, organizers said, with women accounting for nearly 49% of the 11,090 athletes. That's up from 45% at the last games in 2016 in Rio, 23% at the 1984 Games in Los Angeles, 13.2% at the 1964 Games in Tokyo, and 2.2% at the 1900 Games in Paris -- the first to have female athletes.

When the games return to Paris in 2024, there is anticipated to be full gender parity, with the same number of female athletes as male athletes.

The milestone comes as the 2020 Games have sparked a conversation around the needs of mothers in particular, regarding accommodations around pregnancy, breastfeeding and child care and as scandals involving the abuse and harassment of female athletes continue to plague sports globally.

In the years leading up to the Tokyo Olympics -- which, had been delayed due to the coronavirus pandemic -- the International Olympic Committee has been working toward achieving more gender equity in terms of athlete quotas and event programming.

### Deliberate action

The IOC was "very deliberate" about working with international sports federations, which are in charge of their discipline's qualifying procedures, to increase the number of female athletes in 2020, IOC Sports Director Kit McConnell told ABC News.

"We got the overall number of athletes down from Rio to Tokyo, but even in getting the overall number down, we increased the number of women's athletes," he said.

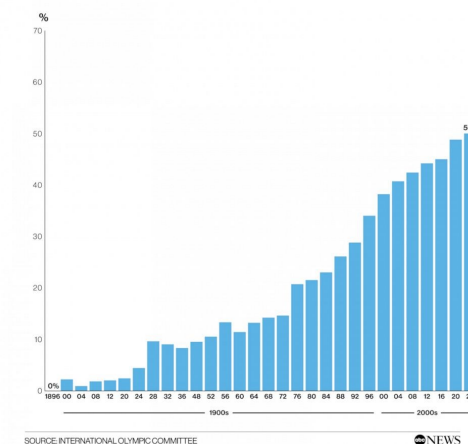
For the first time, each team participating had at least one female and one male athlete, and the 2020 Games featured new events for women and more mixed-gender teams in an attempt at greater gender equity within sports.

Some events have been dropped for men and added for women in boxing, canoe slalom and rowing, and two more women's teams competed in water polo in Tokyo than in Rio, for 10 women's teams and 12 men's teams total. In swimming, the 1,500-metre freestyle -- an event only men previously competed in at the Olympics -- was also added for women. The five sports debuting at Tokyo -- karate, skateboarding, speed climbing, surfing and three-on-three basketball -- all had women's events.

### Year 7 PE Principal's Reading

Week Beginning 05/02/24

Women's Participation in the Summer Olympics



### Questions to answer:

- 1) How many competitors were there at the first Modern Olympic Games held in Athens in 1896?
- 2) When the Games return to Paris in 2024, what is hoped will happen?
- 3) Name the five sports making their first appearance at the Tokyo Olympic Games.

## Typography in Art

Typography is the art and technique of arranging type to make written language readable and appealing when displayed.

As one of the first and fundamental forms of communication, writing and typography trace their roots even back to the times when cave paintings used symbols as a form of language. As each civilization advanced, their need for communication became more complex; from Egyptian hieroglyphics with symbols to Ancient Greeks who used the alphabet.

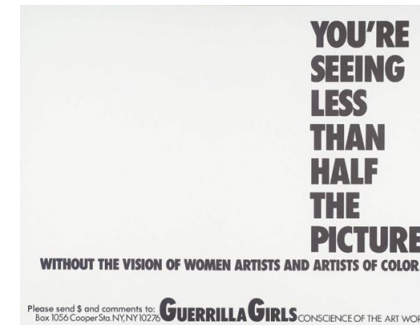
The most important point in the history of modern typography is the invention of the moveable printing press in the 15th century, by Johannes Gutenberg. After this moment everything changed; books could be published and distributed on a large-scale, education became more accessible and news and advertisements could be created and read.

Typography is often used in modern art and design. It is not simply text on paper or a set of letters, it can be an arrangement of words, a description or a statement.

Sometimes artists use words in their art to protest against something or make a change. *Make Art Not War* is a big square painting by the artist Bob and Roberta Smith. It's made on two wooden panels which the artist found in the rubbish! The artist says that his father, who was a soldier in the Second World War, told him 'Make art, not war. Don't hate, draw'. His father's words inspired him to make art that is anti-war.

Have you heard of the Guerrilla Girls? They're a group of female artists but no one knows who they are because they wear Gorilla masks to hide their faces. Their artwork fights against racism and sexism. They made the poster called You're Seeing Less Than Half The Picture because they believe that art should be by all kinds of people. This includes women and people of colour. They're speaking to the art world which at the time (and even today) was not diverse enough.

**Year 7 Art Principal's Reading**  
**Week Beginning 19/02/24**



### Questions to answer:

1. Write a short definition for typography.
2. Why was the invention of the printing press so important?
3. How has typography been used in artworks?

## Tiempo Libre



### El parque (A1)

Me llamo Pedro y hoy quiero hablar del parque que hay junto a mi casa. Yo me divierto todos los días en el parque. Allí veo las palomas comiendo y bebiendo agua. También veo pájaros de colores en los árboles. Yo voy al parque a las cinco de la tarde, cuando termino los deberes de la escuela. Allí veo a mi amigo Juan y a mi amigo Luis. Con ellos juego al escondite y a otros juegos muy entretenidos. Luis se va más temprano del parque porque tiene que ir a la escuela de música a aprender a tocar el piano.

Mi padre también va al parque a hacer deporte. Él corre durante una hora por el parque después de trabajar. Mi madre solo va los fines de semana porque acaba tarde de trabajar. Ella se sienta siempre en el mismo banco y yo juego mientras con mis amigos. Por la mañana cruzo el parque para ir al colegio, pero no me entretengo para no llegar tarde a clase. De camino al colegio veo al guarda del parque y siempre me da un caramelo de fresa.

#### Ayuda—Vocabulary to help!

Hay—there is

Junto—next to

Con ellos—with them

El escondite—hide and seek

Temprano—early

Corre—he/she runs

Después de trabajar—after work

Acaba/termine—finishes

Cruzo—I cross

De camino—on the way

Guarda—guard

Source: [El parque \(A1\) - Texto en español \(lingua.com\)](#)

Year 7 Spanish Principal's Reading

Week Beginning 26/02/24

#### Questions to answer in English:

1. Where does the boy in the text go and how often?
2. What/ who does he see in the park?
3. What time does he go to the park?
4. What is he learning at the music school?
5. What do his mum and dad do at the park?

## The Father of Algebra!

One of the first Directors of the House of Wisdom in Bagdad in the early 9th Century was an outstanding Persian Mathematician called Muhammad Al-Khwarizmi. He oversaw the translation of the major Greek and Indian mathematical and astronomy works (including those of Brahmagupta) into Arabic, and produced original work which had a lasting influence on the advancement of European mathematics.

The word “algorithm” is derived from the Latinization of his name, and the word “algebra” is derived from the Latinization of “al-jabr”, part of the title of his most famous book, in which he introduced the fundamental algebraic methods and techniques for solving equations.

Al-Khwarizmi’s other important contribution was algebra, a word

derived from the title of a mathematical text he published in about 830 called “Al-Kitab al-mukhtasar fi hisab al-jabr wa’l-muqabala” (“The Compendious Book on Calculation by Completion and Balancing”). Al-Khwarizmi wanted to go from the specific problems considered by the Indians and Chinese to a more general way of analysing problems, and in doing so he created an abstract mathematical language which is used across the world today.

His book is considered the foundational text of modern algebra, although he did not employ the kind of algebraic notation used today (he used words to explain the problem, and diagrams to solve it). But the book provided an exhaustive account of solving polynomial equations up to the second degree, and introduced for the

first time the fundamental algebraic methods of “reduction” (rewriting an expression in a simpler form), “completion” (moving a negative quantity from one side of the equation to the other side and changing its sign) and “balancing” (subtraction of the same quantity from both sides of an equation, and the cancellation of like terms on opposite sides).

In particular, Al-Khwarizmi developed a formula for systematically solving quadratic equations (equations involving unknown numbers to the power of 2, or  $x^2$ ) by using the methods of completion and balancing to reduce any equation to one of six standard forms, which were then solvable. He described the standard forms in terms of “squares” (what would today be “ $x^2$ ”), “roots” (what would today be “ $x$ ”) and “numbers.” Al-

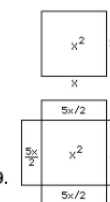
### Year 7 Maths Principal’s Reading

Week Beginning 04/03/24

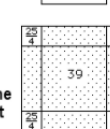
Khwarizmi is usually credited with the development of lattice (or sieve) multiplication method of multiplying large numbers, a method algorithmically equivalent to long multiplication. His lattice method was later introduced into Europe by Fibonacci.

To solve the equation  $x^2 + 10x = 39$  by Al-Khwarizmi’s “completing the square” method:

Start with a square of side  $x$  (which therefore represents  $x^2$ ).



Add to this  $10x$  by adding 4 rectangles of length  $x$ , and width  $10/4$ . Each small rectangle has an area  $10x/4$  (or  $5x/2$ ), total  $10x$ . We know this has a total area of 39.



Complete the square by adding 4 little squares with side  $5/2$  (area of each  $25/4$ ). The outside square therefore has an area of  $39 + (4 \times 25/4) = 39 + 25 = 64$ . The sides of the outside square are therefore 8. But each side is of length  $x + 5/2 + 5/2$ , so  $x + 5 = 8$ , giving  $x = 3$ .



Muhammad Al-Khwarizmi (c.780-850 CE)

### Questions to answer:

- 1) Who is the Father of Algebra?
- 2) What was the title of the Mathematical text he published in 830?
- 3) What term do we use today to describe “roots”?
- 4) In your own words, how would you explain this text to someone else?



# Jabberwocky, by Lewis Carroll

Year 7 Drama Principal's Reading  
Week Beginning 11/03/24

'Twas brillig, and the  
slithy toves  
Did gyre and gimble in  
the wabe;  
All mimsy were the  
borogoves,  
And the mome raths  
outgrabe.

And as in uffish  
thought he stood,  
The Jabberwock, with  
eyes of flame,  
Came whiffling through  
the tulgey wood,  
And burbled as it  
came!

"Beware the Jabber-  
wock, my son!  
The jaws that bite, the  
claws that catch!  
Beware the Jubjub  
bird, and shun  
The frumious Bander-  
snatch!"

One, two! One, two!  
And through and  
through  
The vorpal blade went  
snicker-snack!  
He left it dead, and  
with its head  
He went galumphing  
back.

He took his vorpal  
sword in hand:  
Long time the manx-  
ome foe he sought—  
So rested he by the  
Tumtum tree,  
And stood awhile in  
thought.

"And hast thou slain  
the Jabberwock?  
Come to my arms, my  
beamish boy!  
O frabjous day! Cal-  
looh! Callay!"

"Jabberwocky" is a **nonsense poem** written by Lewis Carroll about the killing of a creature named "the Jabberwock".

It was included in his 1871 novel *Through the Looking-Glass*, the sequel to *Alice's Adventures in Wonderland* (1865). The book tells of Alice's adventures within the back-to-front world of Looking-Glass Land.

In an early scene in which she first encounters the chess piece characters White King and White Queen, Alice finds a book written in a seemingly unintelligible language. Realising that she is travelling through an inverted world, she recognises that the verses on the pages are written in mirror-writing. She holds a mirror to one of the poems and reads the reflected verse of "Jabberwocky". She finds the nonsense verse as puzzling as the odd land she has passed into, later revealed as a dreamscape.

"Jabberwocky" is considered one of the greatest nonsense poems written in English.[2][3] Its playful, whimsical language has given English nonsense words and neologisms (a newly coined word or expression) such as "galumphing" and "chortle".



## Questions to answer:

1. As you read circle words and phrases you do not know or understand. What words are the similar to?
2. Sometimes the sound of a word reminds of you of another word and gives you a clue to its meaning. For each of the 'nonsense' words, write down what you think it might mean, and which other word(s) it reminds you of.

## Lake Malawi

I have always harbored a wish to see the great Lake Malawi for myself and if possible, catch a glimpse of the brilliant array of fish that live here.

If you've ever been to a pet store, chances are you've seen a Malawi cichlid swimming by so beautifully in some fish tank. Malawi cichlids are popular around the world because they add so much life and color to tropical freshwater aquariums everywhere. Nothing compares to the wild patterns and intense colors of these rare tropical fish.

More than a thousand species of African cichlid live in Lake Malawi, and of these, several hundred are endemic (only found in that location). At 300 miles long and almost 300 miles wide, Lake Malawi is one of the largest in Africa, boasting a unique aquatic ecosystem that contributes to such a diverse palette of fish life. Today, catching and collecting aquarium fish remains a small but regular industry for those who live near Lake Malawi.

I spent a good day splashing among the marvelous fish of Lake Malawi as they swam contentedly in their native habitat. I loved the dream-like sensation of plunging myself into the world's original freshwater aquarium and meeting

one fish after another, and all of them so different.

After a long and indulgent snorkeling excursion, I visited the Red Zebra Lodge near the town of Salima on the lake's western shore, where I witnessed the methodical collection of some 150 species of Malawi cichlids. The colors of these fish absolutely blew me away — pale pink, zebra-striped, iridescent purple, flaming orange and shimmering blue — and they were kept in some 200 fish tanks in a brick warehouse where they were readied for export to the United Kingdom, Germany, China, and beyond.

When traveling, there exists that certain moment when you reach the other side of the world and stumble upon the great reveal — for instance, how the *Mona Lisa* is actually quite small, or how (if they wanted to) wild elephants could destroy your car in a single stomp. Travel grants us the truth of places and things, and at Lake Malawi, I encountered the truth of harmless hobby fish tanks: that so many of their leading stars come from this beautiful lake in Malawi.

I was glad to see these fish for myself in their native home. I have said it again and again—how nothing compares to seeing any animal inside its

### Year 7 Geography Principal's Reading

Week Beginning 18/03/24

own natural habitat and the fish of Malawi are no exception. To all those enthusiasts out there who love these fish and love keeping them in their home, I say, "Yes, these are probably the most beautiful freshwater fish in the world."

But I also add one more humble word of travel advice, to come and see the fish of Malawi . . . *in Malawi!* The fish are far happier here and no matter how terrific your fish tank may be, it will never compare to the real thing.



Lake Malawi is a Great African Lake located in the East Africa between Zambia, Mozambique and Malawi.

#### Questions to answer:

1. Why are the cichlids important to Malawi?
2. Why is it important that the cichlids are exported?
3. What is the writer suggesting about the fish in the final paragraph? How do you know?



# The importance of Algorithms

The first step towards an understanding of why the study and knowledge of **algorithms** are so important is to define exactly what we mean by an algorithm.

An algorithm is any well-defined computational procedure that takes some value, or set of values, as input and produces some value, or set of values as output. In other words, algorithms are like road maps for accomplishing a given, well-defined task. Even a simple function for adding two numbers is an algorithm in a sense, albeit a simple one.

So, a chunk of code that calculates the Fibonacci sequence is an example of an algorithm.

*Remember! The Fibonacci sequence, is the sequence of numbers in which each number in the sequence is equal to the sum of two numbers before it.*

*The first numbers in the sequence would be: 0, 1, 1, 2, 3, 5, 8, 13, 21, ....*

Some algorithms, like the one above are intuitive and may be understood by our **logical thinking** and **problem solving skills**. However, you may be surprised to learn just how many complex algorithms people use every day when they check their e-mail or listen to music on their computers.

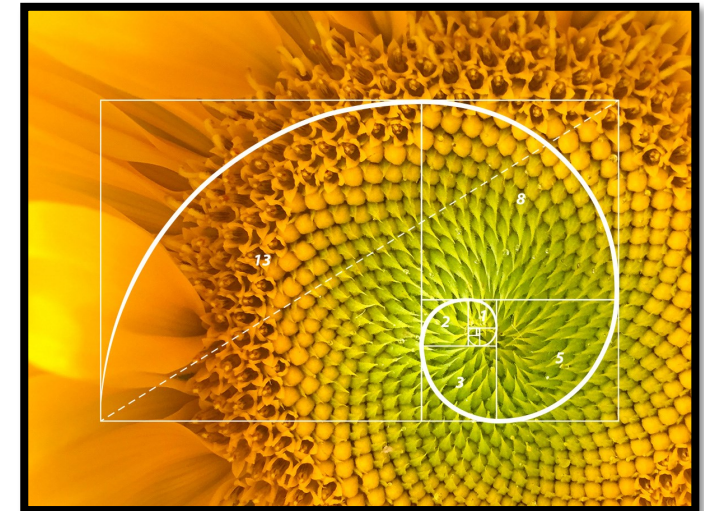
One area which algorithms are essential is when it comes to **sorting** large amounts of data. For example, sorting a list of names in a spreadsheet by first name or surname, or sorting a list of products on an online shop by popularity or star rating.

In these scenarios computers would make use of several different sorting algorithms. One particularly effective method is named an **insertion sort**.

An insertion sort compares values in turn, starting with the second value in the list. If this value is greater than the value to the left of it, no changes are made. Otherwise this value is repeatedly moved left until it meets a value that is less than it. The sort process then starts again with the next value. This process continues until the end of the list is reached.

At this point the list of items would be sorted into the correct position. This data can then be displayed back to the user.

An insertion sort works quickly when there are few items inside the list. However, larger lists of data can be sorted more **efficiently** with other algorithms such as a **merge sort**.



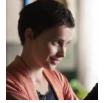
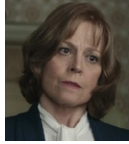



## Questions to answer:

1. What is the definition of an Algorithm?
2. Where are sorting algorithms used?
3. Which sorting algorithm would be used with a large data set?

**Challenge:** Which 2 numbers would follow 21 in the Fibonacci sequence?

Section 1: Key vocabulary	
Tier 3 Vocabulary	Definition
Allusion (n)	When the writer makes a link to another idea or book in their writing.
Archetype (n)	A very typical example of a certain character type (e.g. hero, monster).
Frame Narrative (n)	A narrative which contains a story within a story.
Motif (n)	A significant or recurrent theme or idea.
Symbolism (n)	When we use an image or object to represent ideas. For example, the symbol of light might represent truth.
Narrative Voice	The narrator tells us the story—it is the eyes the reader reads the story through and how the story is told.
Tier 2 Vocabulary	Definition
Grief (n)	The feeling of sadness and loss when someone we know passes away.
Struggle (n/v)	Finding something difficult.
Hostile (adj)	Unfriendly and mean.
Vulnerable (adj)	If someone is weak and can be hurt they are vulnerable.
Ambiguous (adj)	Not having just one obvious meaning. A bit unclear.
Catharsis (n)	The process of releasing, and thereby providing relief from, strong or repressed emotions
Moral (n/adj)	What is right and wrong. A moral is a bit like a lesson about behaviour that we learn.
Didactic (adj)	Intended to teach a moral lesson.

Section 2: Key Characters and Key Themes/ Ideas	
<p>Conor O' Malley</p> 	The protagonist (main character) of the book, thirteen-year-old Conor is very responsible for his age, mainly because his mother was diagnosed with cancer a year before the start of the book.
<p>The Monster</p> 	A giant creature who takes the shape of a yew tree. Conor's pain and grief calls the monster to him, to help him process his feelings about his mother's approaching death. The monster says that it has been called Herne the Hunter, Cernunnos, and the Green Man in the past, relating him to myths.
<p>Conor's Mum</p> 	Conor's mum is suffering with a disease called cancer. The treatment for cancer means she has lost her hair and wears a scarf, and is often
<p>Grandma</p> 	Conor's grandmother seems strict and unfriendly, and Conor doesn't like her very much. He doesn't understand why she tries to make herself look young and still works. However Conor's grandmother and Conor both love his mum very much.
<p>Lilly</p> 	Conor's best friend and classmate. Conor is angry with Lilly: when she found out about Conor's mother's diagnosis, she told a few friends, who quickly spread the news to the entire school.
Key Theme	What does it mean?
Truth	How can we learn to process difficult emotions? Why can it be difficult to speak the truth?
Growing-up	How does our identity change as we grow? How important are other people to us?
Storytelling	How can we apply morals? How do stories help us in our lives? Do characters always fit an archetype?
Isolation	How can stories influence our actions? How do stories help Conor to feel less isolated?
Acceptance	Do words have power? What power to they possess? How can they help Conor accept his reality?

## Section 3: Key Context-Allusions in the story.

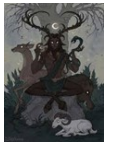
### The Green Man Legend

- The Green Man can be seen often throughout history. His face is covered by leaves.
- Often found carved in wood or stone in medieval churches and cathedrals.
- Thought to be a symbol of the way that people need nature. Also seen as the cycle of growth each spring.



### Cernunnos

Cernunnos was the Gaelic god of beasts and wild places. He is powerful and able to tame both hunters and their prey.










### Herne the Hunter


Herne the Hunter was an English ghost who haunts the Berkshire woods and countryside. Rattling chains and scaring animals, he was marked by the antlers upon his head.

Herne is said to ride at night, especially during storms; he wears horns, rattles chains, and occasionally appears to mortals (humans).



Section 1: Key Vocabulary		
Tier 3	Definition	Example/image
Comedy	A genre of play that is meant to make the audience laugh	<i>The Tempest plays on words, uses insults and mistaken identity to create <b>comedy</b> for the audience</i>
Character	A person's traits in a story: their personalities, emotions, and experiences. These impact how they respond to what happens and how the story unfolds.	<i>Prospero is the <b>character</b> that drives the story forward in The Tempest and makes events happen.</i>
Stage directions	An instruction in the text of the play which shows where actors, effects and lighting should be positioned.	<i>The <b>stage directions</b> in A Midsummer Night's Dream create the <b>comedy</b>, showing that one character has turned into a donkey.</i>
Symbol	something that represents a bigger idea	<i>The storm (tempest) is a symbol of Prospero's magic.</i>
Tier 2	Definition	Example/image
Hierarchy	A system where people are ranked according to status/ power	A monarchy is a <b>hierarchy</b> , where Kings and Queens are the most important.
Patriarchy	A system where men have the most power	Shakespeare's time was <b>patriarchal</b> . Men were seen as more important than women.
Utopia	A perfect world	The island in The Tempest is seen as a <b>utopia</b> where the normal rules don't apply

Section 2: Key Knowledge 
<p><b>1. The Elizabethan Era:</b></p> <p>Elizabeth I brought peace and stability to a country that had been divided by religious conflicts between Protestant Reformation and Roman Catholicism.</p> <p>It was seen as a 'golden age' as the Empire grew with Queen Elizabeth sending privateers (pirates) colonising countries across the globe. However, much of the profits and products brought back to the Britain were made on the beginnings of the slave trade.</p> <div>   </div>
<p><b>2. William Shakespeare's Comedies:</b> Shakespeare's plays are separated into Histories, Tragedies and Comedies. <b>Comedies</b> often include the following:</p> <div>  <p>"He has not so much brain as ear-wax"</p>   </div> <ul style="list-style-type: none"> <li>✓ Funny wordplay- like puns and insults e.g. <i>"I am sick when I do look on thee."</i></li> <li>✓ Love- most of his comedies have characters that overcome obstacles and fall in love by the end</li> <li>✓ Mistaken identities- characters might play scenes in disguise and often the audience will realise who someone is but the characters on stage don't!</li> </ul>
<p><b>3. Characters in power</b> </p> <p>Often Shakespeare shows powerful characters in a <b>hierarchy</b> abusing their power and being <b>villainous</b>. In a <b>patriarchal</b> system, women are often victims.</p> <p>As an audience, we enjoy watching these powerful villains being taught a lesson!</p>

Section 3: Key Connections 
<p>We begun lots of these skills in our previous unit on myths. Now let's connect to our current learning.</p>
<p><b>Identifying quotes and techniques</b></p> <p>Once we've identified a quote, we need to examine what techniques the writer is using to create effects.</p> <p><b>"Hell is empty and all the devils are here."</b> Makes the audience not trust the characters. The <b>religious symbols</b> show an Elizabethan audience how dangerous they are.</p>
<p><b>Characters are constructs</b></p> <p>Writers create their characters a certain way on purpose. They are constructs to represent an idea.</p> <p>We write about why the writers have written them this way by:</p> <ul style="list-style-type: none"> <li>✓ Starting with the writer's name</li> <li>✓ explain what the purpose of the character is</li> <li>✓ A verb to show what the writer is trying to do to the audience</li> </ul> <p>Q: How is Prospero presented in the play?</p> <p>A: <i>Shakespeare uses Prospero to represent magic, warning the audience of the dangers of powerful magic in controlling others.</i></p>



# Mathematics — Place Value and Proportion — Year 7 Spring 1



**Bluecoat Wollaton**  
believe in yourself, in others, in God

## Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Integer (n)	A whole number that is positive or negative
Median (n)	A measure of central tendency (middle, average) found by putting all the data values in order and finding the middle value of the list.
Place Value (n)	The value of a digit depending on its place in a number. In our decimal number system, each place is 10 times bigger than the place to its right.
Fraction (n)	How many parts of a whole we have.
Decimal (n)	A number with a decimal point used to separate ones, tenths, hundredths etc.
Percentage (n)	A proportion of a whole represented as a number between 0 and 100.
Tenth (n)	One whole split into 10 equal parts.
Hundredth (n)	One whole split into 100 equal parts.
Tier 2 Vocabulary	Definition
Negative (ad)	Any number less than zero; written with a negative symbol e.g. -3 -714.53 $-\frac{1}{2}$
Place Holder (n)	We use 0 as a place holder to show that there are none of a particular place in a number.
Range (n)	The difference between the largest and smallest numbers in a set.
Significant figure (n)	A digit that gives meaning to a number. The most significant digit (figure) in an integer is the number on the left. The most significant digit in a decimal fraction is the first non-zero number after the decimal point.
Recurring (ad)	A decimal that repeats in a given pattern.

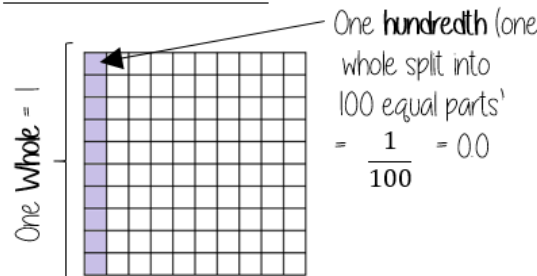
## Section B: Important Ideas / Concepts/ Questions

### Integer Place Value

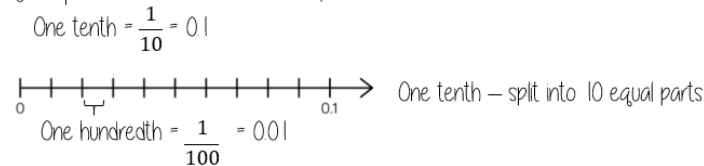
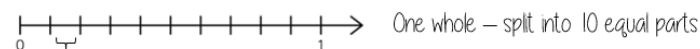
Billions			Millions			Thousands			Ones		
H	T	O	H	T	O	H	T	O	H	T	O
		3	1	4	8	0	3	3	0	2	9

Placeholder

### Tenths and hundredths

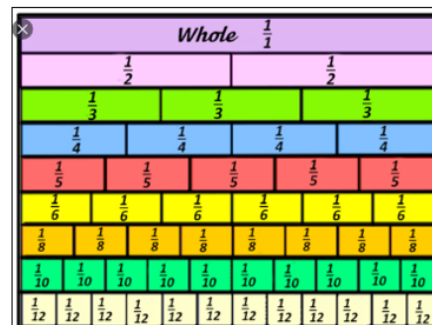


One tenth (one whole split into 10 equal parts) =  $\frac{1}{10} = 0.1$



### Equivalent fractions

Represent equivalence with fraction walls



## Section C: Subject Specific Support

### Common Misconceptions

$$0.7 \times 10 \neq 0.70 \quad 0.7 \times 10 = 7$$

We cannot think of multiplying by 10 as “adding a zero” as this is not true. We must remember the number becomes 10 ten times larger. 0.7 is equal to 0.70 as the 7 is in the 10th’s column in both numbers. To make a number 10 times bigger we must shift the digit’s one place value column to the left.

To convert from a decimal to a percentage we can

multiply by 100. e.g:

$$0.9 = 90\%$$

$$0.09 = 9\%$$

Log onto **Sparx Maths** for additional support:

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Select ‘**independent learning**’ on the bottom left. Then type in these codes so



Topic	Videos
Place Value	M704 M111
Decimals	M522 M803 M262 M263 M958
Fractions	M158 M410 M335 M671 M939
Percentages	M476
Converting F.D.P.	M958 M264 M922
Median	M934
Range	M328
Significant Figures	M994 M131 M878

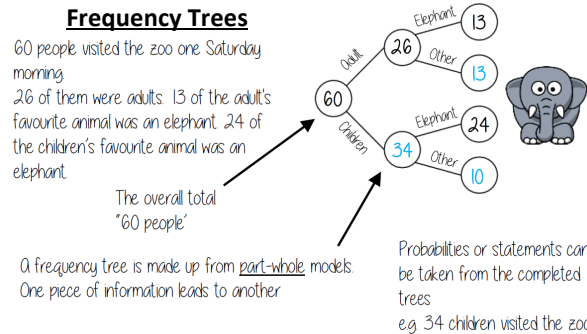
**Concepts you have seen before:** Place value of positive integers, fractions, decimals, percentages, rounding to the nearest integer, ordering integers in ascending or descending order



Section A: Key vocabulary

Tier 3	Definition
Commutative (ad)	Result of an operation is not affected by the order
Associative (ad)	Result of an operation is not affected by groupings
<b>Multiples (n)</b>	Found by multiplying any number by positive integers
<b>Factors (n)</b>	Integers that multiply together to get another integer
Quotient (n)	The result of a division
Dividend (n)	The number being divided
Divisor (n)	The number we divide by
Tier 2	Definition
Perimeter (n)	The total length around the outside of a 2D object
Area (n)	The space inside a 2D object
Polygon (n)	A 2D shape made from straight lines
Balance (n)	The amount of money in a bank account
Credit (n)	Money that goes into a bank account
Debit (n)	Money that comes out of a bank account
Profit (n)	The increase in money after something is sold
Convert (v)	Change into a different form of equal value
Frequency (n)	The number of people or things in a group
Array (n)	An arrangement of items in rows and columns
Chart (n)	A visual representation of numerical values
Rectangle (n)	A four-sided polygon with two pairs of parallel lines and four right-angles
Triangle (n)	A three-sided polygon
Parallelogram (n)	A four-sided polygon with two pairs of parallel lines
Mili-	Prefix meaning one thousandth of
Centi-	Prefix meaning one hundredth of
Kilo-	Prefix meaning one thousand times

Section B: Important Ideas / Concepts/ Questions



**Lowest Common Multiple & Highest Common Factor**

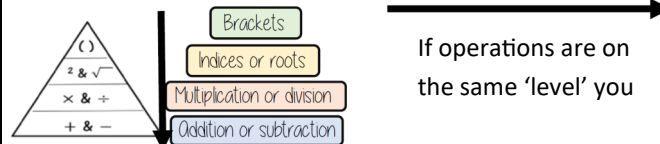
**Find the LCM of 5 and 6**  
**Multiples of 5:** 5, 10, 15, 20, 25, 30, 35, ...  
**Multiples of 6:** 6, 12, 18, 24, 30, 36, ...  
 The lowest common multiple (LCM) of 5 and 6 is 30

**Find the HCF of 24 and 36**  
 Factors of 24: 1, 2, 3, 4, 6, 8, 12, 24  
 Factors of 36: 1, 2, 3, 4, 6, 9, 12, 18, 36  
 The highest common factor (HCF) of 24 and 36 is 12

Read the definitions for multiples and factors in section A.

Highest = Greatest

**Order of Operations**

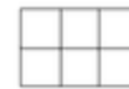


**Area of Polygons**

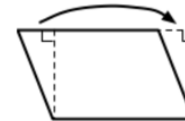
Area is measured by how many squares ( $\text{cm}^2$ ,  $\text{mm}^2$  or  $\text{m}^2$ ) you can fit into the shape.

E.g. In the rectangle to the right, you can fit 6 squares, there-

Rectangle  
Base x Perpendicular height



Parallelogram/ Rhombus  
Base x Perpendicular height



Triangle  
 $\frac{1}{2} \times \text{Base} \times \text{Perpendicular height}$

A triangle is half the size of the rectangle it would fit in



Section C: Subject Specific Support

**Mean**

The mean is the average or norm.

Add up all of the values to find a total.

Divide the total by the number of values you added together.

There are 6 pieces of data

$2 + 2 + 5 + 6 + 7 + 8 = 30$

$30 \div 6 = 5$

The mean number is

**5**

The data shows how many positives 6 students get on one day.

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Sparx Topic	Sparx Videos Codes
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Perimeter of Polygons	M920 M635 M690
Area of Polygons	M900 M390 M269 M291 M610 M996 M705
Order of Operation	M521
Displaying Data	M899, U280, M829
Mean (Average)	M940
Factors and Multiples	M698 M227
Prime and Decompositions	M322 M108 M365

**Concepts you have seen before:** Operations (addition, subtraction, multiplication, division); inverse; placeholder; place value; fractions; percentages; shape names; commutative relationships; finding missing values; solving; equals.



## Subject: Science Year 7 Spring Term 1—Reproduction

Section A: Key vocabulary	
Tier 3 Vocabulary	Definition
Gametes (n)	Sex cells, e.g. sperm and egg cells.
Uterus (n)	Part of the female reproductive system where
Menstrual cycle (n)	The process of ovulation (egg release) and
Hormones (n)	Chemical messengers in the body.
Progesterone (n)	Hormone responsible for maintaining the
Oestrogen (n)	Hormone responsible for building up the
Fertilisation (n)	Fusing of a male sex cell with a female sex cell.
Adolescence (n)	Time when both physical and emotional
Urethra (n)	A tube carrying semen or urine running down the centre of the penis in males. A tube
Ovulation (n)	Release of an egg cell from an ovary in
Foreskin (n)	A covering of skin protecting the head of the
Tier 2 Vocabulary	Definition
Adaptation (n)	The process of change by which an organism or species becomes better suited to
Puberty (n)	The period during which adolescents reach sexual maturity and become capable of
Contraception (n)	The deliberate use of artificial methods or
Infertility (n)	Inability to conceive children or young.
Pregnancy (n)	The condition or period of being pregnant.
Birth (n)	The delivery of a baby or other young from the

### Section B: Important Ideas / Concepts/ Questions

#### Menstrual Cycle

This is a cycle that occurs in women each month. The cycle length is different in every female, some are longer, some are shorter.

Day 1 is when bleeding from the vagina begins. The lining of the uterus breaks down and leaves the body. This is known as a period or menstruation. Around day 5, bleeding stops. The uterus lining starts to grow and an egg begins to mature in an ovary. Around day 14, ovulation occurs. This is when an egg cell is released from the ovary. It travels through the oviduct and heads to the uterus.

If a sperm cell doesn't fertilise an egg cell in the oviduct, the uterus lining breaks down and the cycle starts all over again.

#### Infertility

Males and Females could be infertile for a number of reasons. Some of these reasons are listed below.

##### Males

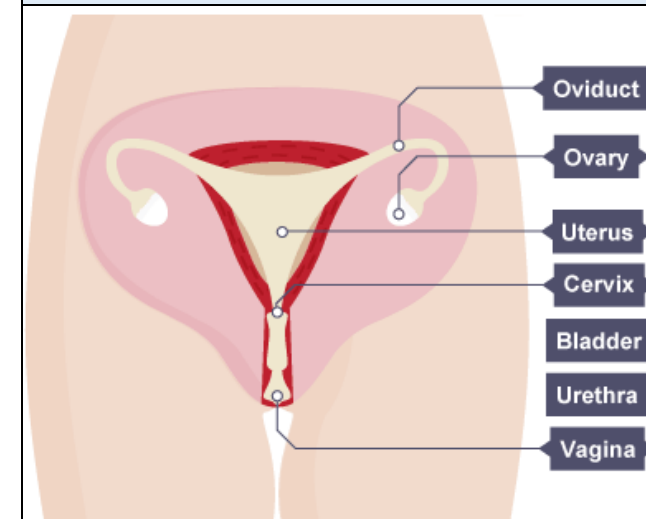
- Not enough sperm produced.
- Non-healthy sperm produced .
- Impotence

#### Reasons for Infertility in Females

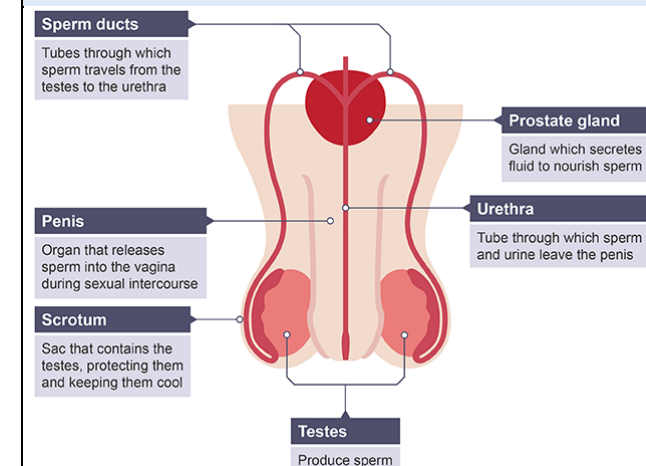
- Ovaries don't produce eggs.
- Blocked/twisted oviducts.
- Complication from a previous STI.
- Uterus lining not developing enough to allow embryo implantation.

### Section C: Diagrams

#### The Female Reproductive System



#### The Male Reproductive System



Concepts you have seen before: Sperm cell, Egg cell





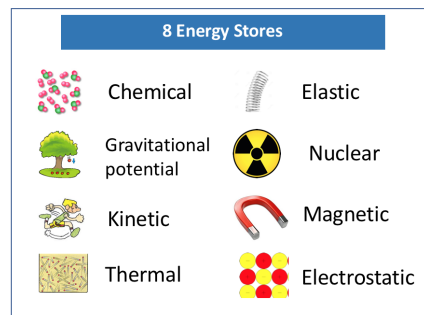
## Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Fossil fuel (n)	A natural fuel such as coal, gas or oil.
Joule (n)	The unit of energy.
Sankey diagram (n)	A way to show how energy is transferred .
Frequency (n)	The rate at which a wave travels.
Wavelength (n)	The distance between two of the same points on a wave.
Conservation of energy (n)	Energy cannot be created or destroyed, only transferred from one type to another.
Tier 2 Vocabulary	Definition
Generate (v)	To produce or create.
Transfer (v)	Move from one place to another.
Detect (v)	Discover or identify something.
Microphone (n)	A device to change sound waves into electricity which can be recorded.
Useful (adj)	Does its job well.
Wasted (adj)	Not used properly.

## Section B: Energy Stores

### Energy Stores

Energy is not created or destroyed. Instead, it moves from one store to another. The different energy stores are shown in the diagram.



### Energy efficiency

A device is a piece of equipment that can transfer energy from one store to another. When a device transfers energy, some of the energy may be wasted. This means that it is not transferred in useful ways.

For example: A car transfers chemical energy stores in the petrol into kinetic energy stores to make the car move. However, some of the energy is transferred to a thermal energy store as the tyres rub along the ground, but this is not useful to the car.

If a device is energy efficient it means that it transferring most of the energy into useful stores, and not wasting much.

To calculate energy efficiency:

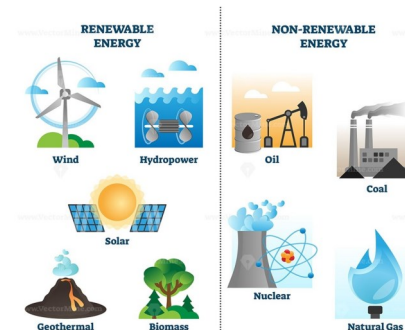
$$\text{Energy efficiency} = \frac{\text{Useful energy transferred}}{\text{total energy supplied}} \times 100\%$$

## Section C: Energy Resources

**Renewable** energy resources do not get used up, and are easily replaced.

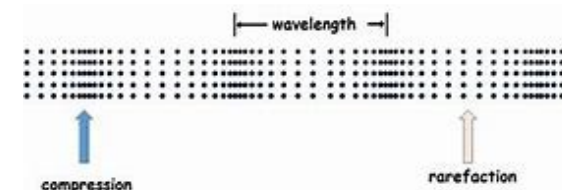
**Non-renewable energy** resources include fossil fuels. They cannot be replaced once they have been used, as they are being used more quickly than they are being made.

### ENERGY SOURCES



**Sound waves** are examples of longitudinal waves.

This means that in order for sound to travel particles must vibrate into one another. If there are no particles, there can be no sound.



Concepts you have seen before:

Energy, Electricity, Fossil Fuels



### Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Trinity (n)	The belief that God is one but also three Persons
Incarnate (n)	The belief that God became flesh as Jesus Christ
Messiah (n)	The saviour of mankind promised in the Bible
Sin (n)	Separation from God
Salvation (n)	Being saved from sin so that you can enter heaven
Agape love (n)	Self-giving love (not selfish), the kind that Jesus wanted us to show to each other
The Fall (n)	The first sin of humanity which led to separation from God
Tier 2 Vocabulary	Definition
Radical (n)	Someone who supports the idea that there should be big social and political changes
Revolutionary (n)	Causing a complete or dramatic change:
Hypocrisy (n)	The practice of stating or pretending to hold beliefs OR principles that you do not follow
Tradition (n)	handing down of a culture's beliefs and customs from parents to children over many years.

### Section B: Key Facts about the life of Jesus

Jesus was born sometime just before 4BCE. Jesus grew up in Nazareth in Galilee and was trained by his father to be a carpenter.

There are historical records of a man named Jesus who lived two thousand years ago. He is written about even by Romans of the time (the Romans weren't particularly fond of Christians so it's unlikely they'd lie about the existence of Jesus Christ).

Jesus was baptised by his cousin John the Baptist, and then started his public preaching with a radical message. He was a healer, teacher and Prophet.

He performed many miracles (there are 37 written about in the New Testament, including turning water into wine, walking on water, calming a storm and raising someone from the dead).



Jesus was killed on the cross by the Romans who were occupying the 'Holy Land' which is where Jews at the time of Jesus were living.



#### The Resurrection:

'On Sunday morning, women went to anoint Jesus' body with spices. They found the tomb empty. Two angels appeared who told them Jesus had risen which they quickly told to the disciples. Jesus then appeared to the disciples.

"Why do you look for the living among the dead? He is not here; he has risen!" **Luke 24:5**



### Section C: Jesus' Teachings

"Jesus used parables—short stories with hidden messages—in his teachings.

Some of the main themes that Jesus taught, which Christians later embraced, include:

- Love God.
- Love your neighbour as yourself.
- Forgive others who have wronged you.
- Love your enemies.
- Ask God for forgiveness of your sins.
- Jesus is the Messiah and was given the authority to forgive others.
- Repentance of sins is essential.
- Don't be hypocritical.
- Don't judge others.
- The Kingdom of God is near. It's not the rich and powerful—but the weak and poor—who will inherit this kingdom.



In one of Jesus's most famous speeches, which became known as the *Sermon on the Mount*, he summarized many of his moral instructions for his followers.

**Concepts you have seen before:**

**Trinity, Salvation, nature of God, The Fall**



### Section 1: Key Vocabulary

Tier 3 vocabulary	Definition
<b>Allah (n)</b>	'God' in Arabic
<b>Muhammad P.B.U.H (n)</b>	The last prophet of Islam
<b>Shahadah (n)</b>	Muslim declaration of faith (first Pillar)
<b>Salah (v)</b>	Ritual prayer (second Pillar)
<b>Zakat (v)</b>	Charity tax - 2.5% of income (third Pillar)
<b>Sawm (v)</b>	Fasting (fourth Pillar)
<b>Ramadan (n)</b>	Month of fasting (ninth month of Islamic year)
<b>Hajj (n)</b>	Holy Pilgrimage to Mecca (fifth Pillar)
<b>Iqra (v)</b>	Recite or read
<b>Laylat al Qadr (n)</b>	Laylat Al Qadr, or the Night of Power, is the name given to the night when the Angel Jibril first appeared to Muhammad and began revealing the Qur'an.
<b>Ummah (n)</b>	Muslim Community
Tier 2 vocabulary	Definition
<b>Pillar (n)</b>	Something or someone who provides support.
<b>Obligation (n)</b>	A duty or commitment.
<b>declaration (n)</b>	An act of formally or confidently stating something.
<b>similarities (n)</b>	The quality or state of being alike in some way.

### Section 2: What were the key events in Prophet Muhammad's life?

<b>570CE</b>	Muhammad P.B.U.H was born in Mecca.
<b>578CE</b>	Both his parents and his grandfather died and he went to live with his uncle who was a trader.
<b>595CE</b>	He married his employer, a rich forty year old widow called Khadijah. She was a trader who was impressed by his fairness and honesty.
<b>610 CE</b>	<b>Night of Power:</b> When Muhammad P.B.U.H was 40 years old, the Angel Jibril appeared to him. This was the first night the Angel Jibril began to reveal the Qur'an to Muhammad P.B.U.H.
<b>613CE</b>	Muhammad P.B.U.H began to preach about the word of Allah, saying Allah was the only one God, and that people should not worship false idols.
<b>620CE</b>	<b>Night Journey:</b> Muhammad P.B.U.H was carried to Jerusalem and then to Paradise on a flying horse named Buraq and met the other prophets.
<b>630CE</b>	Many battles took place between Madinah and Mecca. Mecca was defeated and Muhammad P.B.U.H returned to his home town.
<b>632CE</b>	Prophet Muhammad went on a pilgrimage to Mecca. He returned to Medina, fell ill and died.

#### Concepts you have seen before:

Comparison can be made between Judaism, Christianity.

How religious leaders can influence how followers act today.

### Section 3: The Five Pillars of Islam

<b>Shahadah – First Pillar</b>	<p>"There is no God but Allah and Muhammad is the Messenger of Allah."</p> <p>Shahadah means 'to observe, witness, testify'.</p>
<b>Salah – Second Pillar</b>	<p>Salah is the five times a day ritual prayer of Islam. Salah began with Prophet Muhammad.</p> <p>'Set up regular prayers; for such prayers are enjoined on believers at stated times.' (Surah 4:103)</p>
<b>Sawm – Third Pillar</b>	<p>During daylight hours of Ramadan, Muslims are not allowed to eat or drink. It is a month when Muslims try to live especially good lives, so they will try to give up any bad habits such as lying or swearing and stop doing things they know are wrong.</p>
<b>Zakat – Fourth Pillar</b>	<p>Muslims believe that wealth is a blessing from Allah and should be used responsibly. Both Shi'a and Sunni Muslims believe it is their duty to give part of their wealth to those in need.</p>
<b>Hajj – Fifth Pillar</b>	<p>A pilgrimage is a journey made for religious reasons. Hajj, the fifth Pillar of Islam, is a pilgrimage to Mecca in Saudi Arabia that Muslims should make once in their lifetime, as long as they are healthy and financially able to do so. Hajj takes place in the last month of the Islamic calendar (Dhul Hijjah).</p>



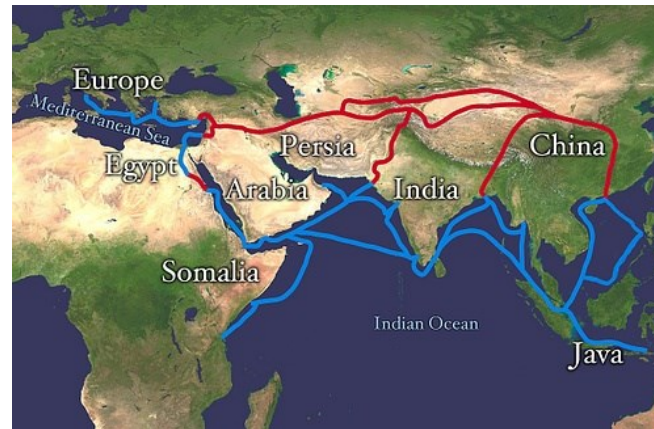
# History—Medieval Europe—Spring Term



## Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Middle Ages (n)	A period of history from 1000 to 1453.
Peasant (n)	A poor smallholder who held a small amount of land with low social status.
Peasant's Revolt (n)	The <b>Peasants' Revolt</b> , also called Wat Tyler's <b>Rebellion</b> or the Great Rising, was a major <b>uprising</b> across large parts of England in 1381.
Mappa Mundi (n)	This is any medieval map of the world.
Doom paintings (n)	Paintings in churches used to make people in Medieval Europe take their religion seriously.
Great Mortality (n)	Another name given to the <b>Black Death</b> . A disease which had a deadly impact on Medieval England.
Purgatory (n)	Where <b>Catholics</b> believe you go before heaven to <b>repent</b> your sins.
Tier 2 Vocabulary	Definition
Successor (n)	The person that is to succeed, or take over, from the current monarch.
Rebellion (n)	When people go against a figure of authority e.g the government.
Taxation (n)	Money provided from the people of a country to pay for the countries expenses.
Excommunicate (v)	To officially remove someone from an organisation (e.g. the Church), group or country.
Pope (n)	The head of the Catholic Church.
Trade (n)	The action of buying or selling goods. Often a big source of income for a country.
Commerce (n)	Large scale buying and selling.

## Section B: Important Ideas / Concepts/ Questions



A map showing the trading routes on the Silk Road.

People in Medieval England made money through trading of goods. One route was through the Silk Roads. The Silk Road was an ancient network of trade routes formally created in China.

**Some of the goods that were traded from the West to the East were:**

Horses, grapevines and grapes, dogs, animal furs, honey, fruits, glassware, woollen blankets, rugs, gold and silver, camels, slaves, weapons and armour.

**Some of the goods that were traded from the East to the West were:**

Silk, tea, dyes, precious stones, china, porcelain, spices, bronze, medicine, perfumes, ivory, rice, paper and gunpowder.

The route slowly became less popular during the 17th Century because European traders were taking to new routes on the sea. This development also impacted different cultures as some European ships would claim land in the name of their country and influenced their own cultures.

## Section C: Subject Specific

195BC	Zhang Qian is born. He is known as the father of the Silk Roads.
200BC	The Silk Roads become a dominant trade route spreading over 6,400 kilometres connecting Asia to Europe.
1215	<b>Magna Carta:</b> The charter signed by King John in Runnymede. It was an attempt to limit his power.
1300s	Illuminated parchment called the Luttrell Psalter which is considered to be the richest source of images of normal medieval life in England.
1300	<b>Mappa Mundi:</b> The Medieval Map of the world. It was illustrated with pictures and told stories of discoverers.
1348	<b>Black Death:</b> The spread of the Bubonic Plague across Europe. It was estimated to have killed 30-60% of the English population.
1381	<b>Peasants Revolt:</b> Following the Black Death, peasants were struck by poverty. They protested against the poll tax issued by the King.

**Concepts you have seen before:** Peasantry and the Feudal System, Successor or heir to the throne, excommunication or to exile someone. Kingship and rebellions.

## Section 1: Key Vocabulary

Tier 3 vocabulary	Definition
Low air pressure	Geographical term for warm, rising air.
High air pressure	Geographical term for cool, sinking air.
Air mass	A large parcel of air in the atmosphere.
Precipitation	The geographical term for rainfall.
Evaporation	The process of liquid turning into gas.
Condensation	Where water vapour cools and turns into clouds.
Relief rainfall	Rainfall which occurs when water vapour is forced to rise over mountains.
Convictional rainfall	Rainfall which occurs when water vapour rises due to heat.
Frontal rainfall	Rainfall which occurs when warm air is forced to rise above sinking cold air.
Synoptic chart	Any map that summarises atmospheric conditions over a wide area at a given time.
Weather depression	A low pressure weather system.
Anticyclone	Is a high pressure weather system.
Drought	A prolonged period of time with lower than usual levels of precipitation.
Tier 2 vocabulary	Definition
Weather	The atmospheric conditions in a particular place at a particular time.
Climate	The long term weather conditions in a particular place.
Weather forecast	Is a prediction for future weather based on scientific information collected from satellites and basic instruments.
Climate graph	A graph which shows the temperature and precipitations of a particular place over a year.
Social	To do with people.
Environmental	To do with the natural world.
Economic	To do with money.

## Section 2: Key knowledge

### 1. Factors that affect climate

**Altitude:** Height above sea level. Temperatures decrease with height. The air is less dense and cannot hold heat as easily. The higher we are above sea level the colder the temperature.

**Latitude:** Distance from the equator. In areas closer to the poles, sunlight has a larger area of atmosphere to pass through and the sun is at a lower angle in the sky. As a result, more energy is lost.

**Distance from the sea:** Areas nearer to the sea are often cooler in summer but warmer in winter.

### 2. Beast from the East

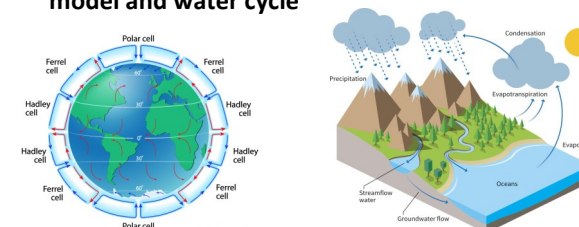
Causes	Impacts	Responses
Cold air was swept across Europe from Siberia.	Thousands of schools were closed.	Met office issued a red warning.
Wind speeds exceeded 70mph 10 to 20cm fell in three days.	10 deaths linked to the cold and snow. Flights and train services were delayed or cancelled.	Snow plough and tractors used to try and clear the roads
Some rural areas experienced lows of -12°C.	NHS cancelled non urgent operations.	Armed forces deployed to rescue drivers and to transport NHS workers.

### 3. 2022 Summer Heatwave

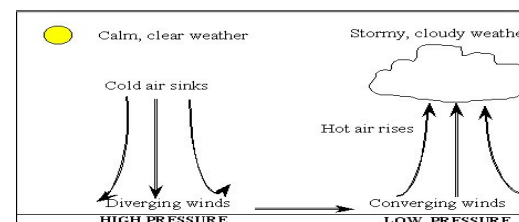
Causes	Impacts	Responses
A high-pressure heat dome brought record-breaking temperatures to Europe and the UK. Temperatures reached 40°C. Global warming has led to more extreme weather.	Five people died in separate incidents involving water. Thousands of schools were closed. Wildfires were reported in London, Yorkshire and the Midlands.	Met office issued a red warning. The first time they have done so for heat. Railways' speed was reduced due to the risk of rails buckling. A major incident was declared in London by the fire service.

## Section 3: Key Diagrams

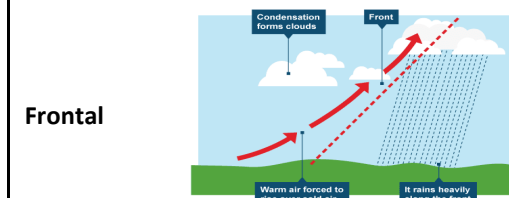
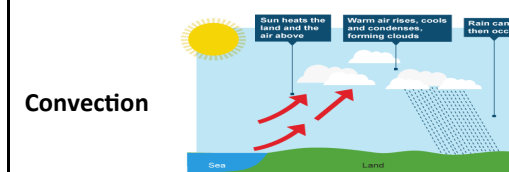
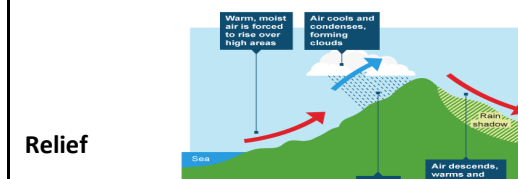
### 1. Diagram to show the atmospheric circulation model and water cycle



### 2. Diagram to show high and low pressure

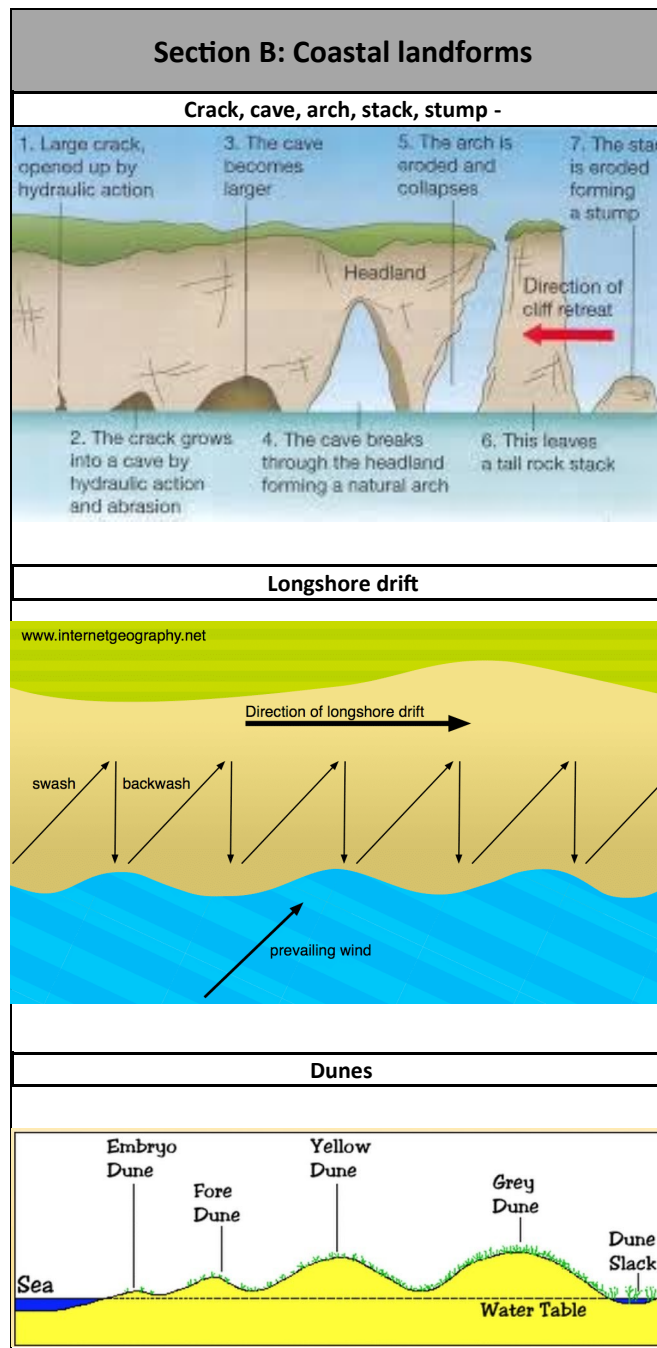


### 3. Diagrams to show the types of rainfall





Section A: Key Vocabulary	
Tier 2	Definition
Wave (n)	Ripples in the sea caused by the transfer of energy from the wind blowing over the surface of the sea.
Landform (n)	A feature on the Earth's surface.
Formation (n)	The process by which a landform is created.
Effect (n)	The consequence of an event.
Management (n)	The process of dealing with or controlling the effects.
Tier 3	
Tide (n)	The alternate rising and falling of the sea due to the movement of the moon and sun.
Erosion (n)	The wearing down of material by the waves.
Longshore drift (n)	The process of transport of sediment along the coast.
Deposition (n)	The setting down of sediment by the loss of energy in the sea.
Hydraulic power (n)	The process by which breaking waves compress pockets of air in cracks in a cliff.
Abrasion (n)	The wearing away of cliffs by sediment flung by breaking waves.
Soft engineering (n)	Managing erosion by working with natural processes to help restore beaches and coastal ecosystems.
Hard engineering (n)	The use of concrete and large artificial structures to defend land against natural erosion processes.



Section C: Jurassic Coast Case study	
Landforms	Coastal management
<p><b>Headlands and bay</b></p> <p><i>Location:</i> Swanage Bay</p> <p><i>Geology:</i> Clay between limestone and chalk.</p>	<p><b>Location</b></p> <p>Lyme Regis, Dorset, South Coast</p> <p><b>Reason for management</b></p> <ul style="list-style-type: none"> <li>- Geology is limestone but covered by a layer of muds, clays and sands.</li> <li>- Prone to landslides.</li> <li>- High population density leading to loss of homes and businesses if not protected.</li> </ul>
<p><b>Cave, arch, stack, stump</b></p> <p><i>Location:</i> The Foreland, Old Harry and his Wife</p> <p><i>Geology:</i> Chalk—resistant rock</p>	<p><b>Management of Lyme Regis</b></p> <ul style="list-style-type: none"> <li>- £35 million has been spent since 1994.</li> <li>- Cliff drainage and stabilisation to reduce risk of land slides.</li> <li>- Extension of the rock armour at the end of The Cobb (a sea wall)</li> <li>- Replenishing of beach material</li> <li>- New sea wall and promenade.</li> </ul>
<p><b>Previously seen concepts-</b></p> <p>Formation of landforms. Cause, effect and response of events. Interpretation of diagrams.</p>	

# Spanish — Mi Tiempo Libre - Year 7—Spring Term 1



**Bluecoat Wollaton**  
believe in yourself, in others, in God

Section A: Key terms	
Previous Tier 3 Vocabulary (from Autumn)	
Conjugate	Cognate
Translate	Definite article
Infinitive	Indefinite article
New Tier 3 Vocabulary	Definition
Conditional Tense (n)	Used to speculate about what we would like to happen. If it is nice weather, I would like to go to the park. Use the conditional opinion phrase + the infinitive verb.
Suffix (n)	A <b>suffix</b> is a string of letters that go at the end of a root word, changing or adding to its <b>meaning</b> .
Time phrase (n)	Each verb tense is for a different time. You know which time it is by the time phrases. These words and phrases help you identify the correct tense.
Tier 1 Key Questions	Meaning
¿Qué te gusta hacer?	What do you like to do?
Me gusta hacer...	I like to do...
Me gusta jugar...	I like to play...
¿Qué te gustaría hacer si hace....(sol)?	What would you like to do if the weather is...(sunny)?
Si hace sol, me gustaría	If it is sunny, I would like to...
Tier 1 Key Nouns	
el fútbol (football)	el baloncesto (basketball)
el tenis (tennis)	la equitación (horse-riding)
la natación (swimming)	la gimnasia (gymnastics)
el voleibol (volleyball)	los artes marciales (martial arts)
mis amigos (my friends)	los videojuegos (videogames)

Section B: Key Grammatical Points

The Present Tense





You use the present tense to talk about what usually happens. It can express an action that is performed often or it is a state that currently, or generally, exists. In Spanish, the verb endings change depending on who is doing the action. You take off the endings (-ar, -er, -ir) and add the ending you need

Pronoun	-AR	-ER	-IR
Yo (I)	-o	-o	-o
Tú (You sing.)	-as	-es	-es
Él/Ella (He/She/It)	-a	-e	-e
Nosotros (We)	-amos	-emos	-imos
Vosotros (You pl.)	-áis	-éis	-ís
Ellos/Ellas (They)	-an	-en	-en

Opinions

**Present tense opinions** are used to say what we like and do not like. However these cannot be literally translated from English into Spanish. Each opinion is followed by the infinitive form of a verb and can also be plural.

Me gusta = it pleases me / me gustaN—they please me.

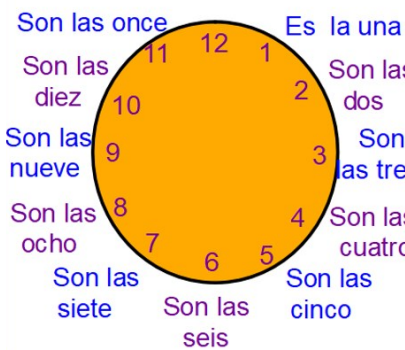

	Me encanta (n)	I love
	Me gusta(n) mucho	I really like
	Me gusta(n)	I like
	No me gusta(n)	I don't like

+ infinitive verb (hacer/jugar/ comer/ visitar)

Section C: EATTACO vocabulary	
Tenses /verbs	
Hacer	Weather phrases
Hace buen tiempo	It's good weather
Hace mal tiempo	It's bad weather
Llueve	It rains
Nieva	It snows
Hace frío	It's cold
Hace calor	It's hot
Hace sol	It's sunny
Está nublado	It's cloudy
Hay	It's stormy
Time phrases	
Hoy	Today
Los lunes	On Mondays
Los fines de semana	At weekends
Durante la semana	During the week
Question words	
¿Qué..?	What..?
¿Cuándo...?	When...?
¿Dónde...?	Where...?
¿Por qué..?	Why....?

Section A: Key terms	
Previous Tier 3 Vocabulary (from Autumn)	
Conjugate	Cognate
Translate	Definite article
Infinitive	Indefinite article
New Tier 3 Vocabulary	Definition
Irregular verbs	A verb that doesn't follow the standard patterns when conjugated.
Possessive determiner	These are pronouns and we use them before a noun.  E.g. My/Your/His/Her/Our/Their  My teacher / Your teacher
Tier 2 Key Questions	Meaning
¿Qué estudias?	What do you study?
¿Qué te gusta estudiar?	What do you like to study?
¿Cómo es tu profesor de ciencias?	What is your <u>science</u> teacher like?
Tier 1 Key Nouns—School subjects	
el inglés (English)	el dibujo / el arte (art)
el español (Spanish)	la informática (I.T)
las matemáticas (maths)	la educación física (P.E)
las ciencias (science)	la religión (R.E)
el francés (French)	la historia (history)
el teatro (drama)	la geografía (geography)
la tecnología (technology)	el alemán (German)
el profesor (teacher-male)	la profesora (teacher-female)
Mi profesor/profesora de..... es..... (My teacher of....is...)	
Mis profesores de..... son..... (My teachers of...are...)	


## Spanish — En el Insti— Year 7—Spring Term (2)

Section B: Key Grammatical Points	
La hora—telling the time in Spanish	
<p><u>Las horas</u></p> <p>Son las doce Es mediodía/medianoche</p> 	<p><u>Los minutos</u></p> 
<p>To tell the time in Spanish you need to start with the hour first, then add (or take away) the minutes.</p> <p>From 'o'clock to half past, you add on the minutes using the word 'y' (and).</p> <p>After half past, you need to jump forward to the next hour, then takeaway the minutes using the word 'menos' (minus).</p>	
<p><b>Es/Son</b> = It is...o'clock</p> <p>If you want to say 'At...', replace the es/son with 'A...'</p> <p><b>E.g.</b> A las dos y cuarto (At 2:15)</p>	
<p>2:00 Son las dos</p> <p>2:05 Son las dos y cinco</p> <p>2:10 Son las dos y diez</p> <p>2:15 Son las dos y cuarto</p> <p>2:20 Son las dos y veinte</p> <p>2:25 Son las dos y veinticinco</p> <p>2:30 Son las dos y media</p> <p>2:35 Son las <b>tres</b> menos veinticinco</p> <p>2:40 Son las <b>tres</b> menos veinte</p> <p>2:45 Son las <b>tres</b> menos cuarto</p> <p>2:50 Son las <b>tres</b> menos diez</p> <p>2:55 Son las <b>tres</b> menos cinco</p> <p>3:00 Son las tres</p>	

Section C: EATTACO vocabulary	
Estudiar	To study
Estudio	I study
Estudias	You (sing) study
Estudia	He/she/it studies
Estudiamos	We study
Estudiáis	You (plural) study
Estudian	They study
Opinions	
Me encanta	I love
Me gusta mucho	I really like
Me gusta	I like
No me gusta	I don't like
No me gusta nada	I really don't like
Odio	I hate
Timephrases	
Por la mañana	In the morning
Por la tarde	In the afternoon
Adjectives	
simpático/a	kind
antipático/a	mean
interesante	interesting
importante	important
fácil	easy
útil	useful
difícil	difficult
aburrido	boring

# Year 7 Art—Flowers and Insects—Spring Term

Section A: Key vocabulary	
Tier 3 Vocabulary	Definition
<b>Colour Wheel (n)</b>	A diagram showing colours in a circle so that you can see the relationship between them.
<b>Primary Colours (n)</b>	Three colours, red, yellow, or blue which can be mixed together to make other colours.
<b>Secondary Colours (n)</b>	Colour resulting from the mixing of two primary colours.
<b>Tertiary Colours (n)</b>	Colours formed by mixing a primary and a secondary colour.
<b>Harmonious</b>	Colours that sit next to or very close to each other on the colour wheel.
<b>Complementary Colours (n)</b>	Colours that opposite each other on the colour wheel.
<b>Warm Colours (n)</b>	Red, yellow orange (fire, sun, volcano).
<b>Cold Colours (n)</b>	Blue green purple (ice ,water, sky).
<b>Tint (n)</b>	Adding white to a colour to make it lighter.
<b>Tone (n)</b>	Adding black to a colour to make it darker.
<b>Gradation (n)</b>	Gradually transitioning from one colour to another .
Tier 2 Vocabulary	Definition
<b>Adjust (v)</b>	Alter or move (something) slightly in order to achieve the desired fit, appearance, or result.
<b>Generate (v)</b>	Produce or create something.
<b>Associate (v)</b>	Connect (someone or something) with something else in one's mind.

Section B: Key vocabulary	
<b>Layout (n)</b>	The way in which text or pictures are set out on a page.
<b>Typography (n)</b>	The art of arranging type (lettering).
<b>Lettering (n)</b>	The art of drawing letters where each letter acts as its own illustration.
<b>Collage (n)</b>	<b>Collage</b> describes both the technique and the resulting work of <b>art</b> in which pieces of paper, are arranged and stuck down onto paper.
Section B– Artist Information	
<p>Clare Youngs is a designer-maker and paper craft collage artist, illustrator and author. She creates colourful illustrations from pieces of patterned papers and fabrics. She trained as a graphic designer and has worked in the industry, mainly in packaging design but has a life long interest in everything handmade. She has enjoyed making beautiful handcrafted objects since childhood.</p>	
	

Section C: Colour Theory

<p><b>Colour Mixing:</b></p> <p><b>Red + Blue = Purple</b></p> <p><b>Blue + Yellow = Green</b></p> <p><b>Yellow + Red = Orange</b></p> <p><b>Sets of complementary colours:</b></p> <p><b>Yellow and Purple</b></p> <p><b>Red and Green</b></p> <p><b>Blue and Orange</b></p>



## Drama—Page to Stage —Spring Term



Section A: Key vocabulary		
Tier 3 Vocabulary	Definition	
<b>Playwright (n)</b>	A person who writes plays.	
<b>Director (n)</b>	A theatre director is in charge of the play, they decide where actors should be on stage and how they should act. They also work with the designers to achieve the overall look of the play.	
<b>Prop (n)</b>	A prop is an object used on stage or by actors during a performance.	
<b>Stage Direction (n)</b>	An instruction in the text of a play indicating the movement, position, or tone of an actor, or the sound effects and lighting.	
<b>Monologue (n)</b>	A long speech by one actor in a play.	
<b>Duologue (n)</b>	a play or part of a play with speaking roles for only two actors.	
<b>Theatre Design (n)</b>	How the set, lighting, music, sound and costumes should look	
Tier 2 Vocabulary	Definition	
<b>Analyse (v)</b>	Examine (something) methodically and in detail, typically in order to explain and interpret it.	
<b>Narrator (n)</b>	Where a performer speaks directly to the audience to tell a story, give information or comment on what is happening in a play.	
<b>Protagonist (n)</b>	The main character in the play.	

### Section B: Pantomime

**Pantomime Meaning:** The phrase pantomime derives from the Greek word 'Pantomimos', which is defined as a performer acting all the roles in a story, or an 'imitator of all.'

#### What is a pantomime?

A pantomime is a theatrical performance, which differs from traditional theatre in many ways. It is traditionally aimed at children, however it can be enjoyed by all generations.

Some standout **characteristics** of a pantomime include:

- Gender role reversal
- A storyline of good vs evil
- Slapstick comedy
- Colourful, eccentric costumes
- Audience participation
- Often derived from a fairy tale or nursery story

There are a number of stock **characters** who feature in almost every pantomime.

- Principal Boy (played by a girl)
- Dame (played by a man)
- Damsel in distress / principal girl
- The Villain
- Panto animal (often a horse)
- Comedy figure

The panto we know and love today – with its slapstick humour and audience participation – has its roots in Italian street theatre of the commedia dell'arte in the 16th Century.

In the early 1700s, theatre manager and actor John Rich realised the potential of the commedia characters and made Harlequin the star of the entertainments and developed the pantomime traditions of slapstick, chases, speed and transformations.

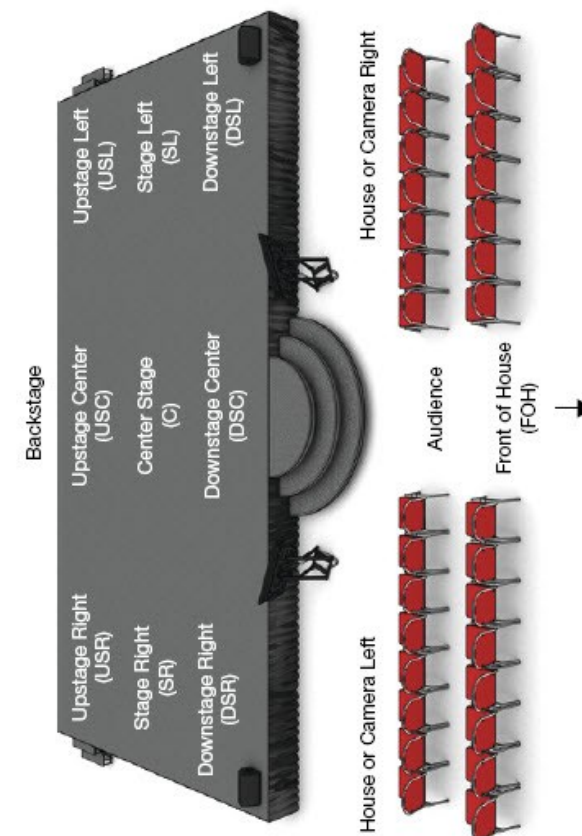
Pantomimes are traditionally staged at Christmas time and have TV stars acting in them.

### Section C: Areas of the stage

The end-on stage can be split into **9** areas: these are used by the director, actors and designers when talking about and moving around the stage space.

The most powerful position on stage is Downstage Centre.

The weakest position is **Upstage Left** because it is the last area our eyes naturally move to.



**Concepts you have seen before: Gesture, Exaggeration, Still Image, Proxemics, Body language, Levels, facial expressions, Improvisation, Masking, corpsing**



## Music, Year 7 —Timbre/Melody —Spring Term

Section A: Key Vocabulary	
Tier 3 Vocabulary	Definition
<b>Major scale</b> (n)	A set of 8 notes using a specific order of tones and semitones.
<b>Orchestra</b> (n)	A group of musicians made up of all 4 families
<b>Reed</b> (n)	Thin piece of wood which when vibrating produces sound.
<b>Timbre</b> (n)	The different sounds of different instruments.
<b>Coda</b> (n)	An ending to a piece of music
<b>Accompaniment</b> (n)	Sounds that do not form part of the main melodic structure.
<b>Pentatonic</b> (n)	A 5 note scale, can be played by just playing the black notes on a keyboard.
<b>Consort</b> (n)	A group of musicians, usually referring to recorders
<b>Conductor</b> (n)	The person who directs the orchestra.
Tier 2 Vocabulary	Definition
<b>Families</b> (n)	In music a category of instruments that look similar and make the sound in the same way.
<b>Analyse</b> (v)	Examine in detail.
<b>Compare</b> (v)	Find musical similarities and differences across 2 different pieces of music.
<b>Fluidity</b> (n)	How well the music flows.
<b>Ensemble</b> (n)	A group of musicians

Section B: Important Ideas / Concepts/ Questions	
<b>Duet</b>	2 musicians playing together.
<b>Trio</b>	3 musicians playing together
<b>Quartet</b>	4 musicians playing together
<b>Quintet</b>	5 musicians playing together.
<b>Strings</b>	String instruments are mainly made from wood and make their sound through strings vibrating. Sometimes we pluck the strings with our fingers ( pizzicato ) or we can use a bow (arco).
<b>Woodwind</b>	The instruments in the family all used to be made out of wood, which gives them their name. Today they are made of wood, metal, plastic or some combination. They are divided into flutes and reed instruments.
<b>Brass</b>	Brass instruments are made out of metal ( brass ). The sound is made by the vibration of the players lips.
<b>Percussion</b>	Percussion instruments involve any instrument that makes a sound when hit, scraped or shaken, They are grouped into two categories. Tuned and untuned..
<b>Concepts you have seen before:</b> Pitch, harmony, melody.	

### Section C: Subject Specific

The **violin**, sometimes known as a **fiddle**, is a wooden, string instrument in the violin family.



Most violins have a hollow wooden body. It is the smallest and the highest-pitched instrument in the family .The violin has four strings, usually tuned to G, D, A, E, and is most commonly played by drawing a bow across its strings. It can also be played by plucking the strings with the fingers (**pizzicato**) and, in specialized cases, by striking the strings with the wooden side of the bow (**col legno**).

Violins are important instruments in a wide variety of musical genres. They are most prominent in the western classical music, both in ensembles (chamber music to orchestras) and as solo instruments. Violins are also important in many varieties of folk music including country, bluegrass, and jazz.

The violin was first known in 16th-century Italy, with some further modifications occurring in the 18th and 19th centuries to give the instrument a more powerful sound and projection. In Europe, it served as the basis for the development of other stringed instruments used in Western classical music, such as the viola.

Violinists and collectors particularly prize the fine historical instruments made by the Stradivari, Guaneri, and Amati families from the 16th to the 18th century. According to their reputation, the quality of their sound has defied attempts to explain or equal it, though this belief is disputed. Great numbers can now be mass produced, more namely in China.

The components of a violin are usually made from different types of wood. Violins can be strung with gut, nylon or other synthetic, or steel strings. A person who makes or repairs violins is called a luthier or violinmaker. One who makes or repairs bows is called an **archetier** or **bow maker**.



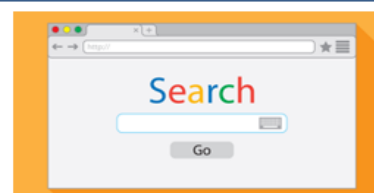
## A – Computer Science Keywords (Tier 3)

Keyword	Definition
<b>Social Media Profiles (n)</b>	A description of an individual's <b>characteristics</b> and <b>likes</b> that <b>identify</b> them <b>online</b>
<b>Hackers (n)</b>	A <b>person</b> who uses <b>computers</b> to gain access to data, computers or systems <b>without permission</b>
<b>Personal Information (n)</b>	Any <b>information</b> that can be used to <b>identify</b> you as an <b>individual</b>
<b>Cyberbullying (v)</b>	Using <b>electronic communication</b> to <b>bully</b> a person or <b>sending messages</b> to <b>intimidate</b> or <b>threaten</b>
<b>Contrast (adj)</b>	<b>Differences</b> in <b>colour</b> , <b>tone</b> or <b>shape</b> that is <b>striking</b> and noticeable
<b>Font (n)</b>	On screen and printable <b>text characters</b> in a <b>size</b> and <b>style</b> . Given a <b>family name</b> to group all the same <b>stylised characters</b>
<b>Formatting (v)</b>	Arrange and add a <b>style</b> on <b>characters</b> and <b>text</b> in an application. <b>Changing</b> colour, size, font family and emphasis
<b>Audience (n)</b>	<b>Who it is for</b> which can be broken into age, gender and interests
<b>Purpose (n)</b>	<b>What is it for</b> , the job of the document or publication; to inform, to entertain, to persuade, to inspire
<b>Digital Footprint (n)</b>	The <b>information</b> about a particular person that <b>exists</b> due to their <b>online activity</b>
<b>White Space (n)</b>	The areas of a page <b>without</b> elements, text or images
<b>Misinformation (n)</b>	When <b>information</b> is shared <b>by accident</b> because you <b>believe</b> it to be true
<b>Disinformation (n)</b>	When <b>information</b> is <b>deliberately</b> shared to <b>mislead</b> and <b>cause harm</b>
<b>Screen time (adj)</b>	The amount of <b>time</b> spent using a <b>device</b> such as a <b>computer</b> , <b>smartphone</b> , TV or <b>games console</b>

## B – Learning Keywords (Tier 2)

Keyword	Definition
<b>Request (v)</b>	The act of <b>asking</b> for something, normally <b>polite</b> and <b>formally</b>
<b>Impact (n)</b>	The effect or influence <b>after</b> something has happened
<b>Comment (n)</b>	A <b>spoken</b> or <b>written</b> remark that gives an <b>opinion</b> or <b>reaction</b>
<b>Constantly (adj)</b>	Happens again and again over a period of time; always happening
<b>Balance (n)</b>	Keeping something even, with the same amount or value on both sides to keep something steady

## C – Searching Online



### Good Keyword Searching

- Vary your search engine
- Use specific keywords
- Simplify your search terms
- Remove unhelpful words
- Refine using search operators
- Avoid pitfalls and falling for adverts or sponsored results

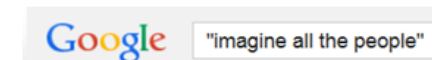


### Finding Images

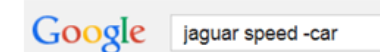
1. Search images not web
2. Use good keywords
3. Narrow your results by image size (in advanced search)
4. Select view image and not just the thumbnail
5. Either save the image in a folder to use or right-click copy to paste into your work

### Advanced Techniques

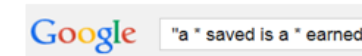
Search for an exact word or phrase



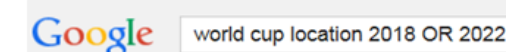
Remove a word from search results



Fill in a blank



Search for either word



## Section A – Computer Science Keywords (Tier 3)

Keyword	Definition
<b>Input (n)</b>	Any <b>information</b> or <b>data</b> <b>sent</b> to a computer for <b>processing</b> is considered input
<b>Process (v)</b>	Where a computer <b>runs</b> <b>instructions</b> to turn any <b>inputs</b> into <b>outputs</b> for the program
<b>Output (n)</b>	How the computer presents the <b>results</b> of the <b>process</b>
<b>Control (adj)</b>	A <b>computer</b> and set of <b>connected devices</b> running a <b>program</b> to <b>control</b> a system and solve a problem
<b>Flow (n)</b>	The <b>direction</b> of <b>data</b> and <b>information</b> in a <b>flowchart</b> . <b>Arrows</b> are used to show the flow
<b>Sequence (n)</b>	Running one instruction after another in <b>order</b>
<b>Condition (n)</b>	A statement, like a question in a <b>program</b> that can either <b>true</b> or <b>false</b> .
<b>Selection (v)</b>	Making <b>choices</b> of which <b>instruction</b> is next
<b>Mimic (v)</b>	A <b>representation</b> of something that is real but in a computer <b>environment</b> . Allows you to <b>test</b> out programs
<b>Iteration (v)</b>	<b>Repeating</b> the same <b>instructions</b> more than once
<b>Sensors (n)</b>	A <b>device</b> that <b>automatically</b> <b>inputs</b> <b>data</b> into a computer system where the <b>data</b> is constantly changing and can be measured
<b>Motor (n)</b>	Are used to <b>control</b> the system and in response to the inputs from <b>sensors</b>
<b>Variable (n)</b>	Used to <b>store</b> <b>data</b> for a computer program
<b>Subroutine (n)</b>	A set of <b>instructions</b> that perform a task <b>outside</b> of the <b>main program</b> . It can be <b>called on</b> and <b>ran</b> when needed

## Section B – Learning Keywords (Tier 2)

Keyword	Definition
<b>Predict (v)</b>	Say or <b>estimate</b> that (a specified thing) will <b>happen</b> in the <b>future</b> or will be a consequence of something
<b>Develop (v)</b>	<b>Creating</b> and <b>making</b> something <b>exist</b> or making it <b>grow</b> by adding more to it
<b>Test (n)</b>	A <b>procedure</b> intended to work out the quality, performance, or reliability of something <b>before</b> it is used
<b>Refine (v)</b>	Make <b>minor changes</b> so as to <b>improve</b> or <b>clarify</b>
<b>Concept (n)</b>	A <b>plan</b> or <b>intention</b>

## Section C – Flowcharts

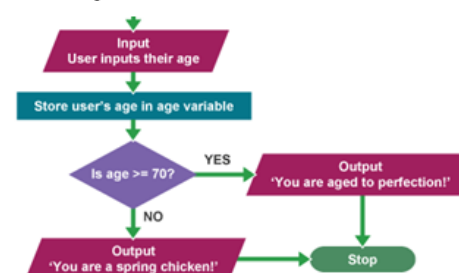
### Overview






A flowchart is a **diagram** that represents a set of **instructions**.

Flowcharts normally use standard symbols to represent the different **instructions**.

Sometimes flowcharts are broken down into many steps to provide a lot of detail about exactly what is happening. Sometimes they are simplified so that a number of steps occur in just one step

### Example of Decision



Name	Symbol	Use
<b>Terminator</b>		<b>Start</b> and <b>stopping</b> a program
<b>Input / Output</b>		<b>Input</b> from a device or sensor and <b>outputting</b> a signal or control to a device/motor
<b>Process</b>		An <b>instruction</b> or <b>command</b>
<b>Decision</b>		A <b>question</b> with two flows yes/no coming out
<b>Flow</b>		<b>Connects</b> the symbols to show the <b>direction</b> of <b>flow</b> for the instructions

Concepts you have seen before: Mimic, Predict, Develop, Test, Refine, Concept.

# Physical Education — Benefits of Exercise — Spring Term



**Bluecoat Wollaton**  
believe in yourself, in others, in God

Section A: Key vocabulary	
Tier 3 Vocabulary	Definition
Health (n)	A State of physical, social and mental wellbeing
Fitness (n)	Ability to meet the needs of the environment around you.
Mental Wellbeing (V)	A mental state that describes our feelings and ability to cope with day to day life.
Social Wellbeing (V)	A state of stability and peace with others
Physical Wellbeing (V)	Engagement in movement activities to create lifestyle habits and maintain body functions.
Lifestyle (n)	The way in which a person lives
Meditation (n)	The act of giving your attention to one thing
Tier 2 Vocabulary	Definition
Application (n)	The action of putting something in to operation.
Participation (n)	To take part in something
Stress (n)	Mental or emotional strain linked with a specific event.
Anxiety (n)	A feeling of worry or nervousness.

Section B: Key Facts	
Designed to Move	Our Bodies are designed to move and therefore we must do this regularly so that our muscles and bones work at their maximum capacity.
Exercise	In order to maintain our bodies condition, we must exert our bodies to work all organs and tissues. This is known as exercise.
Maintain Body Weight	By completing regular exercise we help to control our bodyweight.
Healthy Heart	Regular Exercise works our heart and makes it stronger. This allows more blood to be pumped around the body and conserve how hard the heart has to work.
Diet	Your health is directly related to what you eat. A balanced diet should include all the main food nutrients and water.

Section C: Methods of Health, Exercise and Wellbeing	
Skills Based Sports	This is when a series of movements are combined competitively. This could be Football, Netball or Basketball.
Bodyweight Training	This is using your Bodyweight to improve strength and endurance.
Yoga	A series of Physical postures, breathing techniques and thought to improve emotional wellbeing.
Sleep	Sleep is important for growth and recovery. It allows our bodies to heal and generate energy, ready for the tasks ahead.
Breathing	Breathing not only provides oxygen to fuel our body but helps us to relax and stay calm in a variety of situations.
Unplugging	All humans should try to 'unplug' at various points of the day to reset their bodies and regain focus and concentration.



## Section 1: Key Vocabulary

Tier 3 vocabulary	Definition
Cross contamination (n)	moving bacteria from one thing to another
Microorganism (n)	A tiny living thing eg; bacteria, moulds and yeasts
Food poisoning (n)	Illness caused by bacteria or other toxins in food, typically with vomiting and diarrhoea
Protein (n)	One of the three macronutrients used in the body for growth and repair
Nutrient (n)	A substance that provides nourishment essential for the maintenance of life and for growth
Tier 2 vocabulary	Definition
Detergent (n)	Washing up liquid
Personal hygiene (n)	Keeping yourself clean
Nutrition (n)	The food you need to be healthy
Fibre (n)	Helps you digest food
5 a day (n)	Guidelines for eating fruit and vegetables
Danger zone (n)	The temperature range that bacteria grow 5°C to 63°C



**READY TO EAT FOOD**  
Such as dairy products, yoghurt & cream

**READY TO EAT FOOD**  
Such as cream cakes, butter, cooked meats, leftovers & other packaged food.

**RAW MEAT, POULTRY & FISH**  
Always cover & keep in sealed containers.

**SALAD, FRUIT & VEGETABLES**  
Keep ready to eat fruit and vegetables in sealed bags or containers, always wash before use.

### Foods that should not be stored in the fridge

Dry pasta, flour, sugar, dried fruit, unopened canned foods, chocolate, cereals.

## Year 7 The Wonderful World of Food

### Section 2: Important ideas

#### Bridge hold

Holding food between fingers and thumb and cutting in between.



#### Claw grip

Holding your fingers close together (like a claw) to hold food when you are slicing into smaller pieces.



## Section 3: Facts/Context/Historical relevance/dates

### Why Food Is Cooked

To make it safe to eat

To improve its shelf life (makes it last longer)

To develop flavours

To improve texture

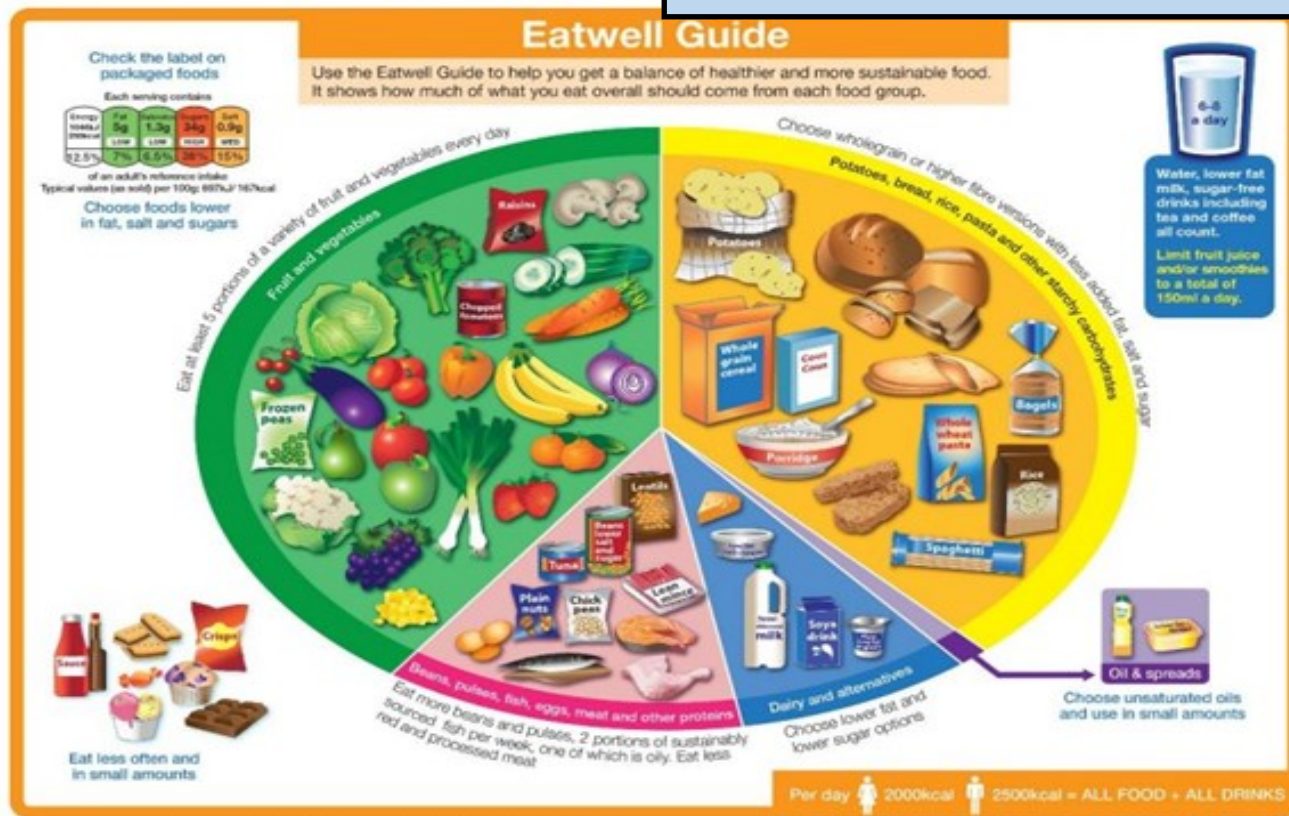
To make it easier to digest

### The four things that bacteria need to grow;

Food, moisture, warmth and time.

### Concepts you may have seen before:

Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety savoury dishes.



## Year 7 -Design Technology– Ping Pong Project




Section A: Key vocabulary	
Tier 3 Vocabulary	Definition
Nano technology (n)	Technology on a minute scale
Biomimicry (n)	Design that is inspired by nature
5th percentile (n)	Smallest 5% measurement of data
50th percentile (n)	Average
95th percentile (n)	Largest 5% measurement of data
Tier 2 Vocabulary	Definition
Engrave (v)	To create a path in the surface of a material
Specification (n)	A list of design requirements
Development (n)	Further improving an idea
Research (n)	Sourcing information and inspiration to help with design work
Evaluation (n)	Reviewing strengths and weaknesses of final product and design work
Dimension (n)	Measurement

### Section B: Important Ideas / Concepts/ Questions

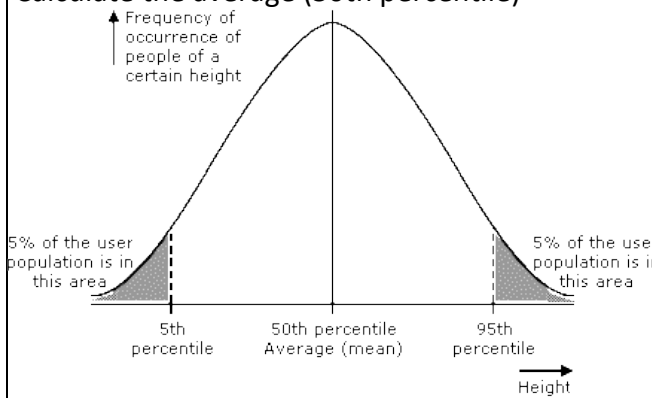
**Stage 1: Anthropometrics.**

Collect the data by measuring a number of different peoples hands.

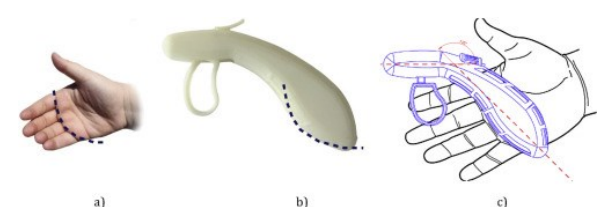


**2. Calculate the average**


Calculate the average (50th percentile)



**3. Use the average dimensions to design the product**



**4. Modify and iterate the design until it works.**



### Section C: Subject Specific

**Smart materials** are materials that have properties which change reversibly, ie can change easily but can then easily change back

## Smart Materials



Photochromic



Micro-encapsulation



Polymorph



Piezoelectric



Thermo-chromic



Quantum Tunnelling Composite



Shape Memory Alloy

Smart material	Properties
Photo-chromic	Colour change when reacts with light
Polymorph	A mouldable polymer, when 80°C can be shaped, will go hard when cools to 30°C
Thermo-chromic	Colour change when reacts to temperature
Shape memory alloy	Metal that can be bent and returns to its original shape

**Concepts you have seen before: prototype, specification, design brief, average, percentage, data collection**



Section A: Key vocabulary	
Tier 3 Vocabulary	Definition
Contour (n)	A path that is an even distance around another path.
Quality Control (n)	Ensuring that a product is made to the correct standard.
Engrave (v)	To create a path in the surface of a material.
Specification (n)	A list of design requirements.
Aesthetics (n)	Appearance.
Tier 2 Vocabulary	Definition
Logo (n)	A symbol or design that identifies a brand.
Design brief (n)	A description of the task. Usually set by the client.
Tolerance (n)	The margin of error allowed for a part of a product. Tolerances are usually given as an upper and a lower limit.
Properties (n)	The qualities of a material eg; Conductivity.
Evaluation (n)	Reviewing strengths and weaknesses of final product and design work.
Prototype (n)	A model or development of an idea.

Section B: CAD & CAM
<p><b><u>CAD = Computer Aided Design</u></b></p> <p>It involves designing products on computers, rather than using pencil and paper.</p> <p><b>CAD</b> packages we use in school include TechSoft 2D Design.</p> <p>CAD helps designers model and change their designs quickly. It is easy to experiment with colours, textures and shape. You can also see errors and change them before making anything.</p> <p>Some CAD programs allow you to view the drawing from all angles.</p>
<p><b><u>CAM = Computer Aided Manufacture</u></b></p> <p>It is the process of making products with the help of computers. There are a variety of CAM machines available.; LASER cutter, 3D printer</p>
<p><b>LASER</b></p> <p>Light</p> <p>Amplification</p> <p>Simulated (by an)</p> <p>Emission (of Radiation)</p>



Section C: Metals
<p>Some metals are <b>pure</b> metals and others (alloys) are <b>mixtures</b> of a metal with another element.</p> <p>Both types can be classified into two groups—<b>ferrous</b> and <b>non-ferrous</b>.</p> <p><b><u>Ferrous metals</u></b> contain iron because of this almost all of them are magnetic.</p> <p>Cast Iron, Mild Steel, Stainless Steel, High Carbon Steel.</p> <p><b><u>Non-ferrous metals</u></b> do not contain iron. They are not magnetic.</p> <p>Aluminium, Copper, Lead, Zinc, Brass, Bronze.</p> <p><b><u>Alloy</u></b> are mixed with other metals or elements to improve its properties.</p>
<p><b>Laser cutter</b></p> <p>Laser cutting works by directing the output of a high-power laser The focused laser beam is directed at the material, which then cuts the material leaving an edge with a high-quality surface finish. In school we mainly cut and engrave on Plywood MDF and Acrylic</p>



Your 5 pieces of equipment you need for learning every day:



**Bluecoat Wollaton**  
believe in yourself, in others, in God