Name: **Form:**

‘The only one who can tell you “You can’t win”, is you, and you don’t have to listen.’

Dame Jessica Ennis Hill

Hill is a British retired track and field athlete. She is a 2012 Olympic Champion, three time World Champion and 2010 European Champion.

Lees Brook Academy

Year 7 Knowledge Organiser:
Autumn Term 2023

CONTENTS

Instructions for using your Knowledge Organiser

Every school day you should be studying **2** subjects from your knowledge organiser for homework.

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 yellow homework 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 sign off your homework every evening using the grid in your KO on pages 4 and 5.

Your KO and exercise book will be checked by your class teacher. Failure to show homework will result in an after school detention that day. Completion of your homework means you will receive a positive point.

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

On a Friday, you will read one piece of **Principal's Reading**, following them in order. You then answer the questions in your yellow homework book.

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:

https://www.leesbrook.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
- Create flowcharts

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.**

You are expected to study the subjects shown on your timetable each day.
Each day use a page of your exercise booklet to evidence your work.

The week you do this work.

Year 7: Autumn Term 1

Week starting: 4th September	Subject 1	Subject 2	Signed off
Monday	English	Art	
Tuesday	Dance/Drama	CT—English	
Wednesday	Maths	DT	
Thursday	CT - Science	French/German	
Friday	Science	Principal's Reading	

Week starting: 11th September	Subject 1	Subject 2	Signed off
Monday	English	History	
Tuesday	RE	PE	
Wednesday	Maths	Computing	
Thursday	Music	Geography	
Friday	Science	Principal's Reading	

Week starting: 18th September	Subject 1	Subject 2	Signed off
Monday	English	Art	
Tuesday	Dance/Drama	CT—English	
Wednesday	Maths	DT	
Thursday	CT—Science	French/German	
Friday	Science	Principal's Reading	

Week starting: 25th September	Subject 1	Subject 2	Signed off
Monday	English	History	
Tuesday	RE	PE	
Wednesday	Maths	Computing	
Thursday	Music	Geography	
Friday	Science	Principal's Reading	

Week starting: 2nd October	Subject 1	Subject 2	Signed off
Monday	English	Art	
Tuesday	Dance/Drama	CT—English	
Wednesday	Maths	DT	
Thursday	CT—Science	French/German	
Friday	Science	Principal's Reading	

Week starting: 9th October	Subject 1	Subject 2	Signed off
Monday	English	History	
Tuesday	RE	PE	
Wednesday	Maths	Computing	
Thursday	Music	Geography	
Friday	Science	Principal's Reading	

Week starting: 16th October	Subject 1	Subject 2	Signed off
Monday	English	Art	
Tuesday	Dance/Drama	CT—English	
Wednesday	Maths	DT	
Thursday	CT—Science	French/German	
Friday	Science	Principal's Reading	

Week starting: 23rd October	Subject 1	Subject 2	Signed off
Monday	English	History	
Tuesday	RE	PE	
Wednesday	Maths	Computing	
Thursday	Music	Geography	
Friday	Science	Principal's Reading	

Your teachers may set work beyond this linked to your learning. For example, Maths teachers will set homework using Sparx in addition to the below.

You are expected to study the subjects shown on your timetable each day.
Each day use a page of your exercise booklet to evidence your work.

The week you do this work.

Year 7: Autumn Term 2

Week starting: 6th November	Subject 1	Subject 2	Signed off
Monday	English	Art	
Tuesday	Dance/Drama	CT—English	
Wednesday	Maths	DT	
Thursday	CT—Science	French/German	
Friday	Science	Principal's Reading	

Week starting: 13th November	Subject 1	Subject 2	Signed off
Monday	English	History	
Tuesday	RE	PE	
Wednesday	Maths	Computing	
Thursday	Music	Geography	
Friday	Science	Principal's Reading	

Week starting: 20th November	Subject 1	Subject 2	Signed off
Monday	English	Art	
Tuesday	Dance/Drama	CT—English	
Wednesday	Maths	DT	
Thursday	CT—Science	French/German	
Friday	Science	Principal's Reading	

Week starting: 27th November	Subject 1	Subject 2	Signed off
Monday	English	History	
Tuesday	RE	PE	
Wednesday	Maths	Computing	
Thursday	Music	Geography	
Friday	Science	Principal's Reading	

Week starting: 4th December	Subject 1	Subject 2	Signed off
Monday	English	Art	
Tuesday	Dance/Drama	CT—English	
Wednesday	Maths	DT	
Thursday	CT—Science	French/German	
Friday	Science	Principal's Reading	

Week starting: 11th December	Subject 1	Subject 2	Signed off
Monday	English	History	
Tuesday	RE	PE	
Wednesday	Maths	Computing	
Thursday	Music	Geography	
Friday	Science	Principal's Reading	

Week starting: 18th December	Subject 1	Subject 2	Signed off
Monday	English	Art	
Tuesday	Dance/Drama	CT—English	
Wednesday	Maths	DT	
Thursday	CT—Science	French/German	
Friday	Science		

Your teachers may set work beyond this linked to your learning. For example, Maths teachers will set homework using Sparx in addition to the below.

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 thing.		
Algorithm	Algorithim	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

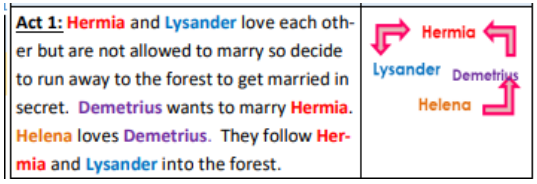
Rather than expand or explain a process, your teacher might ask you to summarise it into its key parts. E.g. summarising the plot 'A Midsummer Night's Dream' in English.

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 Design Innovation Principal's Reading
Week Beginning: 04/09/2023

Is 3D Printing going to change the world?

3D printing is a way of making real objects from designs on a computer.
Rather than making something by sticking lots of small parts together, a 3D printer can build complicated items in one piece.
It's been used in the manufacturing industry for quite some time, but as the technology improves the possibilities increase.
3D printers are slowly becoming cheap enough for people to have a small one at home.

What can be 3D printed?
Typically 3D printers make items out of plastic. You could print a perfect-fitting case for your phone or even a replacement part for something broken.
3D printers can also make replacement body parts that are custom designed to fit your body perfectly.

Not all 3D printers use plastic. Some can be filled with chocolate to print fancy treats!
It's hoped that 3D printers will eventually have no trouble printing body parts made of real human cells.

Will home printing take off?
"Judging by the way 3D printers are used now, it's unlikely we'll all have one in our homes in the near future," said Newsbeat technology reporter Jonathan Blake.
He told Newsround: "Unless you're a designer or need to produce a lot of objects regularly, it's more likely that you'll go to a shop and get something printed."
"The equipment is getting cheaper though, and scientists are pushing the boundaries of what they can produce all the time," he said.

Questions to answer in your yellow homework book:

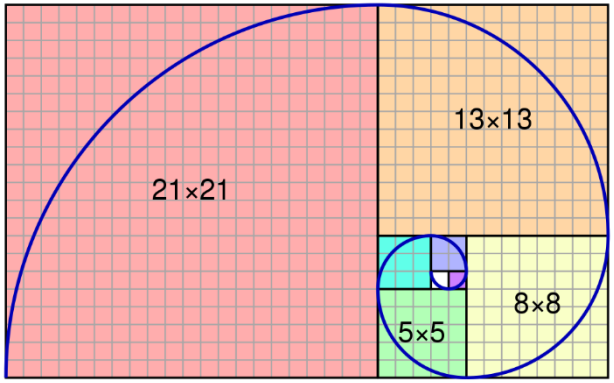
1. How does 3D printing build parts?
2. What is making 3D printing more popular for at home?
3. What materials are mostly used for 3D printing?
4. What more unusual materials can be used for 3D printing?
5. How could 3D printing be used for medical applications?
6. Give reasons for and against 3D printing changing the world.

Year 7 Mathematics Principal's Reading
Week Beginning: 11/09/2023

Fibonacci numbers

Fibonacci numbers are named after Italian mathematician Leonardo of Pisa, later known as Fibonacci. In his 1202 book Liber Abaci, Fibonacci introduced the sequence to Western European mathematics, using it to calculate the growth of rabbit populations. However, the sequence had been described earlier in Indian mathematics, as early as 200 BC in work by Pingala on enumerating possible patterns of Sanskrit poetry formed from syllables of two lengths.

Fibonacci numbers appear unexpectedly often in mathematics and are used in computer algorithms and random number generators. They also appear in biological settings, such as branching in trees, the arrangement of leaves on a stem, the fruit sprouts of a pineapple, the flowering of an artichoke, an uncurling fern, and the arrangement of a pine cone's bracts.



The Fibonacci spiral: created by drawing arcs across squares whose side lengths are successive Fibonacci numbers: 1, 1, 2, 3, 5, 8, 13, 21…

Examples of the Fibonacci spiral in the natural world.

Questions to answer in your yellow homework book:

1. Who are Fibonacci numbers named after?
2. When was the sequence earlier described?
3. Give three examples of where Fibonacci numbers are used or seen.
4. What does each diagram show?

Year 7 Dance Principal's Reading
Week Beginning: 18/09/2023

The Importance of Dance in Secondary Schools'

Dance as a subject is unique, in that it blends artistic practice with physical activity. Dance has an affirmative impact on young people's education and learning and offers opportunities for all young people to perform in school and in local, regional and national events. When compared to sport and academic activities, dance exhibits more positive changes in well-being. High quality dance also promotes whole school improvement through influencing the culture of the school, raising aspiration and enhancing the profile of the school in its community.

"Studying cultural education subjects, such as art and design, dance, drama and music, sparks creativity across the curriculum, encouraging young people to be inquisitive, disciplined and determined. Wherever children start in life, a high quality cultural education in every school should be a right, not a privilege. Alongside literacy and numeracy, another skill needed in our workforce today is creativity. Cultural education subjects help young people to unlock their innate creativity, enabling them to become more rounded and confident human beings.

Dance remains one of the most popular art forms amongst young people. Surveys show that dance is the second most popular physical activity following football, and is a very attractive cultural form through which young people of all learning abilities can express their own identities and cultures. Dance enables young people to gain artistic skills and discipline, as well as developing their ability in physical interaction, team working, problem solving, observing, evaluating, verbal and non-verbal communication. Through dance young people collaborate with other art forms, and make connections with design in space, musicality and creativity. Dance can improve self-esteem and confidence; it can widen aspiration and help tackle obesity and other health issues.

Questions to answer in your yellow homework book:

1. Which website is this article from?
2. Why is dance unique?
3. How does dance benefit health?
4. What does the Arts encourage?
5. What skills do students gain from Dance?
6. How can Dance help with health ?

www.artscouncil.org.uk

Year 7 Art Principles Reading
Week Beginning: 25/09/2023

Art Movement Cubism

Cubism was a revolutionary new approach to representing reality invented in around 1907–08 by artists Pablo Picasso and Georges Braque. They brought different views of subjects (usually objects or figures) together in the same picture, resulting in paintings that appear fragmented and abstracted. By breaking objects and figures down into distinct areas – or planes – the artists aimed to show different viewpoints at the same time and within the same space and so suggest their three dimensional form. In doing so they also emphasized the two-dimensional flatness of the canvas instead of creating the illusion of depth.

What inspired cubist style?

Cubism was partly influenced by the late work of artist Paul Cezanne in which he can be seen to be painting things from slightly different points of view. Pablo Picasso was also inspired by African tribal masks which are highly stylised, or non-naturalistic, but nevertheless present a vivid human image. 'A head', said Picasso, 'is a matter of eyes, nose, mouth, which can be distributed in any way you like'.

Types of cubism: Analytical vs. synthetic

Cubism can be seen to have developed in two distinct phases: the initial and more austere analytical cubism, and a later phase of cubism known as synthetic cubism. Analytical cubism ran from 1908–12. Its artworks look more severe and are made up of an interweaving of planes and lines in muted tones of blacks, greys and ochres.

Synthetic Cubism is the later phase of cubism, generally considered to date from about 1912 to 1914, and characterised by simpler shapes and brighter colours. Synthetic cubist works also often include collaged real elements such as newspapers. The inclusion of real objects directly in art was the start of one of the most i

Questions to answer in your yellow homework book:

1. Which artists invented Cubism?
2. Who originally influenced Cubism?
3. Pablo was inspired by what type of mask? What did he like about it?
4. What year was Cubism invented?
5. What is the difference between Analytical Cubism and Synthetic?
6. From what you have read about Cubism how would you answer the question 'what is cubism?'

Year 7 History Principal's Reading
Week Beginning: 02/10/2023

Windrush Day: Who were the passengers heading to London?

Seventy-five years ago, 1,027 passengers **disembarked** [got off] from the MV Empire Windrush at Tilbury Docks, with about 500 of those being migrants from the Caribbean who had travelled to fill labour shortages in the UK.

Those who arrived would have had to fill out a landing card stating various details such as their age, previous residence, occupation and their proposed address for where they were going in Britain.
These documents were destroyed by the UK Home Office in 2010 leading to the Windrush scandal where many of those who had migrated to Britain became unable to prove they were legally allowed in the country.
In response to this Dr John Price, a senior lecturer at the University of London, transcribed the ship's original passenger list to recreate every landing card as part of a series of exhibitions.

Who were the passengers?

According to the database, the capital was the most popular destination for passengers with 340 of those on board giving an address in the city as where they were planning to stay. The stated occupations of those on-board varied enormously. The largest number were termed **household domestics,** including people such as housewives, servants and cleaners.
Other featured **occupations** [jobs] were plumbers, electricians, dressmakers and cabinetmakers, as well five musicians, two chauffeurs and a Catholic priest.

Surprisingly, Jamaica-born Sam King - a leading member of the Windrush generation who famously became the first black mayor of Southwark and was credited with helping to co-found the Notting Hill Carnival - does not have a London address, with his destination on the passenger list given as Birmingham.

While the ship became known for bringing over people from the Caribbean who helped rebuild a war-torn UK, the previous homes of those with London addresses shows how diverse the passengers on board were.
While the vast majority of those going to London were from the Caribbean, there were also 50 who were from the UK, while other last residences included Burma, New Zealand and Italy.

According to Dr Price this was because the original purpose for the ship's journey was to stop at various ports to collect servicemen as it returned the UK. However, things then changed when it got to the Caribbean.

"When arriving at Kingston, Jamaica, there was still plenty of space left on the ship, so the enterprising captain advertised cut-price tickets on the troop decks to anyone wishing to travel," he says.

As such not all of the passengers with London addresses were planning to stay in the country, with 66 saying they were going on to other parts of the British Empire and three planning to head to other countries.

Where did they stay?

The passenger list shows that those heading to the capital had addresses all over the capital.
For those returning to Britain their destination would have been their homes, while temporary addresses like hotels were provided by those who were simply using the ship as part of a longer journey.

Several migrants gave addresses for businesses where they were likely to have already been offered jobs which they were moving to the UK to begin, according to Dr Price.
For example, John and Hamil Stevens wrote Lloyds Bank in Pall Mall, while the four members of the Berger family noted Nestle's Milk Co in Eastcheap in the City of London as their addresses.

Questions to answer in your yellow homework book:

1. How many passengers boarded the Empire Windrush?
2. What was the main reason for the migration?
3. Which occupations [jobs] did people do? List 5.
4. How many passengers were originally from the UK?
5. Where did John and Hamil Stevens stay? Why did they give this as their address?

Year 7 Food and Nutrition Principal's Reading
Week Beginning: 09/10/2023

Children are leading the way when it comes to saving the planet.
By Christine Hayes

Children are leading the way when it comes to saving the planet through eating less meat and using less plastic, according to a survey by BBC Good Food.
The report asked 1,000 children aged 5-16 about their attitudes to food, cooking and eating now and in the future.
The results found that children were interested in being vegan or vegetarian, they would like less plastic packaging and are keen to spend time in the kitchen trying out new dishes.
The survey found 8% of children are following a vegan diet and of those who don't follow a vegan diet, 15% would like to.
They also found that 13% of children are vegetarian and around one in five (21%) of children who are not currently vegetarian would like to be.

Vegan and Vegetarian
- A vegan is someone who doesn't eat or use animal products
- Vegetarians don't eat meat or fish

The survey also asked children about how they would like the food industry to change over the next ten years.
It found that 44% of children would like there to be no plastic packaging on food and one in four would like to see food delivered by drones.

She added: "They are passionate about exploring alternative diets and methods of food production that could be more sustainable for the planet."
The survey also asked children about what cooking tasks they can do. The results found:
68% can make toast
60% can make a packed lunch
55% heat food in the microwave
54% make coffee/tea or other soft drinks
51% chop vegetables

Questions to answer in your yellow homework book:

1. Who was the report written by?
2. How many children did it ask? How old were they?
3. What did the survey find about children being vegan?
4. What is a vegan?
5. What is a vegetarian?
6. What did 44% of children want?
7. How many children would like to be vegetarian?

Year 7 Music Principal's Reading
Week Beginning: 16/10/2023

The Importance of Singing

1. Singing makes you feel better
There's an increasing amount of evidence that singing releases endorphins, serotonin and dopamine – the 'happy' chemicals that boost your mood and make you feel good about yourself. Scientists believe that's one of the reasons why people report being on a high during choir sessions and continuing to feel positive, uplifted and motivated afterwards. Singing also counts as an aerobic activity as it introduces more oxygen into the blood leading to better circulation – and a better mood.

2. Singing enhances lung function
We often take our lungs for granted, but most of us rarely use them to their full capacity. The way singing requires you to breathe makes you do just that, increasing your lung capacity as well as engaging the muscles around the ribcage. Singing is good for your lungs as it make you breathe more deeply instead of shallow breathing.

3. Singing helps you beat stress and relax
As well as benefitting our lungs, breathing properly and with more awareness is good for releasing anxiety and helping us transition to a state of rest and relaxation. If you've had a bad day, give singing a go. It is stress-busting properties will help you forget your worries and simply be in the moment. Or take a few minutes out of your day and Reconnect with your body, breath and voice by following one of our wellbeing videos.

4. Singing helps improve memory
Singing can help improve mental alertness, memory and concentration as it involves focusing on multiple things at once, engaging many areas of the brain in the process. Music is also increasingly becoming a feature of dementia care, in part because it has proved a powerful tool in sparking memories often long after other forms of communication have diminished. A group of people living with dementia attended Melodic Memories sessions with Opera North to see if it made a difference.

5. Singing builds a sense of community
Singing is a fantastic communal activity. Singing with other people, whether in the flesh or on screen, can help build connections and feelings of togetherness. Recent research has also shown that the sense of self-other merging we experience by synchronising our voices with others is a great way to fast-track social bonding.

6. Singing lets you express yourself
Singing is the perfect way to let go and express how you feel. In From Couch to Chorus (Musical Theatre), the repertoire is chosen to tap into a range of emotions with contrasting pieces. Of course, when you sing in a group, there's the added fun of watching other people enjoying themselves too!

7. Singing boosts your confidence
Many people get nervous at the thought of performing in public, but singing in a group can actually help boost your confidence and fire up your self-esteem – and the more you do it, the more confident you'll feel. Good posture is also a key factor in hitting the high notes, so you'll find you're naturally standing taller by the end. In fact, it works so well that singing has even been used by Opera North to build confidence, self-belief and personal impact in the workplace during training sessions with its Corporate Partners.

Questions to answer in your yellow homework book:

1. Why is singing so important?
2. Do you enjoy singing and if so why?
3. How does music/singing build a sense of community?
4. How does singing boost your confidence?
5. Who is your favourite artist and why?
6. How does singing help improve memory?

Year 7 Computing Principal's Reading
Week Beginning: 23/10/2023

Nearly a quarter of kids see gaming with friends as a form of exercise according to a new survey.

The Youth Sports Trust report suggests children are not doing enough sport and are at risk becoming addicted to their handheld devices.

The charity say they're worried that lots of kids could suffer from health problems in the future and think more needs to be done to improve sport in school.

They want technology to be part of PE in schools to encourage more kids to get fit doing things they enjoy.

The Youth Sports Trust asked 1,000 five- to 16-year olds what they thought of sports in school.

The findings suggested that 75% of young people enjoy PE, but that digital technology can distract children from doing physical activities.

As well as 23% of the kids saying they think playing a computer game with a friend is exercise, around one in three said they spoke to their friends more on social media than they do in person.

The government said it has given schools £300m to improve school sport, and that PE is really important.

Children's minister Edward Timpson said: "It is pleasing that the Youth Sport Trust's research shows that millions of young people are enjoying PE lessons."

But he added that "action is needed now to modernise the approach to PE and school sport and in doing so, guarantee the best possible future for generations to come."

https://www.bbc.co.uk/newsround/33240073

Questions to answer in your yellow homework book:

1. What percentage of students think gaming with friends is exercise?
2. Who carried the survey out?
3. What is the issue of thinking gaming is exercise?
4. Does this article suggest technology be used in PE lessons?
5. What percentage of students like PE?
6. What ratio of students used social media to communicate with friends rather than in person?
7. Who published this article online?

Year 7 Science Principal's Reading
Week Beginning: 06/11/2023

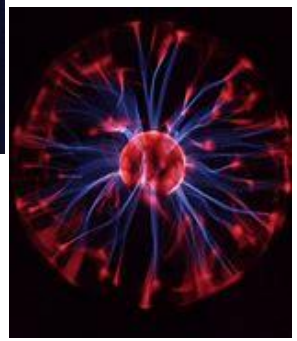
What is plasma?

Plasma is defined as a state of matter **predominantly** comprised of ions and electrons. An ion is formed when an atom or molecule gains or loses electrons, yielding an overall charge (either positive or negative). The presence of charged ions means that a plasma is highly electrically conductive and responds strongly to magnetic and electric fields. Its behaviour is most comparable to that of a gas, as the plasma has no defined volume but instead assumes the volume of the container it is in.

Plasmas commonly form by heating a gas to **searing** temperatures. When heated, the atoms in the gas either gain or lose electrons (ionisation) and the end result is a charged particle plasma. Packed full of charged particles (positive ions, electrons, or negative ions), the plasma can also be created by breaking any molecular bonds with a magnetic field via a device such as a laser. The record for the hottest plasma formed on Earth measures a **scorching** 6 trillion degrees Celsius (10.8 trillion °F)! Definitely hotter than the temperature of the centre of the Sun, which comes in at a **puny** 5 million °C (9 billion °F).
This record temperature was recorded in the Large Hadron Collider; where scientists smashed lead ions, creating a plasma to **simulate** conditions at the start of the universe. Maintaining plasma is a fine art; it requires careful use of energy, balancing the number of electrons stripped from one nucleus and the number of electrons that recombine with another nucleus. The **recombination emits** a unique glow of light, characteristic of plasmas. If too many electrons are captured, the plasma will return to a traditional gas state; if too few recombine, the energy required in maintaining the plasma will increase.
Plasma in Everyday Life & Scientific Study:

Examples of plasmas are varied and many, but a few examples are particularly **intriguing** with lightning as possibly the most famous of all. When lightning forms, air molecules are stripped of their electrons, creating a conducting path and allowing clouds to **discharge** a huge amount of electrical energy at temperatures of around 30,000 °C (54,000 °F). A more accessible example is the plasma display TV. Noble gasses are confined to tiny cells spread across the face of the display in a way so that when high voltages spread across the cell a plasma is created and UV photons are released. The photons are then **absorbed** by the coating of the cell, **subsequently** emitting photons in the visible spectrum, producing the pixels we see on the screen.

Plasmas are also **extensively** researched by many scientific fields, in particular fusion reactors. Here, high energy plasmas are created in order to **fuse** Hydrogen atoms to make Helium - the same process which powers stars. An example of a plasma-based fusion reactor is the Joint European Torus, located in Oxfordshire, UK, where the plasma is contained in a **torus-shape** using a combination of magnetic fields in different **orientations**. In such reactors, the plasma mimics the high-temperature, high-pressure conditions in a star creating an environment where nuclear fusion can occur. This could prove to be an incredible breakthrough, as **fusion** promises a power source without the radioactive waste **associated** with fission reactors or the greenhouse gasses produced by coal and oil power stations. The field of plasma physics is full of **fascinating** properties, applications and mathematics. We are just scratching the surface of possibilities in this **intriguing** field and who knows what amazing discoveries the future holds.



Questions to answer in your yellow homework book:

1. State how plasmas are typically formed
2. Describe why plasma most similar to a gas
3. Give one reason why scientists try to create plasmas
4. Describe why lightning is an example of plasma
5. Explain the importance of creating and controlling plasmas
6. Suggest why plasma is often called the 'fourth state of matter'
7. Add five words and their meanings to a mini glossary at the end of you work for five words you did not know from the article.

Year 7 Principal's Reading
Week Beginning: 13/11/2023

The Importance of Drama in Secondary Schools'

Storytelling is a fundamental part of human nature and so it can be used to support teaching and learning across the curriculum. Drama allows pupils and their teachers to encourage diversity, inclusion, tolerance and acceptance, as well as exploring the perspectives and experiences of cultures from around the world. The drama curriculum should help pupils to develop skills in: • creating • performing • experience of watching performances • evaluating their own work and that of others

Building skills: for life Drama allows pupils to develop transferable skills in leadership, communication, creativity, critical thinking and problem solving. At examination level, drama offers pupils, of all abilities and interests, a range of opportunities in subject-specific skills including performance, design and technical roles.

Cultural experiences: As audiences and participants in drama-based activities, young people develop a lifelong appreciation and understanding of drama and theatre and its interplay with other art forms. Participation in drama activities increases pupils' cultural capital and helps them succeed in life. 5. Mental health and wellbei

Inclusion and diversity: Drama supports and encourages personal expression and the exploration of a wide range of cultures, experiences, perspectives, and the world in which we live.

Mental health: and wellbeing Involvement in drama activities can have a positive effect on the mental health and wellbeing of pupils, staff and the wider school community. It creates cohesion and facilitates relationships across year groups and subject areas. By creating space for self-expression and the exploration of emotions, involvement in drama enables pupils to develop empathy, confidence, enhanced communication skills and an understanding of what it means to be a valued member of society.

Questions to answer in your yellow homework book:

1. What does drama encourage?
2. What skills are developed by having drama lessons?
3. What website was this reading taken from?
4. What is a cultural experience?
5. How is drama inclusive?
6. How does drama benefit mental health?

www.artscouncil.org.uk

Year 7 Religious Studies Principal's Reading
Week Beginning: 20/11/2023

On Passover, people celebrate how God took the Jewish People (Israelites) out of Egypt, where they had been enslaved by Pharaoh. With Moses as His representative, God brought 10 plagues upon the Egyptians until they agreed to send the Jews from their land.

As Moses is shepherding his flock, he comes upon a burning bush, in which God appears to him and instructs him to go to Pharaoh and demand: "Let My people go, so that they may serve Me." Moses objects, mentioning a speech defect he developed while in the palace, and so Moses' brother, Aaron, is appointed to serve as his spokesman. In Egypt, Moses and Aaron gather the elders of Israel to tell them that the time of their redemption has come. The people believe; but Pharaoh refuses to let them go and increases the suffering of Israel. He increases the burden of labour on his Hebrew slaves, commanding their taskmasters to stop bringing the Israelites straw to make the bricks. Now, they must go to the fields to collect the straw themselves, but must continue making the same number of bricks.

Moses can no longer bear the pain of his brethren; he turns to God saying, "Why have You done evil to this people?" God promises that the redemption is close at hand, "Now you shall see what I will do to Pharaoh; for with a strong hand shall he let them go, and with a strong hand shall he drive them out of his land."

God then reveals Himself to Moses. Employing the "four expressions of redemption," He promises to take out the Children of Israel from Egypt, deliver them from their enslavement, redeem them and acquire them as His own chosen people at Mount Sinai; He will then bring them to the Land He promised to the Patriarchs.

Moses and Aaron repeatedly come before Pharaoh to demand in the name of God, "Let My people go, so that they may serve Me in the wilderness." Pharaoh refuses. Aaron's staff turns into a snake and swallows the magic sticks of the Egyptian sorcerers.

Pharaoh still refuses to let the Jews go. Moses warns him that God will smite Egypt. Pharaoh still refuses to let the Jews go. God begins to send a series of plagues upon the Egyptians. During each plague, Pharaoh promises to let the Children of Israel go; but he goes back on his word as soon as the plague is ended.

The Ten Plagues

1) Aaron strikes the Nile, the waters turn to blood;
2) Swarms of frogs overrun the land;
3) Lice infest all men and beasts. Still, Pharaoh remains stubborn;
4) Hordes of wild animals invade the cities,
5) A pestilence kills the domestic animals,
6) Painful boils afflict the Egyptians.
7) Fire and ice combine to descend from the skies as a devastating hail. Still, "the heart of Pharaoh was hardened and he would not let the children of Israel go; as God had said to Moses."

The people of Egypt have suffered too much. They beg Pharaoh to let the Jews go. When Moses comes to warn Pharaoh of the eighth plague, Pharaoh says: You say that you want t go serve your God? I'll let the men go, as long as the women and children stay behind. No, says Moses, we must all go, men women and children, cattle and herds. Pharaoh once agai refuses.

The next plagues descends upon Egypt.
8) A swarm of locusts devours all the crops and greenery;
9) A thick, palpable darkness envelops the land.

The Israelites are instructed to bring a "Passover offering" to God: a lamb or kid is to be slaughtered and its blood sprinkled on the doorposts and lintel of every Israelite home, so that God should pass over these homes when He comes to kill the Egyptian firstborn. The roasted meat of the offering is to be eaten that night together with matzah (unleavened bread) and bitter herbs.

Then God brings the tenth plague upon Egypt,
10) All the firstborn of Egypt are killed at the stroke of midnight of the 15th of the month of Nissan.

Questions to answer in your yellow homework book:

1. What is celebrated on Passover?
2. Why do Moses and Aaron go to the Pharoah?
3. Summarise the 10 plagues into one word each.
4. Why is Passover celebrated by the Jewish people?

Year 7 German Principal's Reading
Week Beginning: 27/11/2023

Source:
Goldlöckchen und die drei Bären

In der Nähe des Waldes wohnte ein kleines Mädchen namens Goldlöckchen. Goldlöckchen war ein kleines Mädchen. An diesem Morgen spielte sie im Wald und warf Steine auf Eichhörnchen

„Oh, ich bin so hungrig!" dachte Goldlöckchen.

Sie klopfte an die Tür des Hauses. Sie sah drei Schüsseln mit Brei auf dem Küchentisch – aber niemand schien zu Hause zu sein. Also ist Goldlöckchen hinein gegangen.

Zuerst hat Goldlöckchen den Brei aus der Schüssel des Bärenvaters probiert. *„Au! Der Brei ist zu heiß!"* sagte sie.
Dann probierte Goldlöckchen den Brei aus der Schüssel der Bärenmutter. *„Igitt! Der Brei ist zu kalt!"*, sagte sie.
Zuletzt probierte Goldlöckchen den Brei aus der Schüssel des Bärenbabys. *„Hmmmm, der Brei ist genau richtig!"*

***Hilfe* – Help:**	Eichhörnchen = squirrels
in der Nähe = nearby	Brei = porridge
Mädchen = girl	Küchentisch = kitchen table
im Wald = in the forest	heiß = hot
Schüsseln = bowls	igitt! = yuck!
warf = threw	probiert – tried
Steine = stones	richtig – right
Tur = door	klopfte = knocked

Questions to answer in your yellow homework book **in English**:

1. What activity is Goldlöckchen doing in the forest?
2. What does Goldlöckchen see on the kitchen table?
3. What was wrong with the porridge belonging to mummy bear?
4. How do you think Goldlöckchen felt after eating the food from the table?

Challenge: Draw a picture to show what might happen next in the story when the bears get home. Make sure to label your picture **in German**.

Year 7 Design Engineering Principal's Reading
Week Beginning: 04/12/2023

While iron has been in use for over 1,000 years, stainless steel is relatively new. The first stainless steel was produced around 100 years ago in Sheffield. In the intervening decades, it has revolutionized the modern world and is found in applications from building to healthcare to transportation.

Rustless Steel

Harry Brearley invented the first true stainless steel in 1913. He added 12.8% chromium to iron, and produced a metal that he found was resistant to both corrosion and rust. Brearley discovered this metal while looking for a solution to the problem of erosion in the gun barrels of the British army.

Once stainless steel was first developed, improvements came rapidly. By 1919, a patent had been filed on marensitic stainless steel, a forerunner to today's 410 stainless steel. In 1929, William J. Kroll discovered the process of precipitation-hardening stainless. The first duplex stainless steel was produced in Sweden in 1930.

Stainless Steel Applications

Soon after stainless steel's discovery, it was put to work in a wide range of applications. In Sheffield, UK, where the first stainless steel was made, factories began manufacturing surgical tools and cutlery from the material. By 1925, stainless steel tanks were proving their resistance to corrosion by storing nitric acid for industrial applications. In 1926, the first surgical steel implants were used. The first beer to be fermented in stainless steel tanks was brewed in 1928. The material is now standard for the brewing industry.

Throughout the 1920s, a range of nickel and chromium formulations were tested. Different mixes presented different benefits in corrosion resistance, malleability and other qualities. There are now roughly 100 grades of stainless steel commercially available. Stainless steel grades fall into four general groups: martensitic, austentic, duplex and ferritic. Ferritic and martensitic are magnetic while austentic and duplex are not.

Many famous landmarks, such as the sculpture above the entrance of 50 Rockefeller Plaza and Chicago's Could Gate, get their luster from stainless steel. Stainless steel was put to work in applications that included tidal power plants in the 1960s and flood barriers by the 1980s.

Stainless Steel Today

As we look toward future challenges, stainless steel remains an ideal material. Stainless steel is 100% recyclable and can be reprocessed without degradation, which keeps it out of the waste stream. It is highly resistant to corrosion, which means it has a long service life before needing replacement. Together, these qualities can help with the task of reducing carbon emissions and forging more sustainable practices.

Questions to answer in your yellow homework book:

1. How long ago was stainless steel invented?
2. Who was the inventor of stainless steel?
3. Where was Stainless Steel invented?
4. What was Stainless Steel used for after it's invention.
5. What are the benefits of stainless steel?
6. What is stainless steel made from?

Year 7 Geography Principal's Reading
Week Beginning: 11/12/2023

India Case Study

Why is development uneven in India and what has been done to improve this situation?

India is an emerging country with a rapidly growing economy in Southern Asia. It has the second-largest population in the world with 1.3 billion people. India has a diverse cultural background. Ports, such as those in Mumbai, have developed along India's extensive coastline, providing significant trade opportunities for India.

How and why is development across India in uneven?

Development across India is very uneven. This uneven development can be explained by the core-periphery model. Industrialised, urban areas which are centres for economic growth are core areas. The periphery is the surrounding, mainly rural areas where there is little economic development and few jobs.

Core areas developed around raw-materials. For example, the Damodar valley became a centre for heavy engineering following the discovery of coal and iron ore. Once a large industry moves into an area there is a multiplier effect. This means people have better jobs and a higher income which leads to increased wealth in the area. This means there is more investment in the infrastructure, which in turn attracts more businesses to the area.

States that are peripheral to Maharashtra, such as Bihar, have higher levels of poverty. States such as this still rely on agriculture for much of their income, however, crop yields and prices are variable.

INDIA AND INTERNATIONAL TRADE

Since 1991, when India reduced barriers to trade, international trade has become increasingly important to India's economy as foreign business has increased.

India is a member of the World Trade Organisation (WTO) and the G20 (the world's 20 largest economies). India's largest trade partners are the USA, China and the United Arab Emirates. India's main import is crude oil and its main exports are chemical products and diamonds.

INDIA AND AID

India has been one of the largest receivers of international aid. It has received aid from individual countries such as the UK, which, until 2015, received over £200 million a year to help tackle poverty. It has also received loans from IGOs such as the World Bank. India changed its economic policies in 1991 to allow foreign businesses to locate in the country following an aid deal of US $2.2 billion from the International Monetary Fund (IMF).

How are public and private investment in India changing?

Prior to 1991, the main type of investment in India was public (by the government). Private investment was prevented in most industries, a licence was needed by private companies before they could start producing goods.

Following India opening its economy to private sector investment in 1991, some large TNCs from the USA and Europe outsourced IT and manufacturing to India. This is because India relaxed foreign investment rules, allowing foreign companies to own more land and properties.
The government has also encourages smaller Indian companies to invest in economic development through projects such as Startup India. Paperwork and taxes have been reduced to support investment.

To support further economic development the government has been increasing public investment by upgrading the rail network, improving broadband provision and building new roads.

Questions to answer in your yellow homework book:

1. Where is India located?
2. What has helped India to be able to trade?
3. What is the difference between **core** and **periphery**?
4. How did the Damodar Valley develop?
5. Where has India received aid from?
6. Why was 1991 such an important year for India?
7. What did the India government do to further support development?

Year 7 – English – Myths and Legends – Autumn Term 1

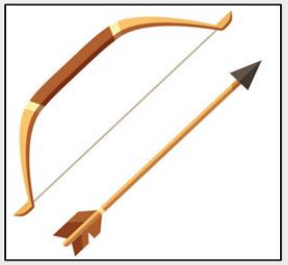
Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Protagonist (n.)	The leading character or one of the major characters in a story.
Antagonist (n.)	A character who opposes the protagonist (often the enemy.)
Hamartia (n.)	A fatal flaw leading to the downfall of a hero or heroine.
Hero (n.)	A person who is admitted for having done something very brave or for having achieved something great.
Villain (n.)	A bad person who is admired for having done something very brave or having achieved something great.
Tier 2 Vocabulary	**Definition**
Myth (n.)	A traditional story with no historical basis created by early civilisations to make sense of things happening in the natural world around them.
Legend (n.)	A very old story from ancient times, not always true but have some historical grounding and focus on a famous person or event.,
Implicit (adj.)	Something that is suggested rather than said.
Explicit (adj.)	Stated clearly, leaving no doubt.
Moral (adj.)	Knowing the difference between right and wrong behaviour.

Section B: Key Concepts/Ideas/Questions

Key Themes and Ideas

- Power and responsibility
- Gods vs Man
- Worship
- Morals and values
- Trust vs betrayal
- Deception
- Mortality
- Murder
- Prophecies and curses
- Battles and quests
- Bravery and courage
- Hero vs villain
- Good vs evil
- Supernatural
- Reason
- Chance vs fate
- Coming of age
- Curiosity
- Pride



Types of Mythology

African
Egyptian
Greek
Chinese
Norse
Native American
English
Fairytales

Big Questions

Power Morality Conflict Tragedy

1. What is a myth?
2. What is a legend?
3. Can I identify myths and legends from our own culture?
4. Can I relate to the context of these stories?
5. How have myths and legends developed over time?
6. How do myths and legends establish a sense of cultural identity?
7. Can I relate to cultural identity in other diverse communities?
8. Why are motives important in myths and legends?
9. Can I analyse a writer's use of language?
10. Can I explore myths and legends in my own writing?

Section C: Subject Specific

Models of Language Analysis:

Point Write a single sentence that outlines your point/answers the question.

Evidence Select a quote to back up your point.

Explain How does the quote prove your point? What does the quote suggest?

Zoom Zoom in on keyword, identify word class and explore the connotations of this word. What can we infer?

Effect What does it make the reader think, feel or imagine?

OR

WHAT has the writer done?

The writer has: depicted/illustrated/portrayed/presented

HOW has the write does this?

Using the adjective/verb/imagery/noun "___" which suggests____

WHY has the writer done this?

Perhaps the writer wanted to teach/warn/criticise…
The writer may have wanted the reader to feel…

Concepts seen before:

At KS2, you will have

- been exposed to different texts, including myths, legends and traditional stories.
- Explored a variety of writer's and their work, whose culture and traditions differ from your own.
- Explored your own literary heritage, including the qualities and traditions here in Britain.

Week Beginning	TASKS Year: 7 Subject: English Topic: Myths and Legends Term: Autumn 1
4/09/23	**TASK:** Read through the summary of why mythology is important. Transform the summary into four concise bullet points encompassing the most important information. **CHECK:** Re-read the summary of why mythology is important and highlight the most important facts. Add any highlighted information to your bullet points that you are missing.
11/09/23	**TASK:** Pick three words from Tier 3. Write the definition then dual code them *(add an image that represents what it is)* E.g. A villain is a bad person who harms other people or breaks laws. **CHECK:** Cover the definitions and try to write them from memory using only your dual coding as a guide. Correct any errors.
18/09/23	**TASK:** Select one of the Big Questions we have focused on in our lessons. Create a mind-map that features everything you can recall that answers your chosen question, without looking at the knowledge organiser. **CHECK:** Look over your knowledge organiser to see if there is anything you can add.
25/09/23	**TASK:** Pick three words from Tier 2 and create a sentence using each of them. E.g. Anansi the spider's behaviour was not **moral** as he chose to be greedy rather than share.
02/10/23	**TASK:** Study the key themes. From memory, write down as many as you can remember. Explain how two of these themes link to myths and legends. e.g. **One reason** the theme of hero vs villain is linked to myths and legends is because Hercules overcomes various monsters from the underworld. **CHECK:** Check the knowledge organiser to see how many other key themes you could have included. Tick the ones you remembered correctly.
9/10/23	**TASK:** Select one of the Big Questions we have focused on in our lessons. Create a mind-map that features everything you can recall that answers your chosen question, without looking at the knowledge organiser. **CHECK:** Look over your knowledge organiser to see if there is anything you can add.
16/10/23	**TASK:** Study the 'Analysing texts'. From memory, recall one possible sentence stem that could be used for **WHAT? HOW? WHY?** E.g. For **WHAT?** The writer highlights... **CHECK:** Have you written the correct sentence stems. Can you think of any of your own?
23/10/23	**TASK:** Recreate your own knowledge organiser for Myths and Legends which specific focus on your favourite myth. **Check:** Check the knowledge organiser to see if there is anything else you could include. Challenge: Research to find your own favourite myth https://www.natgeokids.com/uk/discover/history/greece/greek-myths/

Year 7 – English – 'Asha and the Spirit Bird' – Autumn Term 2

Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Infer (v.)	Come to conclusions based on evidence.
Predict (v.)	Guess what might happen next/later.
Foreshadow (v.)	A warning of future events.
Juxtaposition (n.)	Placing two or more things side by side to compare or contrast.
Context (n.)	Information that gives a text, setting or character deeper meaning.
Authorial intent (n.)	The author's reason for writing a novel.
Structure (n.)	The way a text is organised.
Tension (n.)	A sense that something is going to happen.
Tier 2 Vocabulary	**Definition**
Ancestor (n.)	A family member from past times.
Heritage (n.)	Inherited traditions, monuments, objects, and culture.
Spirituality (n.)	A feeling/belief that there is something greater than us.
Diwali (n.)	A festival that celebrates the triumph of good over evil and the human ability to overcome.
Lamagaia (n.)	A bearded vulture.

Section B: Key Concepts/Ideas/Questions

Themes:

Dreams	Friendship
Family	Conflict
Religion	Identity
Chance vs fate	Spirituality

Big Questions:

1. How is the text structured to interest the reader?
2. Why is setting important?
3. How is the theme of family presented?
4. How is the theme of friendship presented?
5. In what ways is the novel linked to spirituality?
6. Why is authorial intent important?
7. How are beliefs powerful?
8. How do India and England compare?
9. What are the stories of our lives?
10. Why are ancestors important to our identity?

Section C: Subject Specific

Hinduism:

The world's oldest and third-largest religion after Christianity and Islam.

Nature is very important to Hindus. Many believe that some rivers are sacred and can help you wash away sins.

Many Hindu households have an area of their house that they also use to worship; this is known as a 'shrine'.

Sikhism:

One of the youngest world religions and was founded more than 500 years ago.

Believe that God is a spiritual power, not a person, and should always be in Sikhs' minds.

Believe there is one God and everyone is equal. Traditionally Sikhs do not cut any body hair. Some men don't ever cut their hair.

Settings

The Himalayas: The highest mountain range in the world. These mountains are the source of some of Asia's major rivers and also help to regulate our planet's climate. For centuries people here have developed a unique culture that weaves nature and people together into the same fabric of life.

The Ganges: Flows from the Himalayas all the way to the Bay of Bengal. Many Hindus believe that the river has incredible healing powers. It is a common belief that bathing in the Ganges washes away a person's bad karma and is like being in heaven.

Concepts seen before:

Identity
Power
Morality
Conflict and Resolution

Week Beginning (dd/mm/yy)	TASKS **Year**: 7 **Subject**: English **Topic**: Novel Study - 'Asha & the Spirit Bird' **Term**: Autumn 2
06/11/23	**Task:** 1. Draw out an image of the river Ganges **on a whole page of your homework book.** 2. Research the Ganges and answer the following questions around/in your image of the river. · What are the Ganges? · Where are the Ganges? · Why are the Ganges believed to be sacred?
13/11/23	**Task:** During the study of 'myths and legends', you may have learnt about the **archetypal (very typical) hero.** Mind-map the **conventions (characteristics)** of an archetypal hero **and explain in a paragraph** how Asha could be perceived as an archetypal hero.
20/11/23	**Task:** Write a paragraph that describes a person you'd consider to be **brave (this could be someone you know, someone fictional, or even someone famous)**. Feel free to draw them too! **You must**: check your use of capital letters and full stops, and use at least three adjectives.
27/11/23	**TASK:** Create a fact file about Diwali. You need to write about: what it is, how it is celebrated, where it is celebrated, ways it is celebrated, and any other interesting information. **You must make sure that your fact file fills on page of your homework book.**
.4/12/23	**TASK:** Study the key themes. From memory, write down as many as you can remember. **Explain how two of these themes link to our novel in no less than four sentences per theme.** **CHECK:** Check the knowledge organiser to see how many other key themes you could have included. Tick the ones you remembered correctly.
11/12/23	**TASK:** Select one of the Big Questions. Create a learning resource (a mind map, flow chart, etc.) that answers the big question. Make sure that this is detailed. **CHECK:** Look over your knowledge organiser to see if there is anything you can add.
18/12/23	**What we have read so far**: Write a summary of what we have read so far. Write a second paragraph that explains your thoughts and feelings you have towards the novel so far.

Year 7—Mathematics—Algebraic Thinking—Autumn 1

Section A: Key vocabulary

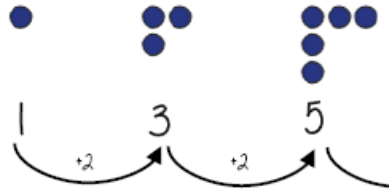
Tier 3	Definition
Non-linear (ad)	The difference between terms increases or decreases in different amounts
Arithmetic (ad)	A sequence where the difference between the terms is constant
Geometric (ad)	A sequence where each term is found by multiplying the previous one by a fixed non-zero number
Coefficient (n)	A multiplicative factor in front of a variable e.g. 5x (5 is the coefficient, x is the variable)
Equation (n)	A mathematical statement where two things are equal

Tier 2	Definition
Variable (n)	A letter in place of a value we don't know yet.
Sequence (n)	Items or numbers put in a pre-decided order
Term (n)	Either a single number or variable, or numbers and variables multiplied together
Linear (ad)	The difference between terms increases or decreases by the same value each time
Difference (v)	The gap between two terms; the result of subtraction
Function (n)	A relationship that instructs how to get from an input to an output
Operation (v)	A mathematical process e.g. addition + or division ÷
Inverse (v)	The operation that undoes what was done by the previous operation (The opposite operation). Subtraction is the inverse of addition
Expression (n)	A maths sentence containing numbers, algebraic variables or a combination of the two. It may also contain operations (addition, subtraction, multiplication, division) but not an equals sign
Evaluate (v)	Work out; find the value of
Equality (v)	When two expressions have the same value
Solve (v)	To find the value of the unknown variable

Section B: Important ideas/ concepts

Describe and continue a sequence diagrammatically

Count the number of circles or lines in each image



What will the next number be? Can you draw this?

The **term-to-term rule** describes how to get from one term to the next.

EG. 3 , 5 , 7 , 9 , 11 …

+2 +2 +2 +2

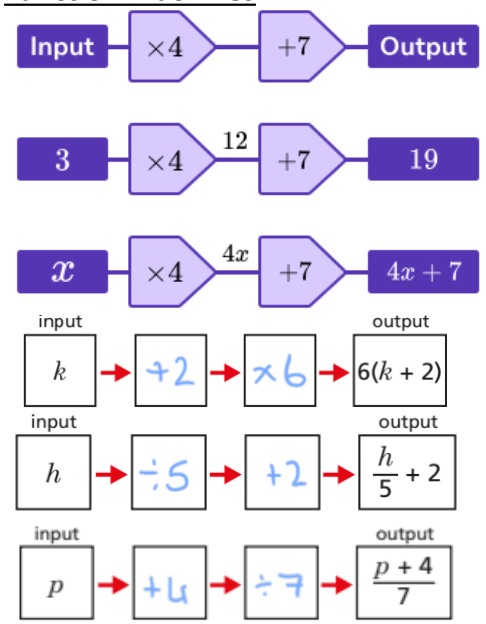
The term-to-term rule is Add 2.

The term-to-term rule is Multiply by 3.

2, 6, 18, 54, 162

×3 ×3 ×3 ×3

Function Machines

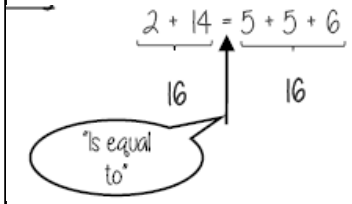


Be very careful with the order that the functions happen to the letter or number.

Section C: Important ideas/ concepts

Equality and equivalence

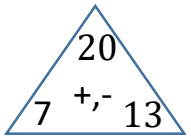
Equality



Equivalence:

$2 \times 2m \equiv 7m - 3m$

Fact Families



$13 + 7 = 20$

$7 + 13 = 20$

$20 - 7 = 13$

$20 - 13 = 7$

Collecting Like Terms

$$3a + 4b + 2a - 2b$$

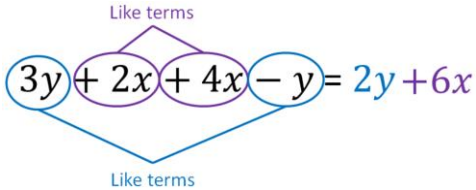
$\boldsymbol{3a}$ and $+\boldsymbol{2a}$ are like terms (they have the same letter).

$+\boldsymbol{4b}$ and $-\boldsymbol{2b}$ are also like terms, but they are different to the terms with the letter a.

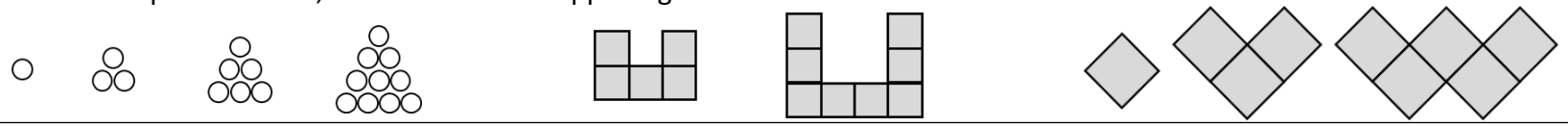
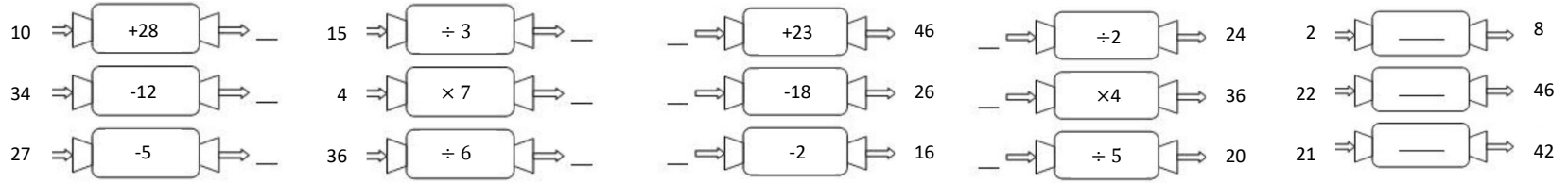
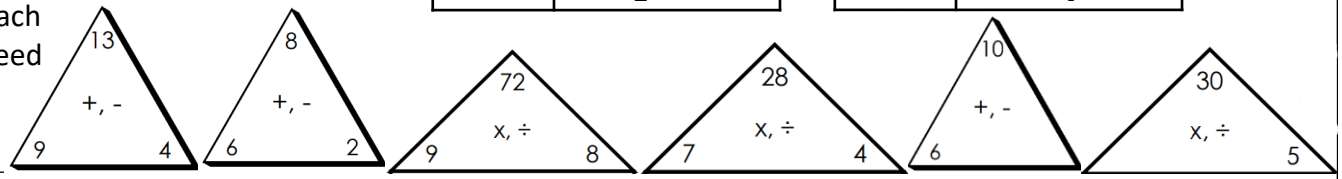
The plus or minus sign in front of a term belongs to that term.

$$3a + 4b + 2a - b = 3a + 2a + 4b - b$$
$$= 5a + 2b$$

This expression cannot be simplified any more as the $\boldsymbol{5a}$ and the $+\boldsymbol{2b}$ are **un**like terms.



Concepts you have seen before:
Four operations (addition, subtraction, multiplication and division), BIDMAS, continuing sequences and describing sequences.

Week Beginning	To hear the homework task read aloud, scan the QR code using the camera on your phone.	TASKS Year 7—Mathematics—Algebraic Thinking—Autumn 1
04/09/2023		Learn the definitions for these key words: **Sequence, term, linear, expression, variable, difference, and coefficient.** Create a poster on a page in your Knowledge Organiser book. On your poster, include the words, their definitions but also a picture to help you remember the word's meaning.
11/09/2023		For each sequence below, describe what is happening and draw the next two terms. 
18/09/2023		1. For each sequence below, write the term-to-term rule and the next two terms. 2. Come up with your own sequence with a different term-to-term rule. CH: State whether the sequence is linear or non linear. a. 3, 5, 7, 9, 11… b. 2, 4, 8, 16, 32… c. 50, 44, 38, 32, 26… d. 20, 17, 14, 11, 8… e. 4, 7, 10, 13, 16… f. 1, 6, 11, 16, 21…
25/09/2023		Copy and complete the function machines. Section A find the output, section B find the input, section c find one or more possible functions. 
02/10/2023		Create function machines for the following expressions. Input: x → Output: $x + 5$ Input: y → Output: $2y + 4$ Input: h → Output: $5h - 3$ Input: n → Output: $\frac{n}{2} + 3$ Input: g → Output: $4(g + 3)$ Input: t → Output: $\frac{t - 7}{4}$
09/10/2023		Write the fact families for each triangle. The last two you need to find the missing number, then write the fact family. 
16/10/2023		1. Classify each par of terms as either like or unlike. a. $2x$ and $-5x$ b. $3y$ and $3z$ c. $-x^2$ and $\frac{1}{2}x^2$ d. $4a^2$ and $3a^3$ e. $5x^2y$ and $-2xy^2$ f. $3uv$ and $2vu$ 2. Simplify by collecting like terms where possible. a. $3x + 6x$ b. $2m + 5n$ c. $3x + 5 + 2x + 1$ d. $2k + 3m + 4m + 6k$ e. $8n + 5 - 3n - 2$

Year 7—Mathematics—Place Value and Proportion-Autumn 2

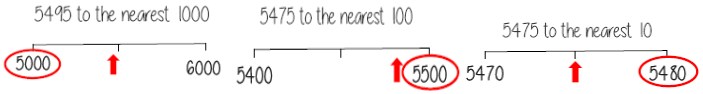
Section A: Key vocabulary

Tier 3	Definition
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.
Place holder (n)	We use 0 as a place holder to show that there are none of a particular place in a number.
Integer (n)	A whole number that is positive or negative.
Recurring decimal (n)	A decimal number with a digit that repeats forever.
Tier 2	**Definition**
Ascending (adj)	Putting into numerical order from smallest to biggest.
Descending (adj)	Putting into numerical order from biggest to smallest.
Round (v)	Making a number simpler but keeping its value close to what it was. e.g.. round to nearest 10 or 100.
Negative (n)	Any number less than zero; written with a minus sign.
Equivalent (n)	Of equal value.
Percent (n)	Parts per hundred.
Fraction (n)	How many parts out of a whole.
Decimal (n)	A number with a decimal point used to separate ones, tenths, hundredths etc...
Interval (n)	What is between two values or points.
Tenth (n)	One whole split into 10 parts.

Section B: Important ideas/ concepts

Millions	Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Units/ones	Decimal point	Tenths	Hundredths
6	8	0	5	7	1	0	.	4	9

This is six million, eight hundred and five thousand, seven hundred and ten point four nine.



Significant figure: the most significant digit in an integer is the number on the left. In a decimal starting **0.**…
It is the first non-zero number after the decimal point.

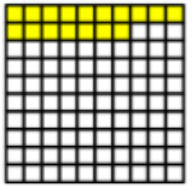
Round to 1 significant figure

370 to 1 significant figure is 400
37 to 1 significant figure is 40
3.7 to 1 significant figure is 4
0.37 to 1 significant figure is 0.4
0.00000037 to 1 significant figure is 0.0000004

Round to the first non zero number

Fractions, Decimals, Percentages:

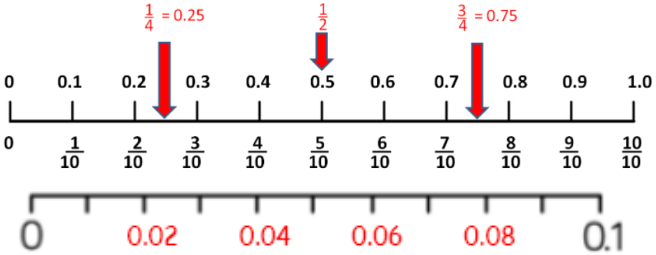
Section C: Important ideas/concepts



Here are 100 squares.
I have 17 squares shaded in.
The fraction of squares shaded is $\frac{17}{100}$.
The percentage of the 100 square shaded is 17%.

Decimal intervals on a number line

One whole split into 10 parts makes tenths=0.1
One tenth split into 10 parts makes hundredths=0.01



You are expected to know some of the key FDP equivalences without working them out.

Decimal	Percentage	Fraction
0.5	50%	$\frac{1}{2}$
0.25	25%	$\frac{1}{4}$
0.75	75%	$\frac{3}{4}$
0.2	20%	$\frac{1}{5}$
0.1	10%	$\frac{1}{10}$
$0.\dot{3}$	$33.\dot{3}\%$	$\frac{1}{3}$

Range

14, 19, 20, 24, 25, 28
highest
lowest
28 − 14 = 14

Median

1, 3, 3, **6**, 7, 8, 9
Median = 6

1, 2, 3, **4**, **5**, 6, 8, 9
Median = (4 + 5) ÷ 2
= 4.5

When you are finding the **median**, you must put the numbers in order first.

Concepts you have seen before:
Number lines, fractions, decimals, percentages, place value and negative numbers.

Week Beginning	To hear the homework task read aloud, scan the QR code using the camera on your phone.	TASKS Year 7—Mathematics—Place Value and Proportion-Autumn 2
6/11/2023		Read, cover, write and check. Accurately copy the words you are learning. Then read the definitions, cover them up, write down what you can remember and then check what you have written. Correct in a different colour pen if you didn't quite remember it accurately. **Place value, integer, ascending, descending, round (v), percent, fraction, tenth, and decimal.** CH: Draw a picture or example to go with your definitions.
13/11/2023		1. Write each number in words. a. 914,352 b. 807,694 c. 572,463 d. 29,175 e. 1,431,726 f. 352.698 g. 1.2435 2. Write the following numbers in digits. a. One hundred and twenty-five thousand, four hundred and thirty-nine. b. One million, five hundred and forty thousand, seven hundred and sixty-three. c. Five hundred and two point three, four.
20/11/2023		Use the correct symbol to compare the two numbers or two calculations <, >, =. Show your working out for the second section. 1.

7	6	0	9	3	-3
-8	-2	$\frac{1}{2}$	$\frac{1}{3}$	0.6	0.58

2.

3 + 5	9 - 3	2 × 6	3 × 4	3 - 8	1 - 7
12 × 2	100 ÷ 4	35 ÷ 7	9 ÷ 2	-8 - 4	3 × -4

27/11/2023		1. Write the following integers in ascending order. a. 64, 11, 92, 87, 12 b. 99, 345, 671, 345, 222 c. 3456, 5364, 3465, 5634 d. 10010, 11010, 10001, 11100, 11011 2. Find the range and median for each of the lists of numbers above. Explain how you find the range and median of a set of data, you can use one of the lists above as an example.
4/11/2023		1. Design a small poster explaining how to round numbers to 1 significant figure. You can use some of the numbers from question two as examples. 2. Round all of the following numbers to 1 significant figure. a. 86, b. 328, c. 1823, d. 5.63, e. 0.34, f. 0.038, g. 0.62, h. 7.083
11/12/2023		1. By using equivalent fractions, decide which of the following fractions is greater. Use < or >. a. $\frac{2}{3}$ or $\frac{4}{7}$ b. $\frac{3}{5}$ or $\frac{4}{6}$ c. $\frac{2}{9}$ or $\frac{1}{6}$ d. $\frac{6}{8}$ or $\frac{10}{12}$ 2. What fraction has a denominator of 30 and when it is simplified it becomes $\frac{2}{5}$? 3. Why can't fractions such as the following be simplified? $\frac{21}{67}$ $\frac{17}{45}$ Explain your answer as fully as possible.
18/12/2023		Write the fractional, decimal and percentage equivalents for the following, you could do it as a table. Give your fractions in their simplest form. a. $\frac{1}{10}$ b. $\frac{1}{5}$ c. $\frac{3}{4}$ d. $\frac{1}{20}$ e. $\frac{1}{100}$ f. $\frac{16}{20}$ g. 0.25 h. 0.02 i. 0.4 j. 0.55 k. 0.15 l. 50% m. 80% n. 8% o. 0.32

Year 7 – Introduction to Science – Autumn Term

Section A: Key Vocabulary

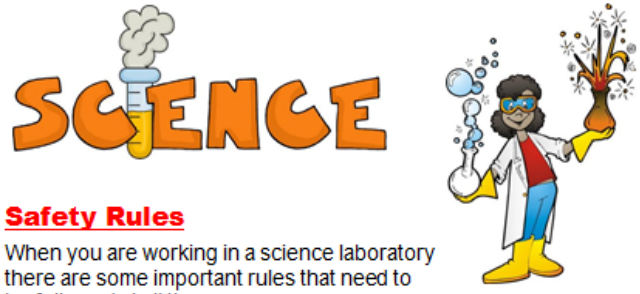
Tier 3	Definition
Accuracy (n)	Being precise in measurements.
Beaker (n)	Glass object used for measuring liquids and powders. They come in various sizes and usually have a small spout and measurements marked on the outside.
Bunsen Burner (n)	A piece of scientific equipment using lit natural gas to heat substances.
Experiment (n)	An investigation conducted to compare outcomes in Science
Investigation (n)	A searching inquiry for ascertaining facts. A detailed or careful examination.
Lab (n)	Shortened version of the word 'laboratory' – a technical room used for Science.
Measuring cylinder (n)	A plastic tube with measurements on the outside, used for accurately measuring liquids.
Meniscus (n)	The convex or concave upper surface of a column of liquid caused by surface tension.
Method (n)	A structured set of instructions to be followed when carrying out an investigation
Pipette (n)	A glass or plastic piece of equipment with a bulb to move liquids from one place to another using suction.
Temperature (n)	A measure of the warmth or coldness of an object or substance. Measured in °c (degrees Celsius)

Tier 2	Definition
Hazard (n)	An unavoidable danger or risk.
Risk (n)	Exposure to the chance of injury or loss; a hazard or dangerous chance.
Diagram (n)	A figure, usually consisting of a line drawing. A drawing or plan that outlines the parts of something

Concepts seen before: Hazards and risks, safety rules, working accurately and methodically.

Lab Safety

Science laboratories differ from any other classroom in school, so as well as normal classroom rules, there are a specific set of rules for working in a Science lab.

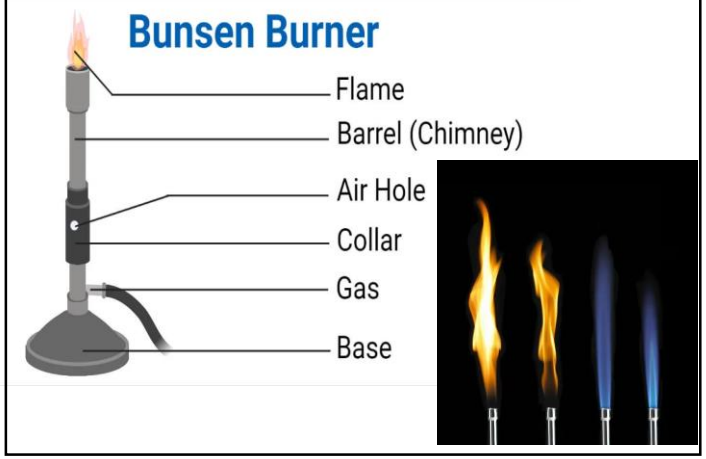


Safety Rules

When you are working in a science laboratory there are some important rules that need to be followed at all times.

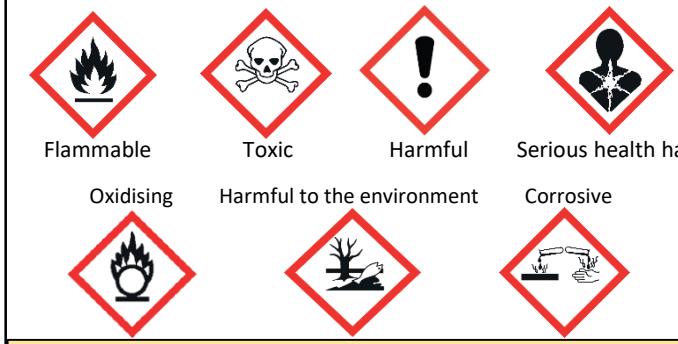
1. Only enter a lab with a teacher.
2. Put your bag and coat out of the way under the bench.
3. Act sensibly in the lab
4. Long hair should be tied back.
5. Safety glasses must be worn to protect your eyes.
6. Eating and drinking in the laboratory is not allowed.
7. Ask questions if you are unsure about the experiment.

Bunsen Burner



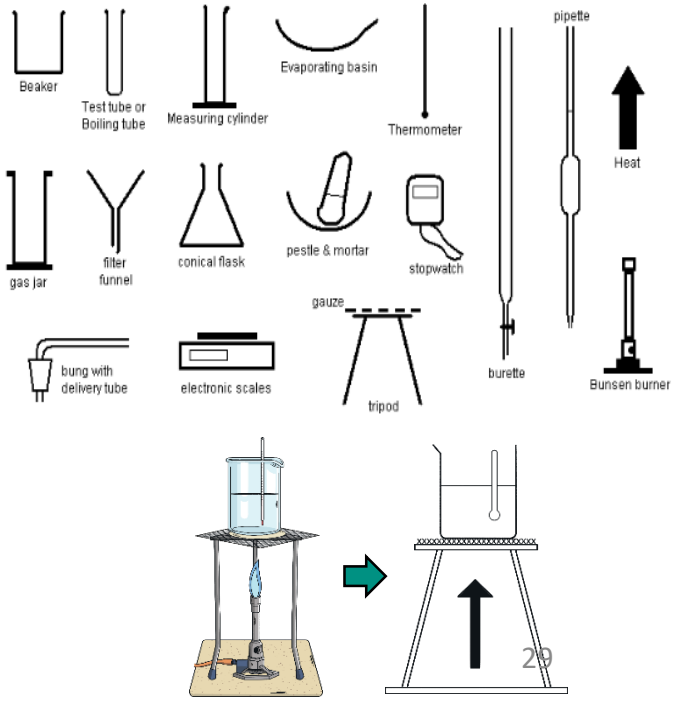
Melting and boiling points

Hazard symbols help to identify at a glance substances that can be harmful or dangerous. They are used internationally to allow everyone to understand.



Density

Scientific diagrams are an easier way to represent complicated scientific equipment than drawing detailed 3D drawings.



Year 7 – The Particle Model and Matter – Autumn Term

Section A: Key Vocabulary

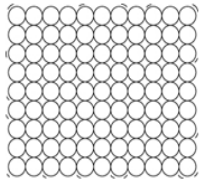
Tier 3	Definition
Air pressure (n)	The force on a certain area caused by air molecules hitting it.
Cubic centimetre (cm^3) (n)	A unit used for measuring volume.
Density (n)	The state or quality of being dense; compactness; closely set or in a crowded condition.
Diffusion (n)	When particles spread and mix with each other without anything moving them.
Liquid (n)	Something with a fixed volume but no fixed shape.
Particles (n)	The tiny pieces that everything is made out of.
Particle theory (n)	Theory used to explain the different properties and observations of solids, liquids and gases.
Property (n)	A description of how a material behaves and what it is like. Example: Hardness is a property of some solids.
Random (adj)	Having no regular pattern.
Solid (n)	Something with a fixed shape and volume.
States of matter (n)	There are three different forms that a substance can be in: solid, liquid or gas. These are the three states of matter.
Vacuum (n)	A completely empty space, containing no particles.
Volume (n)	The amount of room something takes up. Often measured in cubic centimetres (cm3).

Tier 2	Definition
Compressed (v)	To be squeezed into a smaller volume.
Flow (v)	Move and change shape smoothly.
Gas (n)	Something that does not have a fixed shape or volume, and is easy to squash.

Concepts seen before: Solids, liquids and gases. Changes between these states

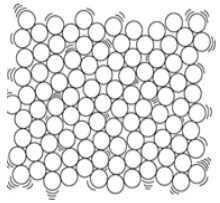
States of Matter

The different properties of solids, liquids and gases can be explained by the particle theory:



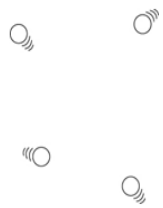
Solids

- Solids are made up of particles that are very close together. (Strong forces of attraction hold the particles together.)
- The particles in solids vibrate in fixed positions.
- The shape and volume of solids do not change.
- Solids cannot be squashed and do not flow.



Liquids

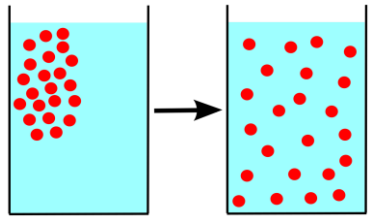
- Liquids are made up of particles that are fairly close together. (Quite strong forces of attraction hold the particles together.)
- The particles in liquids are able to move past each other.
- Liquids have a fixed volumes but their shape can change to fit the container as they flow easily.
- Liquids cannot be easily compressed (squashed).



Gases

- Gases are made up of particles that are well spread out. (There are only weak forces of attraction between the particles.)
- The particles in gases move about freely in all directions.
- The shape and the volume of gases can change as they flow very easily and spread out.
- Gases can be compressed (squashed) quite easily.

Diffusion

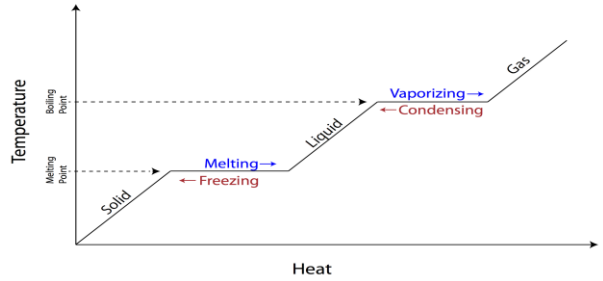


- Diffusion is the movement of a substance from an area of high concentration to an area of lower concentration.
- Diffusion occurs in liquids and gases when their particles collide randomly and spread out.
- Diffusion is an important process for living things - it is how substances move in and out of cells.

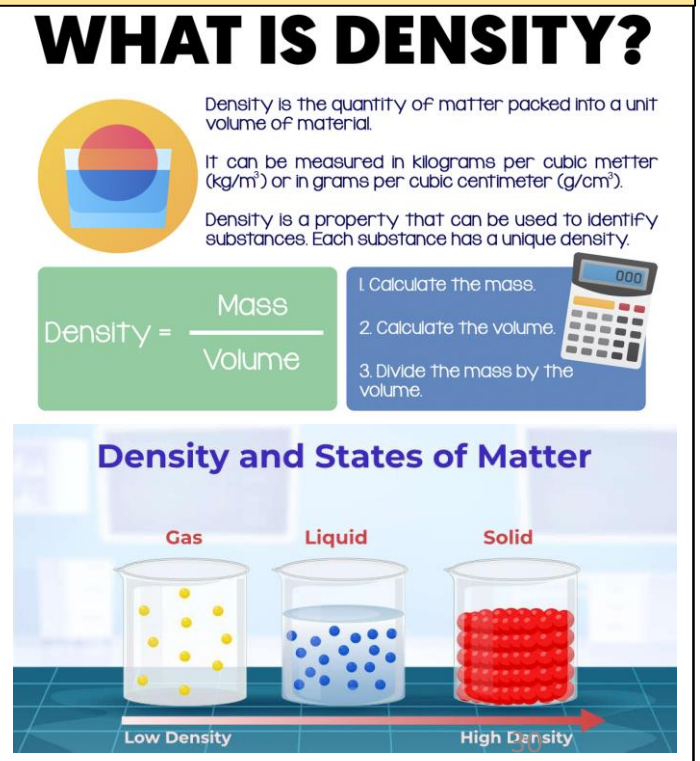
Melting and boiling points

Different substances have different melting and boiling points – the point at which they change state between solids, liquids and gases.

- Melting point is the temperature at which a solid changes into a liquid.
- Boiling point is the temperature at which a liquid changes into a gas



Density



Year 7 Physics - Forces – Autumn Term

Section A: Key Vocabulary

Tier 3	Definition
Air resistance (n)	A force on objects moving through air.
Balanced forces (v)	When two forces are the same strength but in opposite directions.
Elastic (v)	An elastic material changes shape when there is a force on it but returns to its original shape when the force is removed.
Extension (n)	The amount by which a spring or other stretchy material has stretched. It is worked out from the stretched length minus the original length.
Force meter (n)	Piece of equipment containing a spring, used to measure forces. Force measured in newton (N)
Gravity (n)	The force of attraction between any two objects. The Earth is very big and so has strong gravity that pulls everything down towards it.
Hooke's Law (n)	The law that says that the extension of a spring is proportional to the force on it.
Limit of proportionality (v)	The extension of a spring is proportional to the force on it, up to a certain point called the limit of proportionality. If you apply more force the extension is no longer proportional to the force.
Magnetism (n)	A force that attracts objects made of iron or other magnetic materials. Two magnets can also repel each other.
Mass (n)	The amount of matter that something is made from. Mass is measured in grams (g) and kilograms (kg). Your mass does not change if you go into space or to another planet.
Tier 2	**Definition**
Lubrication (n)	Adding a lubricant (A substance used to reduce friction) to something.
Direction (n)	The line along which anything lies, faces, moves etc.
Smooth (n)	Free from projections or unevenness of surface

Concepts you have seen before: forces, speed, weight, gravity.

Section B: Important Ideas / Concepts / Questions

What are forces?

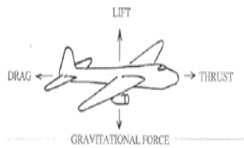
Forces are 'pushes' or 'pulls' and can:

- Change the shape or size of an object
- Change the speed things are moving (make them move faster or slower)
- Change the direction of a moving object

Types of forces

Contact forces when objects are touching.

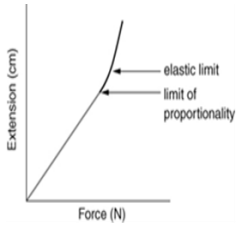
- Friction
- Air resistance
- Water resistance
- Upthrust



Non-contact forces when objects are at a distance.

- Magnetism
- Gravity
- Static

Springs and Hooke's Law



Springs extend when a force is applied. When removed, the spring usually returns to its original length.

If too much force is applied, the spring is stretched beyond its elastic limit and does not return to its original length.

Friction

Friction can:

- slow things down
- produce heat
- wear things away
- cause a noise.

Increased by using rough surfaces or rubber materials
Reduced by using smooth surfaces or lubricants like oil and grease

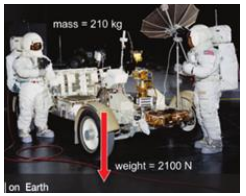
Section C: Deeper Thinking

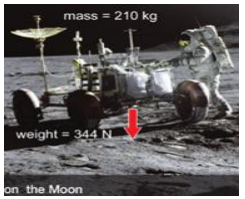
Pressure

Pressure is the amount of forces pushing on a certain area.

- Bigger force or small area = increase in pressure
- Smaller force or larger area – decrease in pressure

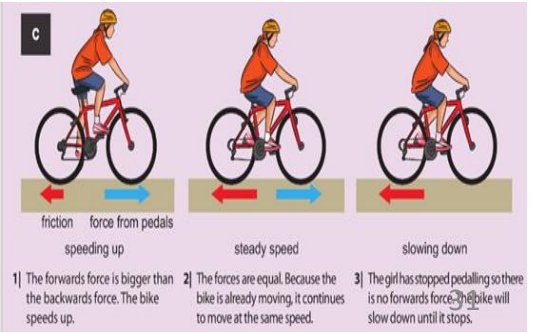
Weight and Mass





Wherever you take an object, its mass will not change but its weight depends on the force of gravity. An object on the Moon would have a smaller weight than on Earth, because the Moon's gravity is not as strong as Earth's.

Balanced and Unbalanced Forces



Year 7 – Cells – Autumn Term

Section A: Key Vocabulary

Tier 3	Definition
Differentiation (n)	The process by which cells become specialised in order to do a specific job in the organism.
Diffusion (n)	The net movement of substances from an area of higher concentration to an area of a lower concentration.
Excretion (n)	Getting rid of waste. All organisms excrete.
Magnification (n)	How much bigger a microscope makes something appear.
Organelle (n)	A specialised part of a cell which has a specific function, for example the nucleus or cell wall.
Nutrition (n)	Substances that help organisms respire and grow. All organisms need nutrition.
Organism (n)	A living thing.
Photosynthesis (n)	Process that plants use to make their own food. It needs light to work.
Reproduction (n)	A process in which organisms make more organisms like themselves. All organisms reproduce.
Respiration (n)	A process in which substances release energy for an organism to use. All organisms respire. There are, however, different forms of respiration.
Sensitivity (n)	The ability to detect things in the surroundings. All organisms can sense certain changes in their surroundings.
Specimen (n)	The object you look at using a microscope.
Tissue (n)	A part of an organ that does an important job. Each tissue is made up of a group of the same type of cells all doing the same job.

Tier 2	Definition
Cell (n)	The smallest living unit of matter. All organisms are made up of cells.
Movement (n)	Going from place to place. All organisms can move themselves or parts of themselves.
Stain (n)	Dye used to colour parts of a cell to make them easier to see.

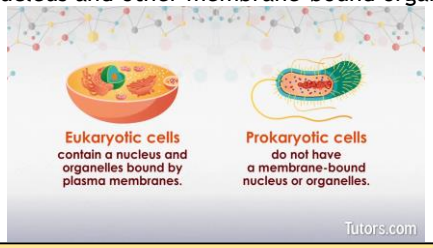
Concepts seen before: What makes something living or not?

Section B – Important information

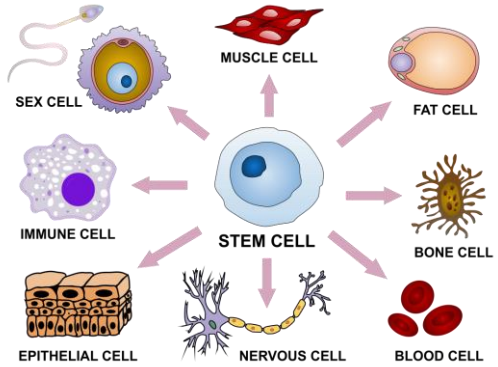
Cell part	Function
cell surface membrane	keeps cell together and controls what goes into and out of the cell
nucleus	controls the cell
cytoplasm	where activities happen, including respiration (which occurs in **mitochondria**)
chloroplast	contains **chlorophyll** to trap sunlight for photosynthesis
cell wall	made of **cellulose** and provides support
vacuole	storage space

Eukaryotic and Prokaryotic cells

- Eukaryotic cells are complex cells that contain a nucleus and other membrane-bound organelles. They are found in multicellular organisms such as animals, plants, and fungi.
- Prokaryotic cells, such as bacteria are simple cells that lack a nucleus and other membrane-bound organelles.



Specialised cells



Specialised cells are cells designed to carry out a particular role in the body and all start out as 'blank' stem cells. Cells will then differentiate (change) depending on the job they need to do in the body.

Cell theory and viewing cells

Principles of Cell Theory

1. All living organisms are composed of one (unicellular) or more cells (multicellular).
2. A cell is the basic unit of life of the structural organization of an organism.
3. Cells arise from pre-existing cells. (Hence not derived from spontaneous generation)

To use a microscope:

A Place the smallest objective lens over the hole in the stage.

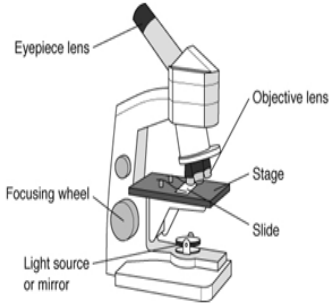
B Turn the focusing wheel to move the objective lens close to the stage.

C Place the slide on the stage.

D Adjust the light source or mirror.

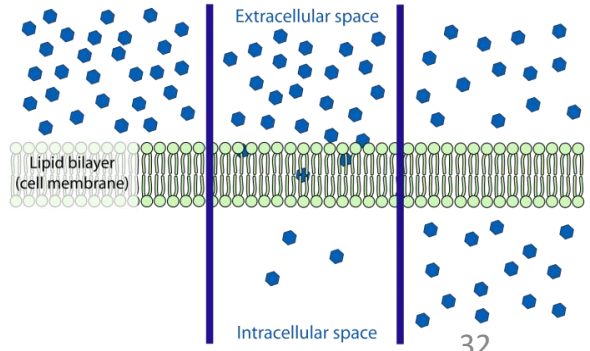
E Look into the eyepiece lens.

F Turn the focusing wheel until what you see is in focus.



Diffusion

Diffusion is the net movement of substances from a region of higher concentration to a region of lower concentration. In living things, diffusion allows substances to move in and out of cells and it's how red blood cells distribute oxygen through the body.



Year 7 – Atoms, Elements and Compounds – Autumn Term

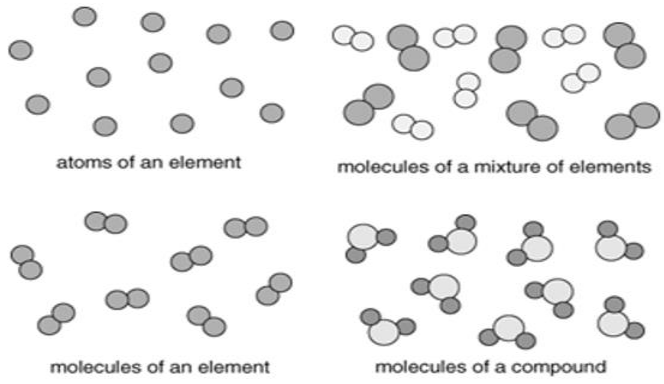
Section A: Key Vocabulary

Tier 3	Definition
Atom (n)	A small particle from which all substances are made.
Bond (n)	The force that joins atoms together in molecules and joins elements together in compounds.
Carbonate (n)	Compound containing an element bonded with carbon and oxygen.
Chemical reaction (n)	A change in which one or more new substances are formed.
Compound (n)	Substance that can be split up into simpler substances, since it contains the atoms of two or more elements joined together.
Element (n)	A simple substance, made up of only one type of atom.
Formula (n)	A set form of words or symbols used to show a chemical reaction.
Molecule (n)	Two or more atoms joined together in group of a set size.
Non-metals (n)	Elements that are not shiny, and do not conduct heat and electricity well.
Oxide (n)	Compound containing one element bonded with oxygen.
Periodic table (n)	A special list of all known elements.
Physical change (n)	A change in which no new substances are formed, e.g. changes of state.
Properties (n)	A description of how a material behaves and what it is like. For example, 'hardness' is a property of some solids.
Tier 2	**Definition**
Metals (n)	Elements that are shiny when polished, conduct heat and electricity well, are malleable and flexible and often have high melting points.
Mixture (n)	Contains more than one substance with different types of particles that are not joined together.
Reaction (n)	A chemical process in which substances are changed into different substances, or one substance changes into other substances.

Concepts seen before: particle model, states of matter and changes of state.

Section B – Important information

Atom, Element, Compound or Mixture?



- Atoms are the smallest unit of ordinary matter that forms a chemical element.
- Elements are substances that consist of only one type of atom.
- Molecules contain the atoms of only one element.
- Compounds contain the atoms of at least two different elements.

Molecular and Empirical formulae

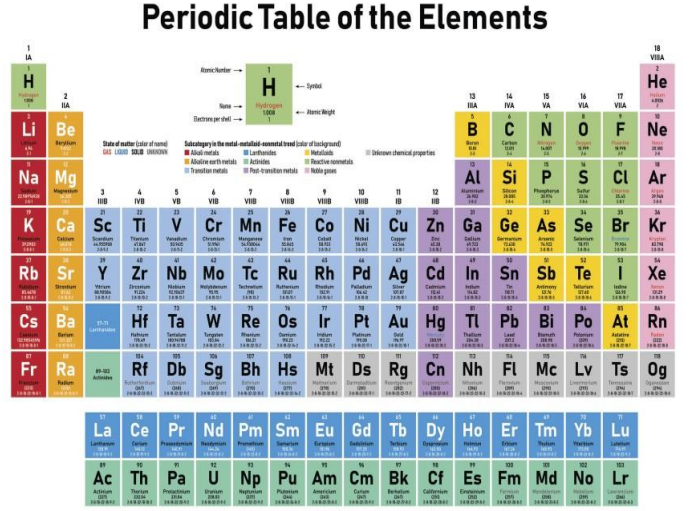
The empirical formula of a compound is the simplest whole number ratio of atoms of each element in the compound.

Examples:

- Calcium hydroxide $CaOH_2$
(1 Calcium, 1 Oxygen, 2 Hydrogen)
- Aluminium oxide $AlOH_3$
(1 Aluminium, 1 Oxygen, 3 Hydrogen)
- Lithium oxide Li_2O
(2 Lithium, 1 Oxygen)
- Calcium Nitrate $Ca(NO_3)_2$
(2 Calcium, 2 Nitrogen, 6 Oxygen)

Molecular Formula	Empirical Formula
$C_6H_{12}O_6$	CH_2O
N_4O_8	NO_2
H_2O_2	HO_2

The Periodic Table



Naming compounds

We can model chemical reactions using word and symbol equations

reactants → products

copper carbonate → copper oxide + carbon dioxide

$CuCO_3 \rightarrow CuO + CO_2$

The name of the products changes depending on the compound formed, for example:

element 1	element 2	compound
iron (Fe)	sulfur (S)	iron sulfide (FeS)
magnesium (Mg)	nitrogen (N)	magnesium nitride (Mg_3N_2)
sodium (Na)	chlorine (Cl)	sodium chloride (NaCl)

element 1	element 2	element 3	compound
nickel	sulfur	oxygen	nickel sulfate
magnesium	nitrogen	oxygen	magnesium nitrate
sodium	nitrogen	oxygen	sodium nitrate

Week Beginning	TASKS Year: 7 Subject: Science Term: Autumn
04/09/23	**Lab safety:** Create an A5 illustrated checklist that would fit in a students exercise book showing the Lab safety rules.
11/09/23	**Lab safety:** Use the Periodic table to write 'factfiles' about any 3 elements. Include things such as the name, chemical symbol, date of discovery and uses of each element as well as any other information you might think is interesting!
18/09/23	**Lab safety:** Explain why hazard symbols and scientific equipment diagrams are the same all over the world. Explain what you think might happen if they were different from country to country?
25/09/23	**Particle model:** Draw and fill in a table to compare how the particles are arranged in a solid, liquid and a gas. Make sure you include information about how the particles are arranged in each state and any movement they might have.
02/10/23	**Particle model:** Learn the spellings and definitions for ten of the Tier 3 vocabulary words for the Particle Model topic. Do this by writing out the definitions and then writing out the words next to each definition in a mixed up order. Match up the words to the definition using a line or colour. Check your answers.
09/10/23	**Particle model:** Calculate the densities of the following objects using the density equation, showing your working: 1) A metal block with a mass of 5kg and a volume of $50cm^3$ 2) A brick with a mass of 2kg and a volume of $100cm^3$ 3) A piece of plastecine with a mass of 0.5kg and a volume of $5cm^3$ 4) A rock with a volume of $2cm^3$ and a mass of 0.05kg
16/10/23	**Contact forces:** Learn the spellings and the definitions of the Tier 3 vocabulary words for the Forces topic. Do this by writing out the definitions and then writing out the words next to each definition in a mixed up order. Match up the words to the definition using a line or colour. Check your answers.
23/10/23	**Contact forces:** Describe what forces and friction are and give one example where friction is useful and another where it is not. Draw a force diagram (see the plane example on the knowledge organiser) for a car accelerating along a road, include all forces acting on the car and arrows to show the size and direction of the forces.

Week Beginning	TASKS Year: 7 Subject: Science Term: Autumn
06/11/23	**Contact forces:** Describe two examples of balanced and unbalanced forces. Include details of the forces acting in your examples and why the forces are either balanced or unbalanced. Explain the difference between weight and mass – why will weight change on different planets but mass will stay the same. Explain why a person walking in deep snow would be wise to wear a snow shoes which have a large area, link you answer into the pressure put on the snow.
13/11/23	**Cells:** Write a step-by-step method of how to set up and use a light microscope to look at a specimen, using the names of the different parts. Identify what someone might have done wrong if they cannot see their specimen.
20/11/23	**Cells:** Draw and complete a table to compare the differences between Eukaryotic and Prokaryotic cells. You may also draw a diagram if you wish.
27/11/23	**Cells:** Draw and label diagrams of a plant cell and an animal cell and label the organelles of each. Remember both cells will have some organelles the same!
04/12/23	**Cells:** Explain how diffusion helps oxygen to pass from the blood into our cells, such as in our lungs. In your description use the keywords: diffusion, cell membrane, concentration, high, low.
11/12/23	**Elements and compounds:** Draw and label diagrams (using colour if you wish) to show the atoms present in the following: Atom Element Compound Mixture
18/12/23	**Elements and compounds:** State the empirical formulae from the following molecular formulae: • H_2O • H_2O_2 • $C_6H_{12}O_6$ • C_4H_{10} • $C_6H_{18}O_3$

Year 7 – Religious Studies – Understanding Christianity – Autumn 1

Topic Enquiry: Do Christian beliefs impact how a Christian lives their life?

Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Trinity (n)	The belief that God is one but also three Persons
Incarnate (a)	The belief that God became flesh as Jesus Christ
Baptism (n)	A religious rite which purifies the believer from original sin and welcomes them into the Christian Church
Sin (n)	Separation from God
Salvation (n)	Being saved from sin so that you can enter heaven
Stewardship (n)	Looking after God's creation
Dominion (n)	Having authority and control over God's creation
Omnipotent (a)	All powerful
Omniscient (a)	All knowing
Omnibenevolent (a)	All loving
The Fall (n)	The first sin of humanity which led to separation from God

Tier 2 Vocabulary	Definition
Interdependence (n)	The idea that different parts of creation (or something else) rely on each other
Interpretation (n)	Explaining the meaning of something
Metaphor (n)	A word or phrase is applied to an object or action to which it is not literally applicable
Simile (n)	Comparing one thing with another thing of a different kind usually using 'as' or 'like'
Attribute (n)	A quality or feature that is inherent to something or someone
Belief (n)	An acceptance that something exists without proof
Feminist (n)	An advocate of women's rights and equality of sexes
Sexist (a)	Showing prejudice, stereotyping, or discriminating against someone because of their sex
Vegetarian (n)	A person who does not eat meat or fish

Section B: Key Texts

Genesis Chapter 1

Then God said, 'Let us make mankind in our image, in our likeness, so that they may rule over the fish in the sea and the birds in the sky, over the livestock and all the wild animals, and over all the creatures that move along the ground.'

Nicene Creed

I believe in one God,
the Father almighty,
maker of heaven and earth,
of all things visible and invisible.

I believe in one Lord Jesus Christ,
the Only Begotten Son of God,
born of the Father before all ages.

God from God, Light from Light,
true God from true God,
begotten, not made,
consubstantial with the Father;
through him all things were made.
For us men and for our salvation
he came down from heaven,
and by the Holy Spirit
was incarnate of the Virgin Mary, and
became man.
For our sake he was crucified under
Pontius Pilate,
he suffered death and was buried,
and rose again on the third day
in accordance with the Scriptures.

Genesis Chapter 2

And he said, 'Who told you that you were naked?
Have you eaten from the tree from which I commanded you not to eat?'
The man said, 'The woman you put here with me –
she gave me some fruit from the tree, and I ate it.'
The woman said, 'The snake deceived me, and I ate.'

Section C: Key Figures

Arius (256 – 336)

He taught that God, is one. However, he placed emphasis on God the Father's uniqueness and Christ's subordination under the Father. This means he did not see Jesus as equal to God. The Church arranged the Council of Nicea, to address Arius' incorrect teachings. At this council they formulated the belief that Jesus was 'Homoousios' or, of the same being, as God the Father.

Saint Francis of Assisi (1182 – 1226)

He renounced worldly goods and family ties to fully embrace a life of poverty. Francis aimed to live a simple life in which he cared for nature and the environment. A spiritual man, Francis spent much time in prayer and silence. At other times, his aim was to live like Jesus, following Jesus' example as given in the Bible. Francis considered nature to be a mirror to God and people told stories of how they would see Francis talking to the birds and wolves.

Mary Daly (1928 – 2010)

She was an American radical feminist philosopher and theologian. She wrote a book called 'Beyond God the Father' where she discusses the need to overcome the habit of putting men at the centre of everything. Famously, Daly taught that 'If God is male, then male is God.' She believed Christianity was just another way men have been able to control and dominate women. She thinks women need to reclaim their power by rejecting Christianity and all organised religion.

Concepts seen before:
Trinity, Creation, God, The Fall

Year 7 Religious Studies - What is Judaism? Autumn Term 2

Section A: Key vocabulary	
Tier 3 Vocabulary	**Definition**
Judaism (n)	The religion that Jews follow
Jews (n)	The followers of Judaism
Tanakh (n)	Collection of Jewish/Hebrew scriptures
Torah (n)	Hebrew for 'Law'. The holiest books of the Jews - the five books of Moses
Prophet (n)	A messenger of God
Exodus (n)	Journey out
Pesach (n) **Passover (n)**	The night the Israelites escaped from Egypt.
Tier 2 Vocabulary	**Definition**
Covenant	Promise or agreement
descendants (n)	Someone related to a person or group of people who lived at an earlier time
Commandments (n)	Instructions or duties
Pharaoh (n)	The ruler of ancient Egypt
Sacrifice (n)	To give something up of value

Section B: Founding fathers of Judaism

Abraham

Judaism began when God made a covenant with Abraham. Abraham was a good and thoughtful man. God spoke to him and asked him to make some promises. In return God promised special things to Abraham too. Abraham did as he had promised and soon God began to fulfil his side of the promise – Abraham was given a son, Isaac, which was a surprise as Abraham and his wife were old and thought they would never have children.

When Isaac was still a boy, God told Abraham to take him up a mountain and kill him as a sacrifice to prove he would keep his promise to obey and worship God. When they reached the top of the mountain, God sent an angel to stop the sacrifice and told Abraham it was a test to see if he would keep his promise.

Moses

Hundreds of years later, Abraham's descendants eventually became slaves in Egypt and were known as Israelites. God chose one man, Moses, to lead their rescue. Moses told Pharaoh to let the Hebrew people go, but Pharaoh refused. God sent ten plagues of terrible events to punish the Egyptians. But it was only when he sent the last plague that Pharaoh agreed to Moses' demands. God sent the Angel of Death to kill the firstborn sons in every Egyptian family. The Angel passed over the Israelite families because Moses had warned them to paint lambs' blood on their doors as a sign. Pharaoh finally let the Hebrews go, but in order for them to escape, God had to help Moses to part the Red Sea so they could cross it safely.

Section C: Key teachings

The Ten Commandments

The Ten Commandments were given to Moses by God so the Jews would know how to live the right way and then share these instructions with the world.

They are duties for how we should communicate with God and how we should treat other people.

"Do not commit adultery" stresses how important being married is, and "Do not commit murder" shows how important human life is for Jews.

What are the Ten Commandments?

1. Believe in one God only
2. Do not worship anyone else
3. Speak about God with respect
4. Rest on the Sabbath day
5. Respect your parents
6. Do not murder
7. Do not be unfaithful to your husband or wife
8. Do not steal
9. Do not lie
10. Do not be jealous of what other people have

Concepts you have seen before:
Covenant, nature of God.

Week Beginning	TASKS Year: 7 Subject: RS Term: Autumn 1
11/09/23	**Christianity:** Draw a table with the headings 'Look, Write, Check'. Write out the definitions of all of your tier 2 vocab in Section A in your 'look' column. Cover the 'look' column and see if you can now write the definition in you 'write' column from memory. Add any mistakes into your 'check' column.
25/09/23	**Christianity:** Write out the Nicene Creed and add images to help you to remember. Now condense the text into just 4 short sentence starters. Practice saying it aloud without looking at the original text, using sentence starters as a prompt.
09/10/23	**Christianity:** Read the 'Key Figures' box. Create a quiz of 10 questions, to test someone on the knowledge in this box. Can you answer them all without looking back to the original?
23/10/23	**Christianity:** Read Genesis Chapter 2. Create a storyboard showing what happens in this chapter.
13/11/23	**Judaism:** Create 10 flashcards to learn the following key words: monotheist / covenant / mitzvoth / Torah / synagogue / Shema / Chosen People / Exodus / Pesach / Shabbat. Once you have created them, test yourself. If you get the right, put them in a correct pile. The ones you get wrong, retest yourself.
27/11/23	**Judaism:** Summarise the section on Abraham into 6 bullet points. Make sure you read the whole box. Summarise the section on Moses into 8 bullet points. Make sure you read the whole box.
11/12/23	**Judaism:** Read the sections called 'Judaism today', 'Hannukah', and 'Pesach/Passover'. Then create 10 quiz questions on flashcards, and write the answers on the other side. Once you have created them, test yourself. If you get the right, put them in a correct pile. The ones you get wrong, retest yourself.

Year 7 History - Autumn Term— Anglo-Saxon and Norman England

Section 1: Key Vocabulary

Tier 3 vocabulary	Definition
Anglo-Saxon (n)	Germanic tribes who lived in England from the 5th century and made up most of the population at the time of the Norman Conquest.
Celt (n)	A group of people from central Europe who had shared beliefs, traditions and languages.
Dark Ages (n)	A time after the fall of the Roman Empire where there was a decrease in learning which meant not many records are kept from this period.
Domesday Book (n)	A survey of England and Wales completed for William the Conqueror. It told him about how much land people owned and what was on it.
Earldom (n)	The land ruled over by an Earl (an important person in the medieval community).
Motte and Bailey (n)	A castle made up of two structures, a mound topped with a wooden keep and an enclosure at the bottom.
Saxon (n)	A group of early Germanic people who settled across Europe.
Witan (n)	An Anglo-Saxon council (a group of people who give advice) or parliament (a group of people who help the King to rule the country). Also called Witenagemot.
Tier 2 vocabulary	**Definition**
Conquer (v)	To take over land or people by armed force.
Exile (v)	Being removed or barred from your native country.
Feudalism (n)	The social system in Europe with the king at the top and the peasants (ordinary people) at the bottom.
Heir (n)	A person who is entitled to land or a title once someone else dies.
Illegitimate	Something not authorised by the law or no evidence for your claim to the throne.
Landholder (n)	A person who owns land and makes money from it, by selling products from it or renting.
Monasteries (n)	A building where monks live under a religious vow.
Nobles (n)	A person of high birth. Usually owning land and wealthy.
Oath (n)	A promise about someone's future behaviour or promise to a person.
Settlement (n)	A place which was previously uninhabited which is now home to a community.
Succession (v)	The process of inheriting a title. For example the line of succession in a family.

Section 2: Important ideas

Diagram of a Norman Motte and Bailey castle

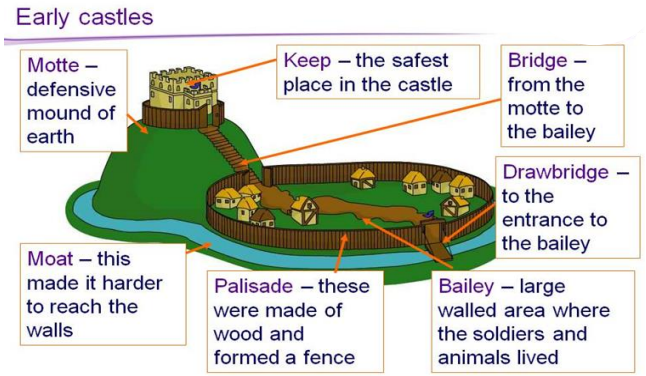
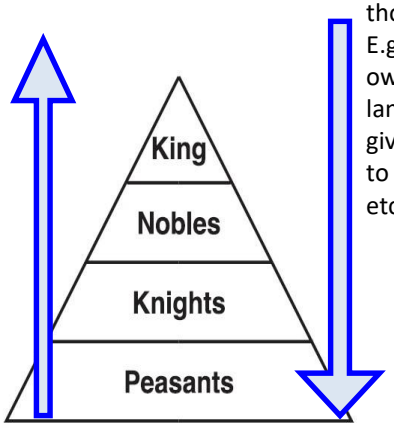


Diagram of the Feudal System

In return for the land, those below give their loyalty to those above. E.g. The knights fight for the Nobles.



Those above pass land down to those below. E.g. The King owns all the land and gives some to the nobles etc.

Section 3: Chronology

Key Dates:

43 AD	Britain becomes part of the Roman Empire.
410 AD	The fall of the Roman Empire in England.
419 AD	Anglo-Saxons invade Sussex.
753 AD	Bede publishes his book on the history of the English people.
1066	September: Harald Hardrada, King of Norway, invades England.
1066	Battle of Stamford Bridge in Yorkshire
1066	William, Duke of Normandy, land s in England.
1066	October: Battle of Hastings.
1067	The first motte and bailey castle was built in England.
1086	The Domesday Book is commissioned (ordered) by William.
1096	The Normans set off on their first crusade to Jerusalem.
1204	The French King Phillip II invades Normandy. Most Normans decide to become English and stay in England.

Concepts seen before: Roman Empire, the Vikings.

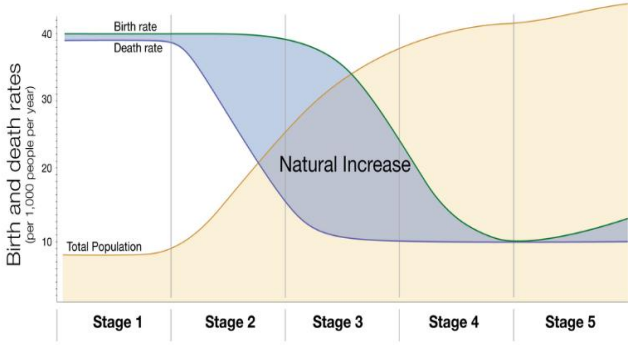
Week Beginning	TASKS Year 7—History—Anglo-Saxon and Norman England—Autumn Term
11/09/2023	**Section 2:** Important Ideas. TASK: Read the diagram of the Feudal System and try to recreate it in your book without the original diagram in front of you. Write one paragraph explaining how it worked. **CHECK:** Compare your diagram to the original. Correct any errors and add any missing key terms.
25/09/2023	**Section 1:** Key Vocabulary. TASK: Pick three words from Tier 3, and two words from Tier 2. Write the definition then dual code them (add an image that represents what it is) E.g. Miasma is a bad air or an unpleasant smell. **CHECK:** Cover the definitions and try to write them from memory using only your dual coding as a guide. Correct any errors.
09/10/2023	**Section 3:** Chronology. TASK: Summarise the chronology of life in England before William the Conqueror invaded England. **CHECK:** Using the timeline, what key events have you missed? Add these and any other missing examples.
23/10/2023	**Section 1:** Key Vocabulary. TASK: Pick three words from tier 3 and create a sentence using each of them. Pick three words from tier 2 and create a sentence using each of them. E.g. William, the Conqueror used the Domesday Book as a way to control England and Anglo-Saxons that lived there. **CHECK:** Correct any spelling errors in the key terms used.
13/11/2023	**Section 2:** Important Ideas. TASK: Study the image of the Motte and Bailey Castle. From memory, draw a diagram and label the features. Explain two reasons why they are effective e.g. One reason the Motte and Bailey castles are effective is because the defensive mound means the Normans could see their enemy approaching which… **CHECK:** Compare your diagram to the original. Correct any errors and add any missing key terms.
27/11/2023	**Section 3:** Chronology . TASK: Use the timeline to test yourself on the sequence of dates. Create flash cards of each event. On one side write the date and on the other the event. **CHECK:** Test yourself on the dates—how many did you remember? Make a note in your books and attach the flashcards
11/12/2023	**Section 1:** Key Vocabulary. TASK: Pick three tier 2 words. For each one write three synonyms and three antonyms. E.g. Illegitimate: Synonyms → illegal, invalid, wrong. Antonyms → authorised, good, legal. **CHECK:** Have you used the synonyms and antonyms correctly? Add any that you could not think of and correct spelling.

Year 7 – Geography – Development – Autumn Term

Section A: Key vocabulary	
Tier 3	**Definition**
HIC (high income country) (n)	A country where the GNI per capita is $12,746 or above.
NEE (newly emerging economy) (n)	A country where the GNI per capita is between $1046 and $12, 745. They have begun to develop, and no longer rely on just farming to earn money.
LIC (low income country) (n)	A country where the GNI per capita is $1045 or below.
Fairtrade (n)	When producers are paid a guaranteed fair price for their products
Tier 2	**Definition**
Sustainable (adj)	The ability to meet the needs of the present without compromising the ability of future generations to meet their needs.
Social (adj)	Related to people, wellbeing and communities
Taxes (n)	Money paid to the government through earnings or the cost of goods
Development (n)	Improvement in the standard of living of people in a country
Economic (adj)	Related to money, businesses and the economy
Population (n)	All of the people living in a particular country, area or place

Section B: Development measures		
Development measures	**Different ways of measuring standard of living or level of development of a country. Some key examples below.**	**Does it increase/ decrease as a country develops?**
Access to safe water	The percentage of people with access to clean water for drinking and washing.	Increase
Adult literacy rate	The percentage of people aged 15 or over who can read and write.	Increase
GNI (Gross national income)	The total income earned by a country's people and businesses in a year. Can be 'per capita', divided by the total population to give average income per person.	Increase
Life expectancy	The number of years a person can expect to live to on average.	Increase
Birth rate	The number of people who are born per 1000 people, per year.	Decrease
Death rate	The number of people who die per 1000 people, per year.	-

Demographic Transition Model



Section C: Barriers to development	
Socio-economic factors: Factors that stop a country developing, associated with people or money and businesses.	
War	War leads to people being displaced (forced to move from their homes) and a huge amount of damage that needs to be repaired.
Disease	Millions of people suffering from diseases, such as malaria, and providing healthcare is too expensive. These people are often too ill to work so the government has less money to spend on healthcare.
Historical factors: Factors linked to a country's history.	
Former colony	Some countries were ruled by others in the past, e.g. Britain. They were exploited (taken advantage of) for their people and resources and have struggled to develop since gaining independence.
Slavery	Some countries experienced slavery in the past, where several million of its healthy adults were sold as slaves.
Physical factors: Factors linked to the natural environment.	
Natural hazards	Hazards, e.g. earthquakes, , hurricanes, or flooding can cause damage which is very costly to repair.
Landlocked	When a country does not have a coastline (surrounded by other countries), trading is difficult, as goods can't be transported by boat.

Reducing the development gap	
Large-scale development	These are schemes to help countries to develop, involving big companies and governments investing a lot of money into big projects.
Small-scale development	These schemes provide communities and local people with appropriate, low-level technology. Usually low-cost and sustainable.

Concepts seen before:
Place Knowledge:
Understand geographical similarities and differences through the study of human geography
Human Geography:
Economic activity including trade links

Week Beginning	TASKS Year: 7 Subject: Geography Topic: Development Term: Autumn
11/09/2023	1) **Write out** the tier 2 and the tier 3 key words from the **Development KO** in your knowledge book: You should have 10 words in total. 2) Now **write a summary** of each definition alongside each word. Your summary definition must be no more than 3 words per key word. 3) Now **check your summary** definitions. Have you included words such as 'the, is, a, of'? If so, an you replace them with more meaningful key words?
25/09/2023	1) **Draw a table** for 'Look, Cover, Write, Check and Correct' as on your 'How do I self-quiz?' page. 2) In the 'Look, Cover' column, **how birth rate, death rate and total population changes in each stage of the Demographic Transition Model.** 3) Give one reason to explain why the total population is changing in each stage of the model
09/10/2023	1) Read through **information on Development Measures** on your knowledge organiser. 2) For each measure, write a suggestion of how it could be improved to help a country to raise its level of development.
23/10/2023	1) **Draw a table** for 'Look, Cover, Write, Check and Correct' with two columns. Label one column push factors and the other pull factors. 2) Under each write out a list of Development Measures**.** 3) For each factor, explain why this causes people to move to urban areas. 4) Check your answers. If you got the answer wrong, **write in the correct answer** in the 'Correct' column.
13/11/2023	1) Read the information on **Barriers to Development** from your KO. 2) Create a fact file **from memory** on the socio-economic, historical and physical factors that have acted as barriers to a countries development level. 3) Go back to your knowledge organiser – check your information for accuracy. 4) Upgrade any information you were incorrect on using red pen.
27/11/2023	1) Read section C of your knowledge organiser on **Strategies to Reduce the Development Gap** 2) Dual code (draw sketches) to show what each category (large scale and small scale) could involve. 3) List the **advantages and disadvantages** of each strategy.
11/12/2023	1) Write an extended paragraph about the best ways for a country to develop in a sustainable way. Use the knowledge you have developed through your lessons and the key terms from your knowledge organiser.

Year 7 – French – Café citron – Autumn Term 1

Section A: Key vocabulary

Tier 1 and tier Vocabulary	Definition
Les nombres et l'argent	**Numbers and money**
un	1
deux	2
trois	3
quatre	4
cinq	5
six	6
sept	7
huit	8
neuf	9
dix	10
onze	11
douze	12
treize	13
quatorze	14
quinze	15
seize	16
dix-sept	17
dix-huit	18
dix-neuf	19
vingt	20
trente	30
quarante	40
quarante-cinq	45
cinquante	50
cinquante-cinq	55
soixante	60
soixante-cinq	65
soixante-dix	70
soixante-quinze	75
quatre-vingts	80
quatre-vingt-cinq	85
quatre-vingt-dix	90
quatre-vingt-quinze	95
Tu as combien d'argent?	How much money have you got?
J'ai dix euros cinquante.	I've got ten euros fifty (cents).
Ça fait €5,00.	That comes to 5 Euros.

Section B: core text

Voici mon café.	1	Here's my café.
Le café **s'appelle** chez Citron.	2	The café **itself'calls** place lemon.
Le menu est <u>super</u>!	3	The menu is super!
Mon plat préféré est <u>le croque monsieur.</u>	4	**My dish favourite** is the hamandcheese toastie.
J'aime aussi les crêpes <u>banane-chocolat</u>	5	**I like also** the pancakes banana-chocolate
mais **je n'aime pas** <u>les crêpes citron pressé-sucre</u>	6	but **I not like not** the pancakes lemon squeezed-sugar.
c'est <u>dégoutant</u>.	7	it's disgusting.
Comme dessert je voudrais **une glace <u>au chocolat.</u>**	8	As dessert I wouldlike **an icecream tothe chocolate**.
Je vais au café avec <u>mon copain.</u>	9	I go tothe café with my friend.
Je prends <u>un coca</u>	10	**I take** a coke.
Ça fait **<u>5 € 00</u>**.	11	That makes **5 euros**.
C'est genial!	12	It's great!

Section C: Tier 3 vocabulary and grammar

Au café	**At the café**
J'ai faim et j'ai soif.	I'm hungry and I'm thirsty.
Vous désirez?	What would you like?
Comme entrée, …	As a starter, …
Comme plat principal,	For the main course, …
Comme dessert, …	For dessert, …
Je voudrais …	I'd like …
Je prends …	I'm having …
Je mange …	I'm eating …
Je bois …	I'm drinking …
un café	a black coffee
un café-crème	a white coffee
un thé (au lait/au citron)	a tea (with milk/lemon)
un chocolat chaud	a hot chocolate
un coca	a cola
un jus d'orange	an orange juice
un Orangina	an Orangina
une limonade	a lemonade
un sandwich au fromage	a cheese sandwich
un sandwich au jambon	a ham sandwich
un croquemonsieur	a toasted cheese and ham sandwich
le poisson	fish
le poulet	chicken
le steak haché	beefburger
la pizza	pizza
une mousse au chocolat	chocolate mousse
une tarte au citron	lemon tart
une crêpe	a pancake
une glace (à la vanille/à la fraise /au chocolat)	a (vanilla/strawberry /chocolate) ice-cream
Bon appétit!	Enjoy your meal!
Je suis végétarien(ne).	I'm a vegetarian.

The **indefinite article** is the word **"a"** (or some in the plural).
There are two words for 'a' in French:

un (masculine)	un café (a coffee)
une (feminine)	une crêpe (a pancake)
des (plural)	des chips (some crisps)

Year 7 – German –Der Tierpark – Autumn Term 1

Section A: Key vocabulary

Tier 1 and tier Vocabulary			
Die Tiere	**animals**	**Verbs**	**Verbs**
der Affe	monkey	ich mag	I like
der Bär	bear	Es gibt	There is
der Eisbär	polar bear	kosten	To cost
der Elefant	elephant	gehen	To go
der Löwe	lion	es heiβt	It's called
der Wolf	wolf	**Farben**	**colours**
die Giraffe	giraffe	braun	brown
die Schlange	snake	gelb	yellow
das Krokodil	crocodile	schwarz	black
das Nashorn	rhinoceros	weiß	white
das Stinktier	skunk	grün	green
das Zebra	zebra	grau	grey
		blau	blue
Zahlen	**numbers**	rot	red
ein	one	orange	orange
zwei	two		
drei	three	**Wochentage**	**Weekdays**
vier	four	Montag	Monday
fünf	five	Dienstag	Tuesday
sechs	six	Mittwoch	Wednesday
sieben	seven	Donnerstag	Thursday
acht	eight	Freitag	Friday
neun	nine	Samstag	Saturday
zehn	ten	Sonntag	Sunday
Adjektiven	**adjectives**	**Oft benutzte Wörter**	**high frequency words**
süβ	sweet	und	and
gefährlich	dangerous	aber	but
intelligent	intelligent	nicht	not
schlau	sly	denn	because
groβ	big	sehr	very
klein	small	ist	is
lustig	funny	sind	are
langweilig	boring	hier	here
		heiβt	is called

Section B: core text

Deutsch		Wort für Wort
Hier ist der Tierpark.	1	Here is the animalpark.
Der Tierpark heiβt Löweland		The animalpark called Lionland
Der Tierpark ist in Wien in Österreich	2	The zoo is in Vienna in Austria
Es gibt viele Wildtiere.	3	It gives lotsof wild animals
Die Giraffe ist sehr groβ	4	The giraffe is very big
und das Krokodil ist gefährlich.	5	and the crocodile is dangerous
Ich mag Eisbären, denn sie sind süβ,	6	I like icebears because they are sweet,
aber ich mag nicht Pinguine,	8	but I don't like penguins,
denn sie stinken.	9	Because they stink
Es gibt sechs Schlangen.	10	It gives six snakes.
Die Schlangen sind schlau.	11	The snakes are sly.
Wir gehen am Montag zum Tierpark.	12	We go on Monday to the Zoo.
Tickets kosten fünfzehn Euro,	13	Tickets cost fifteen Euro
oder fünf Euro für Kinder.	14	Or five Euro for children.

Section C: Tier 3 vocabulary and grammar

'to be' and 'to have' are two very common verbs that are used all the time. You'll see them a lot, so try to learn them.

sein	to be	haben	to have
ich bin	I am	ich habe	I have
du bist	you are	du hast	you have
er ist	he is	er hat	he has
sie ist	she is	sie hat	she has
es ist	it is	es hat	it has
wir sind	we are	wir haben	we have
sie sind	they are	wir haben	we have

'the' and 'a'

All nouns in German have gender – masculine, feminine or neuter, and there are different words for 'the' and 'a' for each gender.

Masculine:	der Bär	ein Bär
Feminine:	die Schlange	eine Schlange
Neuter	das Krokodil	ein Krokodil

It's a good idea to learn the gender of a word as you go along, so vocabulary lists usually include the word for the to help you.

Umlauts and eszett

German uses accents called umlauts. These are only used on ä, ö and ü. They twist the sound of the vowel. E.g. Bar – sounds like the english word, but Bär sounds like bear in English.

The eszett is an extra letter in the German alphabet and is reallv a double s. It looks like this: ß.

Concepts seen before: key grammar terms, such as nouns, adjectives and verbs.

Week Beginning	TASKS Year: 7 Subject: French and German Topic: Café Citron and der Tierpark Term: Autumn term 1
04/09/23	**French – Café citron**. Write out numbers 1-20 and learn them for a test. You must show evidence of your learning. (Make flashcards / look / cover / write / check your work etc.) There will be a test in class.
18/09/23	**German – Der Tierpark.** Draw and label the animals listed in section A in German. Learn these ready for a test in class.
02/10/23	**French - Café citron.** Draw and label in French all the items you could order in the cafe from the list in section C. Start from “un café” and finish at “une glace”. Learn these ready for a test in class.
16/10/23	**German – Der Tierpark**. Draw the colours into your homework book and label them in German. Please learn these for a test in class.

Year 7– French – Introductions – Autumn Term 2

Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Bonjour.	**Hello.**
Salut!	Hi!
Comment t'appelles-tu?	What's your name?
Je m'appelle …	My name is …
Comment ça va? (Ça va?)	How are you? (Are you OK?)
Ça va (très) bien.	I'm (very) well.
Pas mal, merci.	Not bad, thanks.
Ça ne va pas!	Not good!
Et toi?	How about you?
Au revoir.	Goodbye.
À plus!	See you later!
As-tu des frères et sœurs?	***Do you have any brothers or sisters?***
Oui. J'ai …	Yes, I have …
un frère.	one brother.
une sœur.	one sister.
un demi-frère.	one half-/step-brother.
(deux) frères.	(two) brothers.
(trois) demi-sœurs.	(three) half-/step-sisters.
Je n'ai pas de frères et soeurs.	I don't have any brothers or sisters.
Je suis fils/fille unique.	I am an only child.
Quel âge as-tu?	How old are you?
J'ai (onze) ans.	I am (11) years old.
C'est quand, ton anniversaire?	***When is your birthday?***
Mon anniversaire, c'est …	*My birthday is on …*
le (15 mars/24 juin).	*the (15th March/24th June).*
le premier	*the first*
janvier, février, mars	*January, February, March*
avril, mai, juin	*April, May, June*
juillet, août, septembre	*July, August, September*
octobre, novembre, décembre	*October, November, December*

Section B: Key Concepts/Ideas/Questions

Salut! **Ça va**?	1	Hi! **That goes**?
Je **m'appelle** Samuel.	2	I **myselfcall** Samuel.
Ça s'écrit S-A-M-U-E-L.	3	That iswritten S-A-M-U-E-L.
J'ai douze ans	4	**I'have** twelve years
et mon anniversaire c'est le **quatorze** mars.	5	And my birthday it's the **fourteen** March.
Je suis assez rigolo et très sportif,	6	I am quite funny and very sporty,
mais un peu paresseux.	7	but a bit lazy.
J'aime **le** sport et bavarder avec mes amis	8	I like **the** sport and tochat with my friends
par contre je déteste chanter.	9	how-ever I hate singing.
Je **n'ai pas** de frère, mais j'ai deux soeurs.	10	I **do'have not** any brother, but I'have two sisters.
Et toi? À plus!	11	And you? See you!

Section C: Subject Specific

avoir (to have)

J'**ai**	I have
Tu **as**	you have
Il/elle **a**	he/she has

J'ai deux frères. **I have** two brothers.

You also use **avoir** with age.

Quel âge **as-tu**?	How old are you?
J'ai onze ans.	I am 11 years old.

être (to be)

Je **suis**	I am
Tu **es**	You are
Il/elle **est**	He/she is

To make it negative use **ne…pas** to make a 'sandwich' around the verb.

Je **ne** suis **pas** très grand(e). I am not very tall.

ne shortens to **n'** in front of a vowel.

Il **n'**est **pas** arrogant. He is not arrogant.

Most **adjectives** agree with the noun they are describing: they change their ending, depending on whether the noun is masculine or feminine.

The most common pattern is to add –e in the feminine form.

Il est grand. → Elle est grand**e**.
(He is tall.) (She is tall.)

If an adjective already ends in –e, the feminine form stays the same.

Il est timid**e**. → Elle est timid**e**.
(He is shy.) (She is shy.)

Concepts seen before: Grammar definitions such as nouns, indefinite articles (a/an) definite article (the).

Week Beginning	TASKS **Year 7– French – Introductions – Autumn Term 2**
06/11/23	Write out the vocabulary in section A (start from “Bonjour” and go up to “I am 11 years old”) in French and English. Learn this ready for a test in class.
Date to be set by your class teacher.	Look at the grammar boxes in green in section C. Copy them out and be ready to be quizzed on them in class.
04/12/23	Write out the vocabulary in section A (start from “C’est quand ton anniversaire?” and go up to “December”) in French and English. Learn this ready for a test in class.
Date to be set by your class teacher.	Knowledge organiser re-write. Write out the **whole** core text from line 1- 11 in section B, changing at least one detail per line, for example “**je m’appelle Sara**?” instead of “**je m’appelle Samuel**”

Year 7 – German – Wer bin ich?– Autumn Term 2

Section A: Key vocabulary

Tier 1 and tier Vocabulary	Definition
Hallo!	***Meeting and greeting***
Wie heißt du?	*What's your name?*
Ich heiße …	*My name is …*
Hallo!	*Hello!/Hi!*
Guten Tag!	*Hello!*
Wie geht's?	*How are you?*
Gut, danke. Und dir?	*Fine, thanks. And you?*
Nicht schlecht.	*Not bad.*
Tschüs!	*Bye!*
Auf Wiedersehen!	*Goodbye!*
Wie alt bist du?	*How old are you?*
Ich bin … Jahre alt.	*I am … years old.*
Wie alt ist (Julia)?	*How old is (Julia)?*
(Julia) ist … Jahre alt.	*(Julia) is … years old.*
Wo wohnst du?	***Where do you live?***
Ich wohne in …	*I live in …*
Er/Sie/Es wohnt in …	*He/She/It lives in …*
…England	*England*
…Irland	*Ireland*
…Nordirland	*Northern Ireland*
…Schottland	*Scotland*
…Wales	*Wales*
…Deutschland	*Germany*
…Österreich	*Austria*
…der Schweiz	*Switzerland*
Wie bist du?	***What are you like?***
Ich bin …	*I am …*
Er/Sie ist …	*He/She is …*
faul	*lazy*
freundlich	*friendly*
intelligent	*intelligent*
kreativ	*creative*
launisch	*moody*
laut	*loud*
lustig	*funny*
musikalisch	*musical*
sportlich	*sporty*

Section B: core text

1	Hallo! Wie **geht's?**	Hello! How **goingit?**
2	Ich **heiße** Stern	I **am called** Stern
3	und ich bin sieben Jahre alt.	and I am seven years old.
4	Man schreibt das S-T-E-R-N.	You write that S-T-E-R-N.
5	Ich komme **aus** Deutschland,	I come **out** Germany,
6	aber ich wohne in York, in **Nordengland.**	but I live in York, in **NorthEngland**.
7	Ich bin lustig und ziemlich intelligent,	I am funny and quite intelligent,
8	aber ich bin auch sehr laut!	but I am also very loud!
9	Meine Lieblingssache ist Musik-	My favouritething is music-
10	sehr Laute Popmusik!	very loud popmu-sic!

'to be' and 'to have' are two very common verbs that are used all the time. You'll see them a lot, so try to learn them.

sein	to be	haben	to have
ich bin	I am	ich habe	I have
du bist	you are	du hast	you have
er ist	he is	er hat	he has
sie ist	she is	sie hat	she has
es ist	it is	es hat	it has
wir sind	we are	wir haben	we have
sie sind	they are	wir haben	we have

Section C: Tier 3 vocabulary and grammar

Cognates

Cognates are words which are the same or similar in English and German. This means you can often guess their meanings. E.g. Krokodil is a cognate. Can you see others in the text?

'the' and 'a'

All nouns in German have gender – masculine, feminine or neuter, and there are different words for 'the' and 'a' for each gender.

Masculine:	der Bär	ein Bär
Feminine:	die Schlange	eine Schlange
Neuter	das Krokodil	ein Krokodil

It's a good idea to learn the gender of a word as you go along, so vocabulary lists usually include the word for the to help you.

Umlauts and eszett

German uses accents called umlauts. These are only used on ä, ö and ü. They twist the sound of the vowel. E.g. Bar – sounds like the english word, but Bär sounds like bear in English.

The eszett is an extra letter in the German alphabet and is reallv a double s. It looks like this: ß.

Concepts seen before: Grammar definitions such as nouns, indefinite articles (a/an) definite article (the).

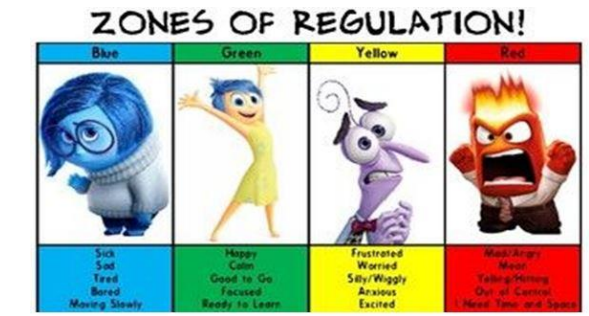
Week Beginning	TASKS Year: 7 Subject: German Topic: Wer bin ich Term: Autumn term 2
Date to be set by your class teacher.	Write out the vocabulary in section A (start from “Hallo” and go up to “Julia ist…Jahre alt”) in German and English. Learn this ready for a test in class.
20/11/23	Look at the grammar boxes in green in section C. Copy them out and be ready to be quizzed on them in class.
Date to be set by your class teacher.	Write out the vocabulary in section A (start from “Wo wohnst du?” and go up to “sportlich”) in German and English. Learn this ready for a test in class.
18/12/23	Knowledge organiser re-write. Write out the **whole** core text from line 1- 10 in section B, changing at least one detail per line, for example “**Guten Tag**, wie geht’s?” instead of “**Hallo**, wie geht’s?”

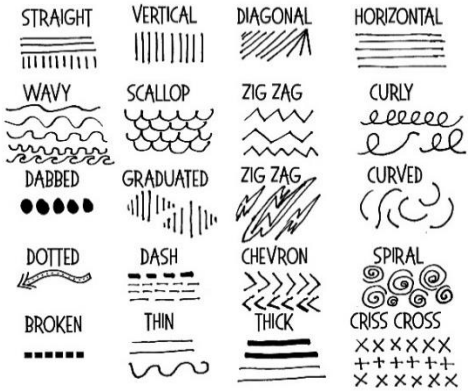
Year 7 – Art – Shading and Tone – Autumn Term

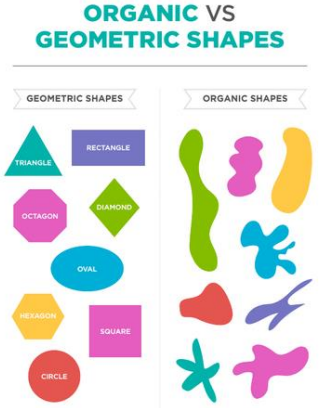
Section A: Key vocabulary

Tier 2	Definition
Line (N)	An element of art defined by a point moving in space. Line may be two-or three-dimensional, descriptive, implied, or abstract.
Shape (N)	An element of art that is two-dimensional, flat, or limited to height and width.
Form (V)	An element of art that is three-dimensional and encloses volume; includes height, width AND depth (as in a cube, a sphere, a pyramid, or a cylinder). Form may also be free flowing.
Tone (V)	The lightness or darkness of tones or colours. White is the lightest value; black is the darkest. The value halfway between these extremes is called middle grey.
Colour (V)	An element of art made up of three properties: hue, value, and intensity. • Hue: name of colour • Value: hue's lightness and darkness (a colour's value changes when white or black is added) • Intensity: quality of brightness and purity (high intensity= colour is strong and bright; low intensity= colour is faint and dull)
Texture (N)	An element of art that refers to the way things feel, or look as if they might feel if touched.
Tier 3	**Definition**
Composition (N)	How a series of images or pictures are laid out on a page.
Continuous line (N)	Where an image is drawn without removing the pen or pencil from the paper.
Media (V)	The type of material used to create art – such as pencil, paint, pastels, clay.
Shading (N)	A gradual change in tone from dark to light.

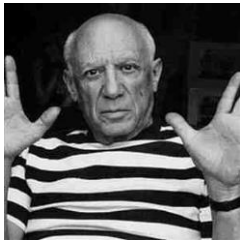
Section B:Techniques and skills



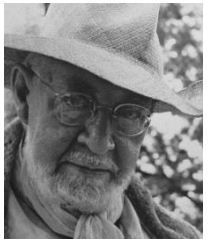




Section C: Artists work



Pablo Ruiz Picasso (25 October 1881 – 8 April 1973) was a Spanish painter, sculptor, printer, ceramist and theatre designer who spent most of his adult life in France. One of the most influential artists of the 20th century, he is known for co-founding the cubist movement.



Henri Matisse (31 December 1869 – 3 November 1954) was a French visual artist, known for both his use of colour and his fluid and original draughtsmanship. He was a draughtsman, printmaker, and sculptor.

Concepts seen before: Lines, Shapes, Colour, Watercolours.

Week Beginning	TASKS Year: 7 Subject: Art Topic: Shade/Tone Term: Autumn
04/09/23	Create a colour wheel with primary and secondary colours (Section B)
18/09/23	Research what the five key emotions are (Section B)
02/10/23	Draw and label as many different types of line (Section B)
16/10/23	Pick one emotion and sketch a face expressing your choice of emotion (Section B)
06/11/23	Research and write five Facts about the artist Henri Matisse (Section C)
20/11/23	Have a go at drawing a mixture of Geometric and Organic shapes look to (Section B)
04/11/23	Look up a picture by Henri Matisse and try to draw it. Look for one which uses a mixture of shapes. (Section C).
18/11/23	Look up the meaning of Shade and Tone (Write these down as we will be learning about these next year)

Year 7– Drama – Physical Theatre /Charlie &TCF – Autumn Term

Section A: Key Vocabulary	
Tier 3 vocabulary	**Definition**
Facial Expression (n)	Actors use facial expressions to communicate how their characters are feeling by manipulating the muscles in their face.
Body Language (n)	The way in which an actor uses their body to communicate emotion.
Vocal Expression (n)	How you deliver a line to convey characters' feelings and emotions through the voice.
Characterisation (n)	Interpreting a character.
Mime (n)	Mime is acting without speaking. In order for the audience to understand the story line, the actor miming may need to over exaggerate their facial expressions and gestures.
Narration (n)	A narrator is like a storyteller informing the audience about the plot. It also makes the drama stylised.
Tier 2 Vocabulary	**Definition**
Ensemble (n)	An Ensemble cast is made up of cast members in which the principal actors and performers are assigned roughly equal roles.
Proxemics (n)	The usage of space on the stage, using distance to show relationships between characters and their feelings

Section B: Key Concepts/Ideas/Questions

Vocal Skills

Vocal skills are very important for the actor. The voice tells us so much about a character, where they come from, their personality and how they're feeling.

An actor's voice needs versatility as it must be able to communicate a range of emotions. It must have clarity and projection so that every word can be heard along with having enough strength and resonance.

Vocal Definitions

Vocal: The way in which an actor uses their voice.

Volume: This is how loud or quiet your voice is.

Tone: The tone of voice used can convey your mood and intention.

Projection: The strength of speaking allowing the audience to hear you clearly.

Pitch: Speaking in a high or low voice to communicate emotion.

Pace: The speed in which a character speaks.

Dramatic Pause: Allowing a silence to build an atmosphere.

Choral Speaking: Ensemble speaking at the same time.

Section C: Subject Specific	
Still Image	Still images and freeze frames are both forms of Tableau. With freeze frame, the action in the play or scene is frozen, as in a photograph. Still images are used to focus in on a particular moment in a play / scene.
Thought Track	Thought tracking helps to inform the audience about a character. You see it in action when a character speaks out loud about their inner thoughts at a particular moment in the drama.
Improvisation (Improv)	Unplanned or unscripted performance. Creative thinking on the spot. Using thought or prop stimulus to create.
Physical Theatre	
Roll on the Wall	Physical and emotional analysis of a character.
Breaking the Fourth Wall	Talking directly to the audience.

Week Beginning	TASKS Year: 7 Subject: Drama Topic: Physical Theatre / Charlie & TCF Term: Autumn Term
04/09/23	Using the tier 3 vocabulary try putting them into a sentence explaining how you would use these drama terms in a performance.
18/09/23	Summarise the following vocal skills in your own words: Vocal, Volume, Tone, Projection, Pitch, Pace, Dramatic Pause and Choral Speaking.
02/10/23	Vocal skills are very important for the actor. The voice tells us so much about a character, where they come from, their personality and how they're feeling. Try to practice 3 different accents. This will be completed as a task in the retrieval lesson so be prepared with your 3 accents.
16/10/23	Explain in your own words what still image and thought tracking is. Once you have completed this explain how you have used these in your drama lessons. You might want to think about: - What went well, What needed improving, How you would improve this for next time.
06/11/23	Practice using rhythm & pace in a performance piece. Now ADD: Vocal, Volume, Tone, Projection, Pitch, Pace, Dramatic Pause and Choral Speaking.
20/11/23	Write about one of the following characters that you have explored in your lesson. (Charlie, Verruca, Violet, Augustus, Mike or Willy Wonka) Give as much background knowledge of the character as you can and explain how they came to win their ticket. In your answer explain how you would use body language and facial expressions to portray them to the audience.
04/11/23	Write about a different character that you have explored in your lesson. (Charlie, Verruca, Violet, Augustus, Mike or Willy Wonka) Give as much background knowledge of the character as you can and explain how they came to win their ticket. In your answer explain how you would use body language and facial expressions to portray them to the audience.
18/11/23	Evaluate your Charlie and the Chocolate Factory performance by answering the following questions in detail. 1. What went well in your performance? 2. What needed improving for your performance? 3. What would you do differently next time? *4. Remember to use key vocabulary in your answers. (refer to your knowledge organiser)*

Year 7 Expressive Arts—Dance—Lion King/Indian Dance

Expressive Skills	
Vocabulary	**Definition**
Projection (n)	The energy the dancer uses to connect with and draw in the audience.
Focus (v)	Use of the eyes to enhance performance or interpretative qualities.
Spatial Awareness (n)	Consciousness of the surrounding space and its effective use.
Facial Expression (v)	Use of the face to show mood, feeling or character.
Phrasing (v)	The way in which the energy is distributed in the execution of a movement phrase.
Musicality (n)	The ability to make the unique qualities of the accompaniment evident in performance.
Sensitivity (to others) (n)	Awareness of and connection to other dancers.

Mental Skills	
Vocabulary	**Definition**
Systematic Repetition (n)	Repeating something in an arranged or ordered way.
Mental Rehearsal (v)	Thinking through or visualising the dance.
Rehearsal Discipline (n)	Attributes and skills required for refining performance such as commitment, systematic repetition, teamwork, responsibility and effective use of time.
Planning a rehearsal (v)	Plan, make and show material.
Response to feedback	Peer assessment and teacher feedback
Capacity to Improve	The ability to improve from feedback and assessment strategies.
Resilience (n)	Recover quickly from difficulties.

Subject Specific

Simba is a young lion prince who is full of energy. He hugely admires his father Mufasa, the king. Mufasa's sudden death shocks Simba, leaving him unsure of his own identity.

Rafiki is a spiritual guide who appears at key moments in the story to guide Simba on his path. The character of Rafiki is inspired by South African Sangoma who are respected members of the community, trusted to heal and guide others.

Mufasa is a strong, brave and wise king and an understanding father.

He teaches Simba about being a responsible leader, and the importance of the great circle of life.

Scar is the younger brother of Mufasa and Simba's uncle. He is bitter and untrustworthy, believing that he should be King.

Zazu is a hornbill and Mufasa's most trusted advisor. He is extremely loyal to the king and takes his duties seriously. Zazu likes to stick to the rules and keep things orderly.

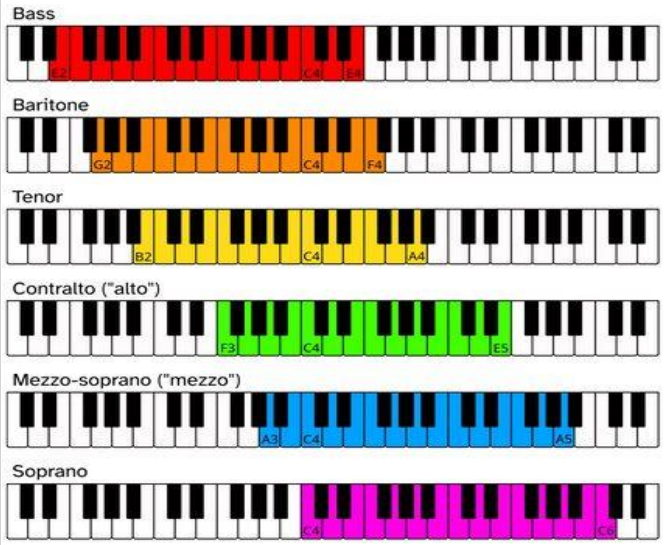
Nala is a lioness cub who is best friends with Simba and equally inquisitive.

Week Beginning	TASKS Year 7—Dance—Indian Dance—Term 1A
04/09/23	Write a paragraph about each character in the Lion King .
18/09/23	Learn the following definitions and spellings for: **Projection/Focus/Facial Expression/Systematic Repetition**
02/10/23	Learn the following definitions and spellings for: **Spatial Awareness/Mental Rehearsal/Rehearsal Discipline/Capacity to Improve/Resilience**
16/10/23	Select 3 definitions from previous homework and write a sentence about how you have used these skills in a lesson. Example: **Projection** I start my dance with my feet together and **my eye-line lifted. This helps to show that I'm ready to start the dance and my energy helps to** connect and draw in the audience.
06/11/23	**Explain** how you have used **rehearsal discipline** in lessons. Look at the definition on the knowledge organiser and link this to the practical work produced in lesson
20/11/23	What were the 5 key Indian hand gestures you included within your dance ? How did you link each action together? Which skills from previous homework did you apply when performing?
04/11/23	Research Bharatanatyam Indian Dance. Find 3 facts and write them in your book.
18/11/23	Write about the **two topics** you have studied so far this Term. Give factual information about Lion King and Indian Dance. What did you enjoy about each topic? What did you struggle with?

Year 7 Music - Singing - The Musical Elements – Autumn Term 1

Section A: Key vocabulary	
Tier 3	**Definition**
Dynamics (ad)	The volume of the music.
Articulation (ad)	How the music is articulated (soft or sharp – legato or staccato).
Rhythm (n)	Pattern of sounds.
Metre (n)	How many beats are in the bar.
Tempo (n)	The speed of the music.
Diction (n)	The effectiveness of pronunciation and distinctiveness.
Ensemble (n)	Group work.
SATB – Acronym (n)	Soprano Alto Tenor and Bass vocal ranges.
Tier 2	**Definition**
Warming up (v)	Getting your voice warmed up.
Posture (n)	The importance of stature and breath work for singing.
Solo (n)	Individual singing/performing.

Section B: Important Ideas / Concepts/ Questions



Singing is imperative for mental and physical health and well being. Why do you think that is?

Singing is scientifically known to improve peoples well being and is fundamental in the KS3 curriculum.

DR P SMITH

Concepts seen before:

- Potentially – Musical elements
- Describing how music sounds using adjective

Section C: Important ideas/concepts

Year 7 - Music - Instruments of the Orchestra – Autumn Term

Section A: Key vocabulary	
Tier 3	**Definition**
Orchestra (n)	A large ensemble (group of musicians) of performers on various musical instruments who play music together.
Symphony orchestra (n)	A large orchestra) can have between 80-100+ performers.
Conductor (n)	Leads the orchestra with a baton (white 'stick') and hand signals. stands at the front so they can be seen my all performers.
Composer (n)	Someone who writes Music (composes).
Tuning up (v)	Before the orchestra rehearses or plays, all instruments need to be in tune with each other.
Sonority/ Timbre (n)	Describes the unique sound or tone quality of different instruments and the way we can identify orchestral instruments as being distinct from each other –sonority can be described by many different words including.
Stave notation (n)	Reading notes on the stave on classical instruments.
Tier 2	**Definition**
Theory (n)	Understanding the theoretical knowledge to underpin the practical in music.
Families/ Sections (n)	Instruments of the orchestra can be divided into 4 families or sections: strings, woodwind, brass and percussion.
Pitch (n)	The highness or lowness of a sound, a musical instrument or musical note .

Section B: Important Ideas / Concepts/ Questions

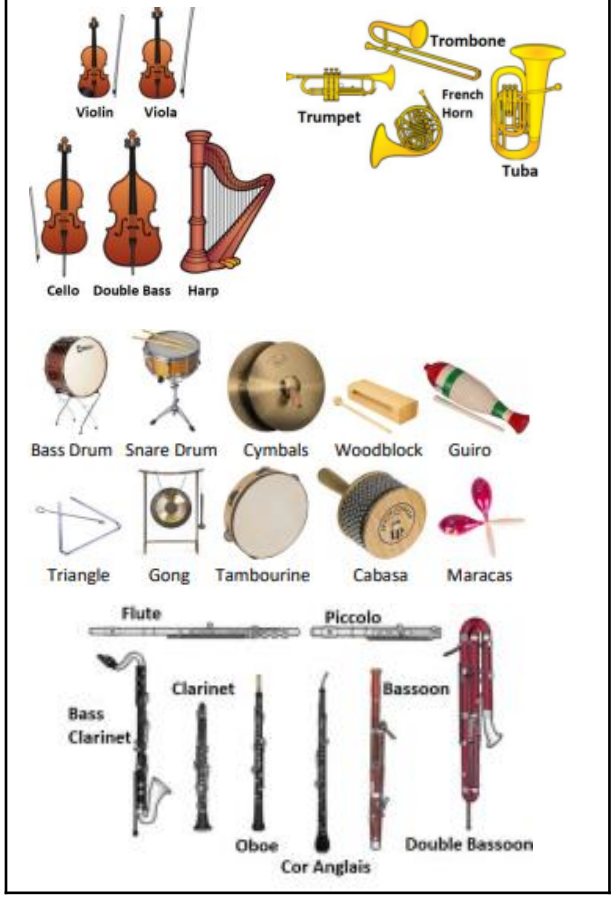
Largest section of the orchestra who sit at the front, directly in front of the conductor.
Usually played with a bow (arco), (not the harp) but can be plucked (pizzicato).
Violins split into two groups: 1st and 2nd violins (melody and harmony)

Originally (and some still are) made from wood (some now metal and plastic). All are BLOWN. FLUTES: flute and piccolo – air blown over hole. SINGLE REED (small piece of bamboo in the mouthpiece): clarinet, bass clarinet & saxophone (not traditionally in the orchestra, but some modern composers have used it) DOUBLE REED (two reeds in the mouthpiece): oboe, Cor Anglais, bassoon, double bassoon.

Four types of brass instruments in an orchestra, all made from metal – usually brass and blown by the player 'buzzing their lips' into a mouthpiece (shown right). The trumpet, French horn and tuba all have three VALVES which, along with altering the players mouth positions, adjust the length of the tubing allowing for different notes to be played. The trombone has a SLIDE which adjusts the length of the tubing. Brass instruments (along with percussion) have often been used to play FANFARES: a short, lively, loud piece of music usually warlike or victorious in character used to mark the arrival of someone important, give a signal e.g., In battles, of the opening of something e.g., A sporting event or ceremony. Fanfares often use notes of the HARMONIC SERIES – a limited range of notes played by BUGLES (smaller trumpets with no valves) and valve less trumpets.

Always located at the very back of the orchestra (due to their very loud sounds!). Large number of instruments which produce their sound then hit, struck, scraped, or shaken. TUNED PERCUSSION (able to play different pitches/notes).

Section C: Important ideas/concepts



Concepts seen before:

- DR P SMITH acronym
- Listening skills relating to instrumentation
- Classical Music and how this can differ to 'Popular Music'

Week Beginning	TASKS Year 7 - Music – Autumn Term
11/09/2023	Practice the first five words in **Section A** and make some flash cards for these key terms.
25/09/2023	Design a poster on why singing is so important for both physical and mental health.
09/10/2023	Practice your **DR P SMITH** acronym writing down as many Tier 3 vocabulary as you can associated with these key words. 
23/10/2023	Pick one Musical element from **DR P SMITH** and create a poster on this key term with as many Tier 3 words as possible! **Dynamics/Rhythm/Pitch/Structure/Melody/Instrumentation/Tempo/Timbre/Texture/Harmony**
13/11/2023	Pick a family of the Orchestra and design a poster based on the instruments in that particular section for example: Woodwind
27/11/2023	Revise your **Section A** Tier 3 words using flash cards .
11/12/2023	Read **Section B** of your KO in Music this half term and summarise and condense this knowledge.

Year 7 – Computing– Beginning Computer Science – Autumn Term 1

Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Web Browser (n)	Application software for accessing websites.
Folder (n)	A collection of files and documents stored in a location.
Download (v)	Copy data or files from one computer system to another, typically over the internet.
Upload (v)	Transfer data or files from one computer system to another.
Webpage (n)	A collection of text (words), formatting, images and interactive elements written in a language called HTML.
Search Engine (n)	A piece of software that looks up and returns webpages using the keywords entered by the user.
Tier 2 Vocabulary	**Definition**
Individually (n)	Personally, by yourself.
Initial (n)	Exist or happens at the beginning.
Recipient (n)	A person or thing that receives or is awarded something.
Identify (v)	Say what or who something is.
Browse (v)	Look for and casually read.
Appropriate (n)	Be suitable for the time, place and circumstance.
Purpose (n)	What is it for, the job of the document or publication; to inform, to entertain, to persuade, to inspire.
Audience (n)	Who it is for which can be broken into age, gender and interests.

Section B: Key Concepts/Ideas/Questions

Passwords are a secret word or phrase used to gain access. **Usernames** are used to identify a person with access to a computer, network or service.

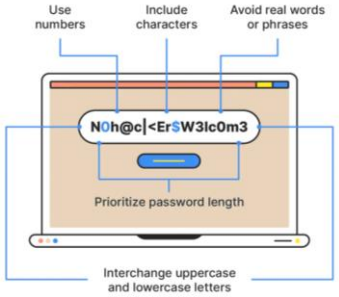
You will have a username and password for accessing your account in school and a school email address, which uses the same password as your school account.
Example for Joe Bloggs:

Username: 27joeblo
Password: Password123
Email: 27joeblo@leesbrook.co.uk

Never use personal information: Strong passwords shouldn't include references to personal information such as names, birthdays, addresses, or phone numbers.

Avoid using real words: Hackers use malicious programs that can process every word found in a dictionary to crack passwords.

Strong passwords should use a mix of letters both uppercase and lowercase along with numbers and symbols and will have a minimum length of 8 characters.

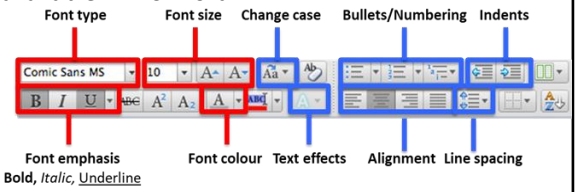


Section C: Subject Specific

We use a range of **applications** sometimes called software or apps, this is a computer program that has a specific function or job.

Word processor is an example of an application. It's a computer program that allows for input, editing, formatting, and output of mainly text.

Formatting is changing the way something looks or works by using tools. This shows some of the tools available in MS Word.



Save current file	Ctrl + s
Copy	Ctrl + c
Paste	Ctrl + v
Cut	Ctrl + x
Undo	Ctrl + z
Redo	Ctrl + y
Select all	Ctrl + a
Switch between programs	Windows + Tab
Refresh the page	F5

Concepts seen before: Used tools in software, accounts on other platforms in and out of school

Year 7 – Computing – Starting Hardware and Software – Autumn Term 2

Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Input Device (n)	A piece of computer hardware that allows you to get data into the computer.
Output Device (n)	A piece of computer hardware that gets information out of the computer.
Hardware (n)	The machines, wiring, and other physical components of a computer system.
Software (n)	The programs, applications and other operating information used by a computer.
Motherboard (n)	Connects all the hardware together, both internal and external so they can communicate.
CPU (n)	Runs the instructions and works out how to do them. Everything a computer does is made up of lots of instructions.
RAM (n)	Allows the computer to think. It gives the CPU somewhere to keep instructions and to work things out.
Hard drive (n)	Stores the apps and files even when the power is off. These need to be copied into the RAM for the computer to think about them and use them.
Tier 2 Vocabulary	**Definition**
Internal (n)	Found on the inside.
External (n)	Belonging to or forming the outer surface or structure of something.
Components (n)	A part or element of a larger whole, especially a part of a machine or vehicle.
Portability (n)	The ability of software, device or data to be transferred from one machine or system to another.
Durability (n)	The ability to withstand wear, pressure, or damage.
Capacity (n)	The maximum amount that something can contain.

Section B: Key Concepts/Ideas/Questions

Better RAM means more software can be open at once

Better CPU means every task is executed quicker

Better Hard Drive means more storage to use

Better Solid State Drive means more storage to use

Better Motherboard means more hardware components can be installed

Section C: Subject Specific

Back to that **binary number**?

- **Why?** – because of **place value**
- The **binary number system** uses different **place values** because it's a different **number system**

Each **place value** column can contain a **single number** from these **2** available and **place values** go up in **multiples** of **2**

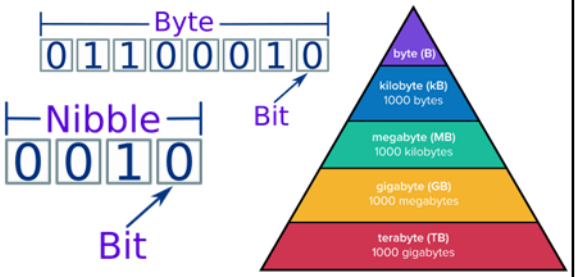
0110 in binary = **6** in denary

8s	4s	2s	1s
0	1	1	0

From the Latin word
Bini
meaning ***two together***

When **computers store** files, applications and data they take up different **amounts** of **space.**

We need to have **names** for these **units of storage**



Concepts seen before: Using devices and being aware of external inputs and outputs

Week Beginning	TASKS Year: 7 Subject: Computing Term: Autumn Term
11/09/2023	**Beginning Computer Science:** Use Look, Cover, Write, Check to learn the key terms spellings.
25/09/2023	**Beginning Computer Science:** Create flash cards to learn the meanings of the key terms (card with the word on one side and the meaning on the other). Use these to learn the terms.
09/10/2023	**Beginning Computer Science:** Practice on a computing device the short cut keys.
23/10/2023	**Beginning Computer Science:** Practice logging into Go4schools and school email accounts on a personal device (Phone laptop etc. at home). Practice sending emails to your friends at school, keep it appropriate.
13/11/2023	**Starting hardware and software:** Use Look, Cover, Write, Check to learn the key terms spellings.
27/11/2023	**Starting hardware and software:** Create flash cards (or other method if you do not have flash cards) to of the meanings of the key terms (card with the word on one side and the meaning on the other). Use these to learn the terms.
11/12/2023	**Starting hardware and software:** Draw a diagram of a computer system with all the terms labelled.

Year 7 – PE – Football – Autumn Term

Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Passing (n)	Kicking the ball to another player.
Receiving (n)	Getting the ball from another player.
Dribbling (n)	Running with the ball to evade an opponent.
Tackling (n)	To dispossess an opponent.
Jockeying (n)	Slowing an attacking player down by keeping between the attacker and the goal.
Interception (n)	Preventing a pass between players.
Shot (n)	An attempt to score.
Offside (n)	Being on the pitch where only one opponent is between the player and goal.
Tier 2 Vocabulary	**Definition**
Identify (v)	Name the key point.
Describe (v)	Recall facts, events or process in an accurate way.
Explain (v)	Make something clear, or state the reasons for something happening.
Evaluate (v)	Using the information supplied to consider evidence for and against when making a judgement.

Section B: Key Concepts/Ideas/Questions

4-3-3
An attacking formation with 4 defenders, 3 midfielders and 3 forwards.

5-3-2
A defensive formation, with 5 defender, 3 midfielder and two forwards.

4-4-2
The most traditional formation used in football

2-3-5
This formation was used in the early 1900's

Section C: Subject Specific

1. Game is started by kicking the ball from the centre spot.

2. The U12 game has 9 or 11 players, depending on age group– goalkeepers, defender, midfielders and attackers.

3.Referee and two assistants with officiate the game.

4. If a ball goes over a touch line a throw in is taken. If an attacker kicks over the goal line it is goal kick and if a defender kicks it over the goal line it is a corner.

5. To score the ball must cross the opposition's goal line.

6. The offside rule also applies where an attacker is in front of all opposing defenders when the ball is kicked.

Use the QR codes to learn more about the individual skills

Passing

Control

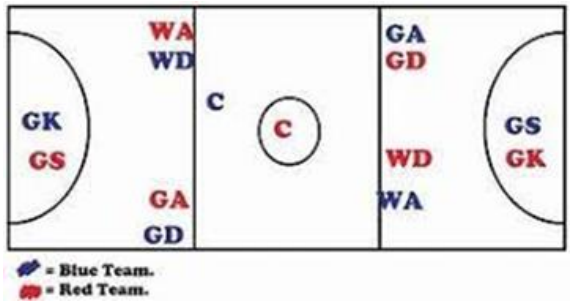
Shooting

Concepts seen before:
Using tactics to create space

Year 7 – PE – Netball – Autumn Term

Section A: Key vocabulary	
Tier 3 Vocabulary	**Definition**
Passing (n)	Passing the ball to another player.
Receiving (n)	Getting the ball from another player.
Dodging (n)	A sudden deceptive move often used to avoid the opponent.
Centre Pass (n)	The netball centre pass is the initial passing movement which begins and restarts play following a goal.
Footwork (n)	It applies to the person with the ball being allowed very limited movement with their feet after catching the ball.
Intercepting (n)	Taking a pass intended for the opposite team.
Tier 2 Vocabulary	**Definition**
Identify (v)	Name the key point.
Describe (v)	Recall facts, events or process in an accurate way.
Explain (v)	Make something clear, or state the reasons for something happening.
Evaluate (v)	Using the information supplied to consider evidence for and against when making a judgement.

Section B: Netball position



Positions and responsibilities:

Goal Shooter (GS) – To score goals and work in and around the circle with the GA. Marks the GK.

Goal Attack (GA) – To feed the ball to the GS and to score goals. Marks the GD. Wing Attack

Wing Attack (WA) – To feed the ball into the circle and to help move the ball down to the teams attacking third. Marks the WD.

Centre (C) – To take the centre pass and to act as a link between defence and attack. Moves the ball down the court. Marks the opposite C.

Wing Defence (WD) – To look for interceptions and move the ball down into attack. Marks the WA.

Goal Defence (GD) – To get the ball from the attack and help pass it back down the court. To prevent the GA from scoring. Marks the GA.

Goal Keeper (GK) - To work with the GD and to prevent the GA/GS from scoring. Marks the GS

Section C: Subject Specific

Rules:

Footwork - You must comply with the footwork rule e.g. a 1-2 landing or a 2-footed landing. You only have 3 seconds to release the ball.

Obstruction - When defending you must be 1 metre away from the player.

Contact - There must be no contact with an opposing player.

Scoring - Only GS and GA may score a goal. You must stay in the correct area of the court for your position.

Replaying - catching the ball, dropping it and then catching it again

Use the QR codes to learn more about the individual skills

Passing

Dodging

Shooting

Concepts seen before:
Using tactics to create space

Week Beginning	TASKS Year: 7 Subject: PE Topic: Football and Netball Term: Autumn
11/09/2023	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.
25/09/2023	Create a 10 question quiz based on the section B, providing the answers.
09/10/2023	Create a 10 question quiz based on section C, providing the answers.
23/10/2023	Using the video on passing create an information poster describing how to accurately pass the ball using the different techniques.
13/11/2023	Using the video on shooting, design a training session to improve a Year 4's accuracy.
27/11/2023	**Football:** Using section B, select two of the different formations and evaluate whether they are attacking or defensive formations giving justification to support your thinking. **Netball:** Using section B watch the dodging and defending videos and identify and describe the key technique points of those skills.
11/12/2023	Scan the QR code and answer the 20 multiple choice questions.

Year 7 – Design and Technology - Design Engineering – Autumn Term

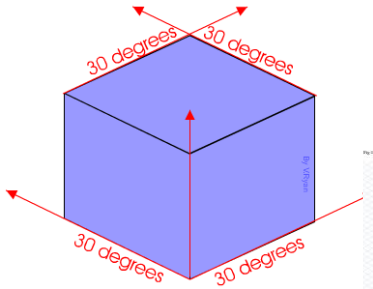
Section A: Key vocabulary

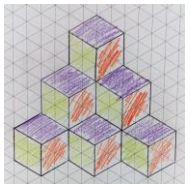
Tier 3 Vocabulary	Definition
Production Aids (n)	Used to aid accuracy / speed / safety of making
Annotation (v)	Notes to explain features of a design
Specification (n)	A list of criteria that your design must, should or could fulfil to ensure the design brief is met
Toughness (a)	A materials ability to absorb impact without fracturing / breaking
Hardness (a)	Materials ability to withstand scratching / dinting
Brittleness (a)	A material which easily cracks / snaps / does not bend.
Malleability (a)	A malleable material can easily be squashed / deformed.
Tier 2 Vocabulary	**Definition**
Evaluate (v)	Review strengths & weaknesses
Dimension (n)	Sizes / measurements
Source (n)	Origin of a material
Category (n)	A group of something with similarities
Property(n)	A physical feature
Characteristic (n)	An aesthetic feature

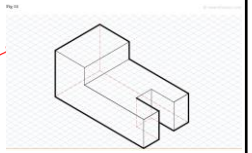
Section B: Key Concepts/Ideas/Questions

A is for Aesthetics
C is for Cost
C is for Customer
E is for Environment
S is for Size
S is for Safety
F is for Function
M is for Material

Use ACCESS FM for analysing, evaluating or specifying existing or future products. Ensure you say 'why' for each point you make to show your understanding.





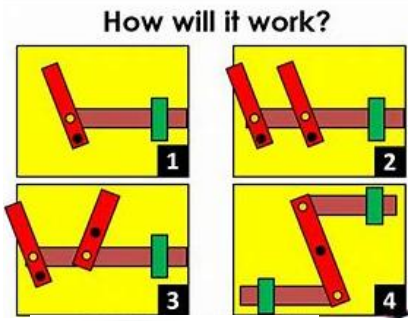


Isometric Drawing Success Criteria for a cube:

1. Horizontal lines must be at 30° to the base line.
2. Vertical lines must be vertical
3. Opposite lines should be parallel

Top tip – use isometric grid paper to help you achieve accuracy, or a 30 ° Set Square

Section C: Subject Specific



Levers & Linkages.

These can change the direction of motion or even multiply force

Coping Saw

Disk Sander

Glass Paper

Pillar Drill

Steel Rule

Concepts seen before: Design Process, hand drawing skills

Week Beginning	TASKS Year 7 Design Engineering
1	Using your knowledge organiser, research the meanings of the different terms in ACCESS FM and create a definitions page.
2	Using your knowledge organiser, use look , cover, write, check and correct to learn the key words and definitions.
3	Using your knowledge Organiser, create an isometric drawing of an object from around your home. This could be your phone, a building, computer, T.V etc.
4	From the tools and equipment you have used so far, list what health and safety measures should be followed.
5	Research the different types of lever and linkage and what they can be used for.
6	Using your knowledge Organiser to create a revision mind map.

*Due to being on rotation, your DT Teacher will tell you the dates for your KO homework.

Year 7 – Design and Technology - Design Innovation – Autumn Term

Section A: Key vocabulary

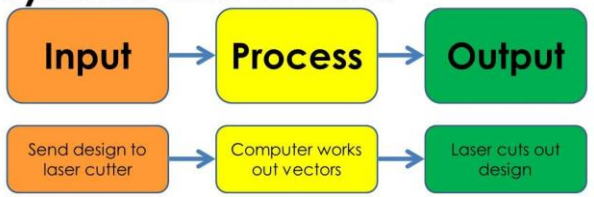
Tier 3 Vocabulary	Definition
Design Brief (n)	A statement explaining what it is you are required to design – the problem.
Specification (n)	A list of criteria that your design must, should or could fulfil to ensure the design brief is met.
Aesthetics (a)	The visual / stylistic appearance / features of a product.
Environment (n)	Consideration of environmental impact / effect of a product.
Annotation (n)	Notes to explain features – detailing any information that cannot be explained through your images / drawings.
CAD (n)	Computer Aided Design.
CAM (n)	Computer Aided Manufacture.
Additive Manufacture (n)	The process of manufacture where material is added, not taken away e.g. 3D printing.
Tier 2 Vocabulary	**Definition**
Dimension (n)	Sizes / measurements.
Emerging (v)	Relatively new and growing.
Research (n)	Finding out of information.
Inspired / inspiration (n)	Taking ideas but not copying.
Quality (a)	Level of finish.

Section B: Key Concepts/Ideas/Questions

Design Approaches:
Designers often use different design approaches to help them produce creative solutions to problems. One design approach analysing the work of past and present professionals.

To do this, we can analyse their design values or their design style – colours, shapes, patterns and textures.

Systems and control:

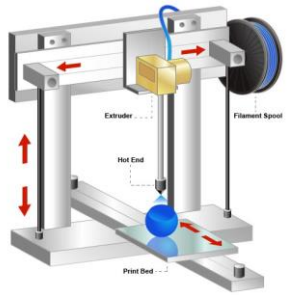


CAD = Computer Aided Design.

CAM = Computer Aided Manufacture.

What may the advantages and disadvantages of these be?

Section C: Subject Specific

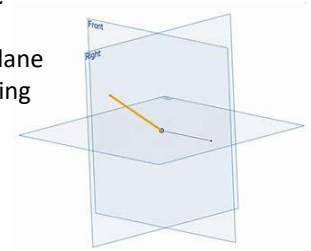


New & Emerging Technology

An example of a new and emerging technology is 3D Printing or additive manufacturing.

Onshape

Sketch Plane for creating 3D CAD models.



Onshape

Shape sketch tools. What do you think each

Onshape

Cut (delete)

Dimension

Concepts seen before: Design process, Use of computers, dimensioning / measuring

Week Beginning	TASKS Year 7 Design Innovation
1	Using your knowledge organiser, research CAD (Computer Aided Design) and CAM (Computer Aided Manufacture) and list 3 examples of each – e.g. CAD – Onshape 3D CAD software
2	Using your knowledge Organiser, look , cover, write, check key terms and definitions.
3	Using your knowledge Organiser, create a flow chart – input, process, output for making a food dish of your choice – e.g. baking a cake.
4	From your knowledge organiser and what you have learned in lesson, create a mind map on the advantages and disadvantages of using computer aided design over hand processes.
5	Using your mind map and past homework, create a flow chart showing the input, process and output for creating a laser cut keyring.
6	Using your knowledge Organiser to create a revision Mind Map

*Due to being on rotation, your DT Teacher will tell you the dates for your KO homework.

Year 7 - Food and Nutrition – Autumn Term

Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Cross Contamination (v)	Transfer of potentially harmful bacteria from one thing to another.
Microorganism (N)	A microscopic living thing. E.g. Bacteria, moulds and yeasts.
Food poisoning (N)	Illness caused by bacteria or other toxins in food, typically causes vomiting and diarrhoea.
Carbohydrate (n)	One of the three macronutrients, needed for energy.
Protein (n)	One of the three macronutrients, needed for growth and repair.
Fat (n)	One of the three macronutrients, needed for insulation, protection and energy.
Nutrient (n)	A substance that provides nourishment essential for the maintenance of life and for growth.
Tier 2 Vocabulary	**Definition**
Detergent (n)	A water-soluble cleaning agent that cleans dishes and surfaces (washing up liquid).
Personal hygiene (n)	Maintaining cleanliness of one's body and clothing.
5 a day	Guidelines for how much fruit and veg you should eat.
Danger zone	A temperature range bacteria multiply rapidly 5'c to 63'C.

Section B: Key Concepts/Ideas/Questions

Claw grip
Create a claw by partly curling your fingers together into a claw shape. Press the tips of your fingers (nails) against the food to be gripped and then lean your fingers slightly forward of your nails so that you can't see your nails when you look down on your hand. It is the best method to use when food needs to be cut into slices or diced.

Bridge hold
Create a bridge over the food with your hand. The fingers should be on one side and the thumb should be on the other. Hold the food to be cut between the fingers and thumb creating a bridge. The knife should go through the bridge to cut the food. It is especially useful for cutting circular items into halves and quarters, e.g. tomatoes, apples.

The Eatwell Guide

The Eatwell guide is used to help us make healthy choices, it is split into sections, the bigger the section, the more of your diet should come from the foods on it.

Section C: Subject Specific

Energy is provided by carbohydrate, fat and protein.
Carbohydrate is the main source of energy for the body.
Fat is needed for health, but in small amounts.
Protein is needed for growth and repair.

A variety of food from different food groups is needed to get the range of nutrients needed by the body.

Food Group	Nutrient (main)
Fruit and vegetables	Vitamins, e.g. vitamin A and vitamin C
Potatoes, bread, rice, pasta and other starchy carbohydrates	Carbohydrate
Beans, pulses, fish, eggs, meat and other proteins	Protein Minerals, e.g. iron
Dairy and alternatives	Minerals, e.g. calcium
Oil and spreads	Fat

Cold **food** must be kept at 8°C or below. This is a legal requirement in **England**, Wales and Northern Ireland. It is recommended to set your **fridge** at 5°C to make sure that **food** is kept cold enough.

Concepts seen before: Importance of hygiene, the Eatwell guide.

Week Beginning	TASKS Year: 7 Subject: Food and Nutrition
1	Use Look, Cover, Write, Check to learn the Tier 3 key words and definitions. Use the 'How do I self-quiz?' page of this knowledge organiser if you need help.
2	1)Summarise how you use a claw grip. You should have no more than 20 words. 2)Summarise how you use a bridge hold. You should have no more than 20 words.
3	Use Look, Cover, Write, Check to learn the Tier 2 key words and definitions. Use the 'How do I self-quiz?' page of this knowledge organiser if you need help.
4	Explain why it is important to have a balanced diet. Use the key words from your knowledge organiser and your Eatwell Guide.
5	Design a meal you could have for dinner than would be balanced. Use the Eatwell Guide and the different food groups in the table to help you. Explain why you have chosen eat part of this meal.
6	Create flashcards for the 10 words you have found most difficult to remember the definitions of this term. On one side of your flashcard write the key word. ON the other write the definition. Then ask a family member to quiz you. Remember to glue in your flashcards.

*Due to being on rotation, your DT Teacher will tell you the dates for your KO homework.

Notes page

Notes page

Your equipment you need for learning every day: