

Year 7 Art and Design Autumn Term Knowledge Organiser

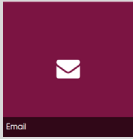
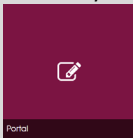
Key Vocabulary:

1	The Formal Elements of Art	The formal elements of art are used to make a piece of artwork. The art elements are line, tone, texture, shape, pattern and colour. They are often used together, and how they are organised in a piece of art determines what the finished piece will look like.
2	line	A line is a mark or link between two points.
3	mark	Mark making describes the different lines, dots, marks, patterns and textures created to produce a work of art. Artists use gesture to express their feeling and emotions in response to something seen or something felt .
4	tone	Tone refers to the light and dark values of an object when drawing. There are three different types of tone: shadows, mid tones and high lights.
5	texture	The texture stimulates two different senses: sight and touch.
6	Shape	Shape is a flat, enclosed area such as a square or triangle.
7	form	A form can refer to a three-dimensional composition or object.
8	pattern	A repeated decorative design.
9	colour	Colour is the element of art that is produced when light, strikes an object, and is reflected back to the eye. A colour wheel is an illustrative organisation of colour hues around a circle, which shows the relationships between primary colours, secondary colours and tertiary colours.

Colour Theory:

10	primary	red, yellow, blue
11	secondary	orange, green, purple
12	tertiary	secondary + primary
13	shade	add black
14	tint	add white
15	warm colours	red, orange, yellow
16	cold colours	blue, purple, green
17	Media	Media is the materials and tools used by the artist to create a work of art. For example ,pen and ink. The pen is the tool and the ink is the material.
18	Still Life	One of the subject types of Western art. A still life includes all kinds of natural or man-made objects which do not move.

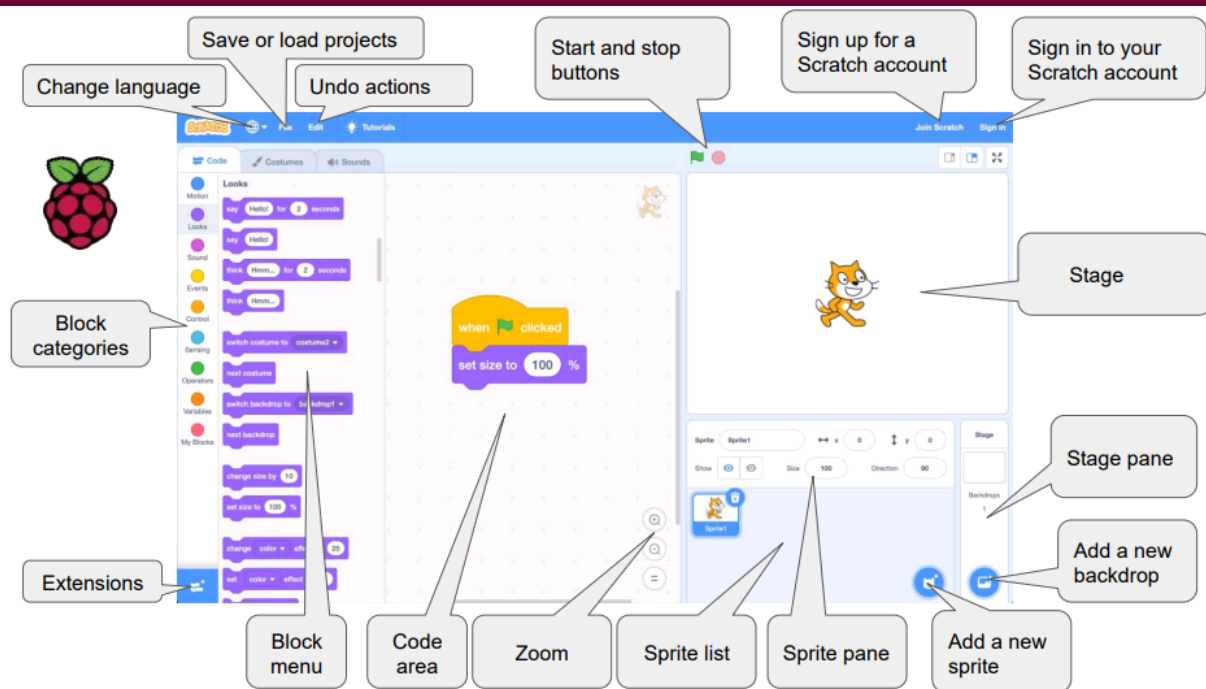
Year 7 Computing Autumn Term Knowledge Organiser Accessing the Network E-Safety

Key Vocabulary:			Accessing the network & E-Safety		E-Safety	
1	Password	A Password is a word, phrase, or string of characters intended to allow access to a users individual area. This must be kept secret and not shared.	8	How to log on to school network:	13	What are the dangers of being online?
2	Digital Footprint	A digital footprint is the trail of information you leave behind when you use the internet.	User name: [graduation year] 27Firstname.Surname Password: Your own secret word!		Some of the possible dangers of being online are: • Strangers - Exposure to inappropriate / illegal content • Fraud (identity / financial) • Viruses • Cyberbullying	
3	Digital Citizen	Digital citizenship is the set of behaviors and standards that a person practices while utilizing technology responsibly and professionally.	9	How to access school email:	14	Digital Footprint:
4	Personal information	Personal information is a person's name, address, phone number or email address.	To access your school email at home, go to the school website and scroll down to this button 		The things you share online will stay there forever like a path where you have been. With every new profile, tweet or photo you post online, you are adding to a digital footprint. People that know you, and people who don't, can see it and learn a lot from it.	
5	E-Safety	E-safety is the safe and responsible use of technology.	User: [[graduation year] 27Firstname.Surname@rshs.spt.ac.uk Password: Same secret word as logging on at school		15	What is Cyberbullying?
6	Cyber Bullying	Cyberbullying is the use of technology including mobile phones, instant messaging, e-mail, chat rooms or social networking sites such as Facebook and Twitter to harass, threaten or intimidate someone.	10	Who can see my school email & network area:	Cyber bullying is when someone uses the internet, mobile phone or tablet to intentionally hurt someone.	
7	Consequences	A consequence is something that happens as a result of your actions.	Your school email can be viewed by the School Network Manager and technician. Emails are monitored and automatically scanned for inappropriate content. There are consequences for anyone misusing the school email system. Email use is monitored to ensure appropriate use and to protect learners from unsuitable content.		16	Being a Digital Citizen:
			11	How to access network remotely via portal:	Being a responsible digital citizen means having the online social skills to take part in online community life in an ethical and respectful way. Responsible digital citizenship also means: • behaving lawfully – for example, it's a crime to hack, steal, illegally download or cause damage to other people's work, identity or property online • protecting your privacy and that of others • recognising your rights and responsibilities when using digital media • thinking about how your online activities affect yourself, other people you know, and the wider online community.	
			To access your school email at home, go to the school website and scroll down to this button. Use the same logging on details as you would in school. 			
			User: [graduation year] 27Firstname.Surname Password: Same secret word as logging on at school			

Year 7 Computing Autumn Term Knowledge Organiser Block Based Coding in Scratch

Key Vocabulary:

1	Scratch	Scratch is a block based programming language.
2	Blocks	Scratch bricks that we can use to code algorithms
3	Computational thinking	Solving problems with or without a computer
4	Sequence	Running instructions in order
5	Selection	Making choices
6	Iteration	Repeating steps/Doing the same thing more than once
7	Input	Data or information going into a computer
8	Process	Computer thinks about the information
9	Output	Computer produces a result
10	Program -	A program is a set of instructions that tell a computer what to do.
11	Algorithm	a sequence of instructions that can be processed by a computer



Blocks in Scratch:

Hat block		Starts each sequence of instructions. It has a rounded top and a bump at the bottom to snap into other blocks below itself.
Stack block		Performs the main instructions. It has a notch at the top and a bump at the bottom to snap into other blocks above and below itself.
Boolean block		These contain statements which can be either true or false. They fit inside other blocks, so that those blocks can behave differently depending on if the statement is true or false.
Reporter block		These have rounded edges on both sides and fit within other blocks to provide a value such as numbers or text. For example, you can use a block to get the position of a sprite so that you can use that value in other blocks.
C block		These are also known as wrap blocks. You can use these blocks to control if and when to run the blocks that you have placed inside them.
Cap block		You use the cap blocks at the end of a set of instructions. They have a notch at the top to snap into other blocks and a rounded bottom so that you can't snap other blocks onto it.

Year 7 Drama Autumn Term Knowledge Organiser

Key Vocabulary:		
1	Characterisation	Use of voice and movement to create a role.
2	Improvisation	Create spontaneously or without preparation
3	Facial Expressions	Matches the character's feelings/emotions
4	Body language	Over exaggerated to create identifiable characters to a young audience.
5	Gestures	Exaggerated hand and head movements
6	Monologue	A character speaks directly to the audience about their feelings.
7	Tableaux	A single frame forming a motionless image

Theatre in the Making	
8	What is characterisation? At the heart of all good drama is a story and characters. The art of story telling is one of the most necessary skills required to create meaningful and interesting dramatic work. During this topic you will study and practically explore how to create characters and storylines.
9	What is Stereotyping? Stereotyping is a popular and simplified characterisation of people often made according to how they visually appear or behave. In drama, stereotypes are how we assign a role to a character in a drama. The Hero, the Mentor, the Villain and so forth.
10	Which key skills are developed? Communication – Clear voice Freeze Frames – to exaggerate a point in the story Teamwork – Creating a group performance Characterisation – to be in the shoes of someone else Script writing – Creating your own structured storyline Reading aloud – Developing confidence Vocal and physical skills – to present a believable character
11	Facial Expressions and emotions What are the emotions? 
12	Props, Costume, sound and lighting effects. Spotlights  Character  Atmosphere 

Television Advertisements - Persuasion	
13	Persuasive Techniques Character list – a list of names. Scene title – usually the setting, a theme or even just a number. Stage Directions – descriptions of action placed in brackets during dialogue or in italics elsewhere. Character Names – written in the left hand margin, often in capitals or before a colon Dialogue – speech between characters Scene – a moment of continuous action Act – a grouping of scenes within a play
14	Research Research makes the activity more visible, and heightens its status in society. through establishing distance, from Research allows you to include facts that make your audience believe more in your idea because they can relate to it.
15	What are the 5 qualities of a good advertisement? What are five qualities of a good advertisement? These are also known as salient features or characteristics of a good advertisement copy. (1) It Should Be Simple: (2) It Should Be Capable Of Holding The Reader's Attention: (3) It Must Be Suggestive: (4) It Should Have Conviction Value: (5) It Should Educate The People: (6) It Should Have Memorising Value

Year 7 English Autumn Term Knowledge Organiser Unit One

Key Vocabulary:

1	Mythology	a set of stories, traditions, or beliefs associated with a particular group or the history of an event.
2	Symbols	an abstract idea conveyed through an object.
3	Conventions	are the defining characteristics, or must-haves, of a given genre.
4	Morality	the set of standards. It's what societies determine to be "right" and "acceptable."
5	Archetypal	very typical of a certain kind of person or thing.
6	Heroic	having the characteristics of a hero or heroine; admirably brave or determined.
7	Villainous	wicked or criminal behaviour.
8	Quest	A search for something
9	Labyrinth	irregular network of passages or paths; a maze
10	Protagonist	the leading character

Myths:

Persephone and the Underworld

The story of Persephone, the sweet daughter of goddess Demeter who was kidnapped by Hades and later became the Queen of the Underworld.

Pandora's Box

The myth of Pandora's box is considered one of the most descriptive myths of human behaviour in Greek mythology.

Pandora was given a box or a jar, called "pithos" in Greek. Gods told her that the box contained special gifts from them but she was not allowed to open the box ever. Then Hermes took her to Epimetheus, brother of Prometheus, to be his wife. Prometheus had advised Epimetheus not to accept anything from the Gods, but he saw Pandora and was astonished by her beauty, thus he accepted her right away.

Pandora was trying to tame her curiosity, but at the end she could not hold herself anymore; she opened the box and all the illnesses and hardships that gods had hidden in the box started coming out. Pandora was scared, because she saw all the evil spirits coming out and tried to close the box as fast as possible, closing Hope inside.

Theseus and the Minotaur

A dangerous Minotaur lives in a labyrinth - a maze - under the palace. Young men and women were fed to the minotaur as a 'tribute'. Theseus, the son of a king, goes into the labyrinth to kill the minotaur to stop any more tributes being sacrificed.



Year 7 The Girl of Ink and Stars Half Term 2 Knowledge Organiser

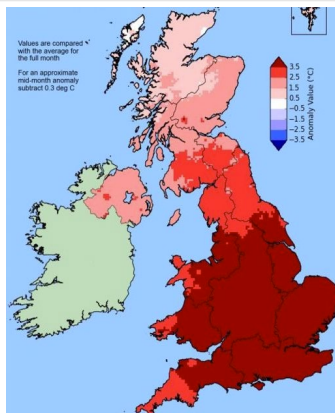
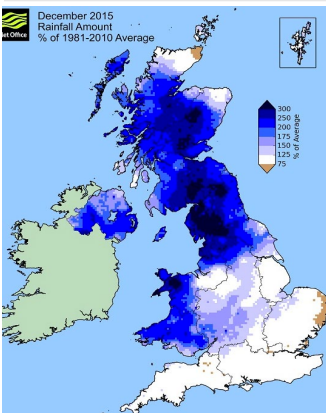
Key Vocabulary:			Themes:	Characters:
1	Tension	A build up to the most exciting or fearful part of the story.	9 Friendship Isabella and Lupe show both extremities of a friendship; the good and the bad.	13 Isabella The protagonist who is Da's daughter.
2	Metaphor	A comparison, saying something is something else.	10 Mystery and Tension The story begins with Cata's death, which creates immediate mystery. This is then followed by Lupe's disappearance as she attempts to find the murderer. She goes to the Forgotten Territories where the audience learn more about Arinta and Yote.	14 Da Isabella's father is a map maker. He is imprisoned in the Dedalo.
3	Mood	Emotions that are presented within a story. Setting can help to develop a mood.	11 Plot Summary: A young girl, Cata, mysteriously dies after Isabella's best friend, Lupe, asked her to get her some dragon fruit from the orchard.	15 Lupe Isabella's best friend who goes missing. Her father organises a hunt for her.
4	Protagonist	The main character in a story.	Isabella and Lupe have a big argument and Isabella accuses Lupe of causing Cata's death. The Governor makes preparations to leave the island with his family, but their ship is burnt down by some angry rebels, including Pablo.	16 Governor Isabella's father, he is the cruel dictator of Joya.
5	Hero	A person who is admired for their bravery.	Lupe runs away. There is an uprising and many people are imprisoned in the Dedalo, including Da. The Governor organises a search party into the Forgotten Territories. As a cartographer's daughter, she has knowledge of the stars, and is eager to navigate the island. But the world beyond the walls is a monster-filled wasteland – and beneath the dry rivers and smoking mountains, a legendary fire demon (Yote) is stirring from its sleep.	17 Pablo Family friend of Isabella and Da. He is the son of Masha and is very protective.
6	Uprising	Rebelling against someone or something.	Isabella and Lupe get lost in the Labyrinth beneath the Forgotten Territories and must avoid the terrifying Tibicenas. Whilst there, Isabella comes face to face with Yote, and using the legendary sword of Arinta, she saves the island by releasing the ocean's water and flooding the demon world. In the process, Lupe becomes stuck in the flood water and slips from Isabella's grasp.	18 Masha She is the mother of Pablo and is very protective of Isabella.
7	Magical realism	A type of writing that creates a real world, but adds magical elements to it.	The Dedalo floods with water and it seems that many are trapped. But Pablo manages to save them by breaking the trapdoor which had been nailed down by the Governor. Water continues to flow beneath the island, and Joya begins to float. The island is now safe.	
8	Dictator	A powerful person who forcefully controls a country.		
9	Theme	Main ideas that are explored throughout a narrative.		

YEAR 7 HALF TERM 1 – EXPLORING THE UK

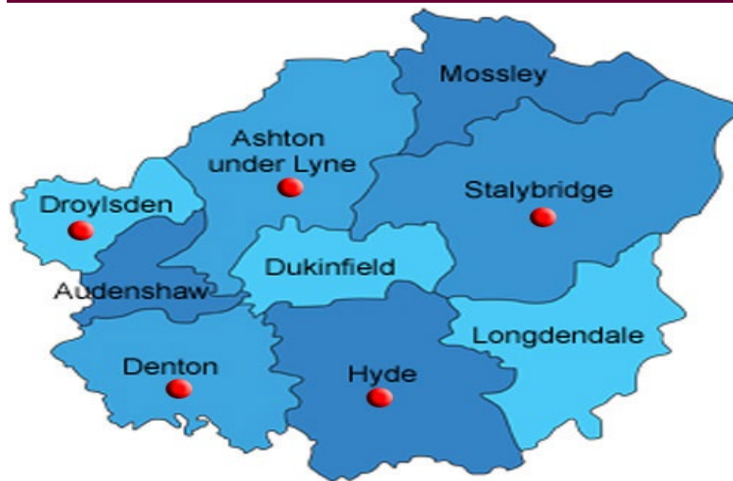
Key vocab	Definition
Borough	A district or area home to several towns
Migration	The movement of people from one area to another
Britain	The word used instead of the United Kingdom
Multiculturalism	A society that has numerous people from different ethnicities and cultural backgrounds
Human landscape	A landscape that has been altered by humans
Physical	A natural landscape that has not been altered by humans
Urban	A town or a city
Rural	The countryside
Weather	Day today conditions of the atmosphere that change in a short space of time
Climate	The weather periods in a certain area over a long period of time
Sparse	Very few items or people are found here
Dense	An area that is overcrowded with very little space

Climate of the UK

- Scotland, Northern England and Wales has the most rainfall.
- The South and East of England receives the least rainfall.
- The midlands, southern and eastern England has the highest temperatures in the UK
- Northern Scotland and Northern Ireland have the lowest temperatures

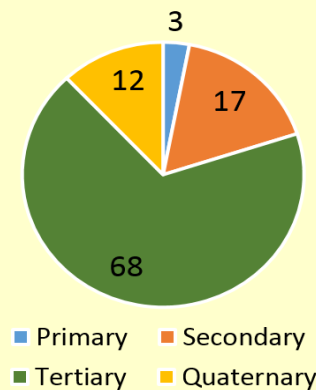


Towns found within Tameside



	Population	Capital city	Date founded	Famous people
England	55.6 million	London	927 AD	Elizabeth I Sir David Attenborough
Northern Ireland	1.9 million	Belfast	1921 AD	George Best C.S. Lewis
Scotland	5.4 million	Edinburgh	843 AD	JK Rowling Robert Burns
Wales	3.1 million	Cardiff	1057 AD	Tom Jones Roald Dahl

UK Employment Sectors



Job sector	Definition
Primary	Gathering raw materials - farmers
Secondary	Processing materials - manufacturers
Tertiary	Providing services for people - Bus drivers
Quaternary	Knowledge and skills based jobs - researcher



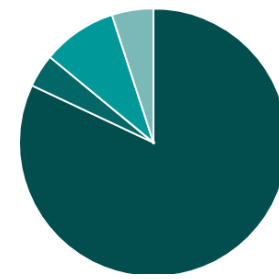
Multicultural Britain

- The UK is a predominantly white country
- Migration has happened to Britain for hundreds of years which has helped Britain become multicultural – 14.4% of Britain are Black and Minority Ethnic (BME)
- Britain is home to 18 different ethnic groups

How many 18-24-year-olds are BME?

% 10-17-year-olds in England and Wales at time of 2011 census

■ White
■ Black
■ Asian
■ Mixed/ Other



Year 7 History Autumn Term Knowledge Organiser The Romans

Key Vocabulary:			Key Knowledge		Key Knowledge	
1	Significance	an event that leads to change in the future	8	Who are they? The Romans built up their empire through conquest or annexation between the 3rd century BC and the 3rd century AD. At its height, the Roman Empire stretched from north-western Europe to the Near East and encompassed all the lands of the Mediterranean	13	Roman Manchester The first migrants to build a large settlement here were the Romans after they built a fort here in 79AD. We can still see the legacy of the Romans in Manchester today – large roads such as Chester Road and Deansgate were originally built by the Romans. Even the name “Manchester” comes from the Roman word “Mamucium”.
2	Inference	a suggestion based on evidence. Enquiry – When you want to find out about a particular subject.	9	How did the Romans pass time? Most Romans enjoyed gladiator contests. There were two kinds of gladiator – the retiarius, who used a trident and a net, and different kinds of swordsman, such as the murmillio, the thraex and the secutor, armed in slightly different ways. Sometimes they fought each other, sometimes wild animals. Gladiators – including women gladiators – became as famous as modern footballers.	14	What happened in Pompeii? It is certain that when the eruption of Vesuvius started on the morning of 24 August, AD 79, it caught the local population utterly unprepared. Although at the same time, as we now know in retrospect, all the tell-tale signs were there to warn them The eruption lasted for more than 24 hours from its start on the morning of 24 August.
3	Continuity	when there is no change and everything stays the same	10	What did the Romans eat? Rich Romans held lavish meals with several courses. There was entertainment and lots of wine. When they had eaten as much as they could, the guests would make themselves sick so they could eat some more.	15	How do we know what happened in Pompeii? It is mainly thanks to the vivid eye-witness account of the younger Pliny (a Roman administrator and poet, whose many vivid letters have been preserved), that we have some understanding of what happened.
4	Mancunium	the order that events happen in.	11	What were Roman homes and towns like? The Romans built new towns . These were often protected by walls and there was everything a citizen of Roman Britain would need inside: ▪ houses ▪ shops ▪ temples ▪ meeting spaces ▪ workshops ▪ Bathhouses People mainly lived in small villages of wooden houses with thatched roofs . The biggest city in Roman Britain was Londinium (London)	16	What is history? The past: Who they were, what they thought and how they lived. Evidence: Each time period generates evidence. Interpretation: We use the evidence to try and understand what the past was like
5	Source	Something that tells us about history	12	What did Romans Bring to England? The Romans were very good at building roads and bridges . To make sure soldiers and supplies could move from town to town quickly, the Romans made their roads as straight as possible. Many Roman roads survive today, 2,000 years later Imports into Britain included Samian ware pottery and Rhineland glass, olive oil, wine and salted fish.	17	How do we find out about the past? • Artefacts • Written evidence • Photographs • Statistics • Oral Evidence • Human remains
6	Interpretation	Reflecting on the past				
7	Historian	An expert in history				

Mi tiempo libre-Year 7-Knowledge Organiser

Key Vocabulary					6. Parallel Text:	
1						
Me gusta – I like Me gusta mucho – I really like Me encanta – I love No me gusta – I don't like No me gusta nada – I really don't like Odio – I hate		chatear en línea - to chat online escribir correos - to write emails escuchar música - to listen to music jugar a los videojuegos - to play videogames leer - to read mandar sms - to send text messages navegar por internet - to surf the net salir con mis amigos - to go out with my friends ver la televisión - to watch t.v	porque es – because it is... porque no es – because it isn't	interesante – interesting guay – cool divertido/a – funny estúpido – stupid aburrido/a – boring entretendido – entertaining activo – active sano - healthy	En mi tiempo libre	In my free time
					<u>me encanta leer</u>	I love reading
					porque es <u>interesante</u>	because it's <u>interesting</u>
					pero nunca <u>hago equitación</u>	but I never <u>go horseriding</u>
					porque ¡cuesta un ojo de la cara!	because it costs an arm and a leg!
					Cuando <u>hace sol</u> juego al <u>fútbol</u> .	When <u>it's sunny</u> I play <u>football</u> .
					Siempre me ha gustado <u>el fútbol</u>	I've always liked <u>football</u>
					porque es <u>sano</u> y	because it's <u>healthy</u> and
					cuando <u>llueve veo la televisión</u> .	when <u>it rains I watch TV</u> .
					¿Qué haces cuando <u>llueve/hace calor/nieva</u> etc? – What do you do when it rains/it's sunny/it snows?	What do you do when <u>it rains?</u>
					Los <u>sábados salgo con mis amigos</u>	On <u>Saturdays I go out with my friends</u>
					pero mañana voy a <u>jugar a los videojuegos</u> .	but tomorrow I'm going <u>to play videogames</u> .
Seasons			Questions			
3	En... - in... primavera – spring verano – summer otoño – autumn invierno - winter			5	¿Qué haces en tu tiempo libre? – What do you do in your free time? ¿Qué te gusta hacer? – What do you like to do? ¿Te gusta...? – Do you like...? ¿Qué haces cuando llueve/hace calor/nieva etc? – What do you do when it rains/it's sunny/it snows? ¿Qué haces en primavera/verano/otoño/invierno? – What do you do in spring/summer/autumn/winter?	
Days of the Week						
4	lunes – Monday martes - Tuesday miércoles - Wednesday jueves - Thursday viernes - Friday sábado - Saturday domingo - Sunday Los lunes - On Mondays, every Monday Los martes – On Tuesdays, every Tuesday Los miércoles – On Wednesdays, every Wednesday etc...					

Mi vida-Year 7-Knowledge Organiser

Key Vocabulary						7.Parallel Text:	
1							
Tengo – I have Tienes – you have Tiene – he/she/it has No tengo – I don't have		años – _____ years old	un caballo – a horse una cobaya – a guinea pig un conejo – a rabbit un gato – a cat una tortuga – a tortoise un perro – a dog un pájaro – a bird un pez – a fish un hámster – a hamster un ratón – a mouse una serpiente – a snake mascotas – pets		una hermana – a sister un hermano – a brother una hermanastra – a stepsister / half-sister un hermanastro – a stepbrother / half-brother hermanos - siblings	Buenos días. Me llamo <u>José</u>	
						Hello. My name is <u>José</u>	
						y vivo en Inglaterra	
						and I live in England	
						¿Cómo te llamas? y ¿Qué tal?	
						What is your name? and How are you?	
						Soy muy <u>simpático</u>	
						I am very <u>nice</u>	
						y bastante <u>listo</u>	
						and quite <u>clever</u>	
						pero no soy <u>perezoso</u> .	
						but I'm not <u>lazy</u> .	
						Mi pasión es el fútbol	
						My passion is <u>football</u>	
						porque es <u>divertido</u>	
						because it's <u>fun</u>	
						y mi héroe es <u>Mo Salah</u>	
						and my hero is <u>Mo Salah</u>	
						porque es <u>genial</u> .	
						because he's <u>great</u> .	
						Tengo <u>una hermana</u>	
						I have a <u>sister</u>	
						pero es <u>tonta</u> .	
						but she is <u>silly</u> .	
						¡Ojalá tuviera <u>un hermano</u> !	
						If only I had a <u>brother</u> !	
						Tengo <u>once</u> años.	
						I am <u>11</u> years old.	
						También, mi cumpleaños es el <u>cuatro de junio</u> .	
						Also, my birthday is the <u>4th</u> of <u>June</u> .	

My passion				Questions	
4	Mi pasión es... - My passion is Mi héroe es... - My hero is... el deporte – sport la música - music el fútbol – football el tenis – tennis la tele – TV los videojuegos – videogames porque es... - because it is...			6	¿Qué tal? – How are you ¿Cómo te llamas? – What's your name? ¿Dónde vives? – Where do you live? ¿Y tú? – And you? ¿Cuántos años tienes? – How old are you? ¿Cuándo es tu cumpleaños? – When's your birthday? ¿Qué tipo de persona eres? – What kind of person are you? ¿Cómo eres? – What are you like? ¿Tienes hermanos? – Do you have brothers and sisters? ¿Tienes mascotas? - Do you have any pets? ¿Cómo es? – What's it like? ¿Cómo son? - What are they like?
Colours					
5	blanco/a – white amarillo/a – yellow negro/a – black rojo/a – red verde – green gris – grey marrón – brown azul – blue rosa – pink				

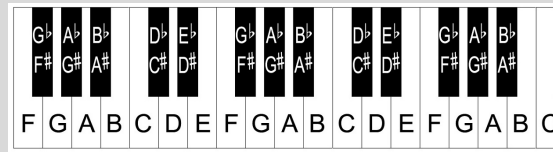
Year 7 Music Autumn Term Knowledge Organiser

Key Vocabulary:

1	Melody	The main tune or musical theme
2	Articulation	How the notes are played – smooth (legato) or short (staccato)
3	Dynamics	The volume - How loud (forte) and quiet (piano) the music is
4	Instruments	The apparatus used to make and play the music Strings – Violin, viola, cello, double bass and harp Woodwind – Flute, Oboe, Clarinet and Bassoon Brass – Trumpet, French horn, Trombone and Tuba Percussion – Timpani, maracas, triangle, etc. Guitars Synthesizers
5	Rhythm	The patterns of notes used and their durations
6	Tempo	How fast (Allegro) or slow (lento) the speed of the music is
7	Structure	How the sections of music are organised Introduction, verse, chorus etc.

Music Theory

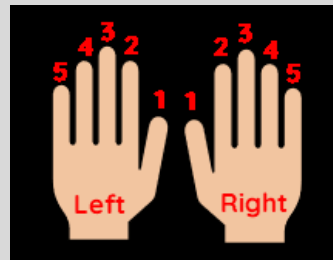
8 The keyboard



9 Hand positioning on the keyboard

Tip for Keyboard Players

When learning the keyboard, use all your fingers and resist just using your 2nd and 3rd fingers. Play the melody with your right hand and the harmony/chords with the left



10 Music of the Stave

F A C E **Every Good Boy Does Fine**

All Cows Eat Grass **Good Burritos Dont Fall Apart**

FastPianoLessons.com

11 Treble clef

Treble Clef
Played by the right hand
with higher pitches on the right hand
side of the piano



Music Theory

12 Notes and how many beats they are

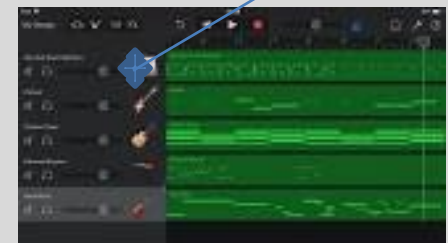
Note Durations and Rhythms		
Note Symbol	Technical name	Note Duration
	Semi-breve	4 Beats
	Minim	2 Beats
	Crotchet	1 Beat
	Quaver	½ Beat
	Semi-Quaver	¼ Beat

13 Using Garageband

Click on the Garageband icon on the bottom of the screen – Then click on the green piano and choose



Then select the instrument from the left hand side and the piano will change to the sound of the instrument. Then to record press the record button – it will tick 4 times then you can record your piece. As you record green layers of sounds appear. To add a new layer press on the + button. For each new layer repeat the process of selecting the instruments



Year 7 Religion and Worldviews – What is so radical about Jesus?

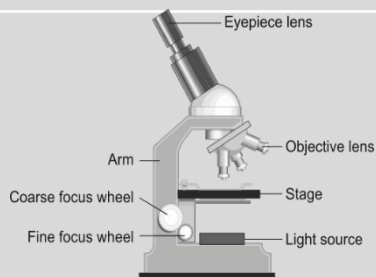
Key Vocabulary:			1	The life of Jesus	3	Jesus’ beliefs on injustice
1	Rebel	A person who does not obey authority or follow usual standards.	He was born sometime just before 4BCE. Grew up in Nazareth in Galilee and was trained by his father to be a Carpenter. He was Jewish. He was baptised by John and then started his public preaching with a radical message. He was a healer, teacher and Prophet. He performed many miracles. He was killed on the cross by the Romans who were occupying the ‘Holy Land’. Jews at the time of Jesus were living in the ‘holy land’; modern day Israel/ Palestine. Jews believed this land was given by God – that is was special and sacred. Many Jews did not like the idea that they were ruled by ‘ungodly’ people who used the sacred land for making money.			Jesus taught not to judge others and to have a look at yourself before criticising others. The story of the women caught in adultery shows this teaching. Luke 6: 42 “How can you say to your brother, 'Brother, let me take the speck out of your eye,' when you yourself fail to see the plank in your own eye? You hypocrite,” Luke 4:18-19 “18.....”Because He has anointed me to preach the gospel to the poor; He has sent me to heal the broken-hearted,” This was radical because he was saying the poor are important and need looking after.
2	Pharisees	A Jewish sect, distinguished by strict observance of the traditional and written law.				4 Representations of Jesus He helped people who were normally ignored this was radical: “He ate with tax collectors and sinners saying “Healthy people don’t need a doctor—sick people do. I have come to call not those who think they are righteous, but those who know they are sinners.” Mark 2: 15-17
3	Salvation	Being saved from sin.				
4	Pacifism	The belief of non-violence A pacifist reject all violence and they do not think that conflict should be dealt with by resorting to war.				
5	Messiah	The expected king and deliverer of the Jews.	2 Jesus’ beliefs on pacifism and non-violence The early Christians interpreted Jesus' commandments to mean that they could not fight in wars or be violent. In the Gospel of Matthew, Jesus said: Blessed are the peacemakers: for they shall be called the children of God. Matthew 5:9 They also look to the example of Jesus' life for further reasons to be pacifists. When the guards came to arrest Jesus he did not fight back and he commanded his disciples to allow him to be taken. Do not murder. Exodus 20:13 Matthew 5:44 “But I say to you, love your enemies, bless those who curse you,” This was radical because normally you would get revenge. Matthew 5:9: “Blessed are the peacemakers, For they shall be called sons of God”. This was radical because Jesus was telling his followers not to fight back.			
6	Resurrection	When someone who is declared dead returns to life.				5. Image of Jesus The Good Shepard Jesus guides people in their lives, that he is a good example to follow and that he looks after his followers.
7	Ordination	In Christian churches, a rite for the dedication and commissioning of ministers.				The Historical Jesus Jesus was a middle eastern man and so would have dark hair and olive coloured skin.
8	Inequality	The unfair situation in society when some people have more opportunities, money, etc. than other people:				The Black Jesus Tells us that it does not matter what Jesus looked like, Jesus’ words and deeds are what is important and were for every-one of every race.
9	Injustice	The absence of justice : violation of right or of the rights of another.				The Crucified Jesus Jesus was crucified (killed) for his beliefs and for wanting to see change in the world.

Year 7 GCSE Science Autumn Term Knowledge Organiser - Cells

Key Vocabulary:

1	Hazard	Something that can cause harm
2	Risk	The harm that might happen to you or someone else
3	Precaution	What you do to prevent a hazard from causing harm
4	Nucleus	Controls the cells activities because it contains DNA
5	Cell Membrane	Controls what enters and leaves the cell
6	Cytoplasm	A jelly-like substance where reactions happen
	Mitochondria	Where aerobic respiration takes place
7	Cell Wall	Surrounds plant cells and provides strength and support
8	Chloroplast	Where photosynthesis take place to make food (glucose) for the plant and contain chlorophyll to absorb sunlight
9	Vacuole	Contains a liquid that stores substances for the cell and keeps it rigid
10	Specialised Cells	Different structures that let them carry out their function

11 Microscope



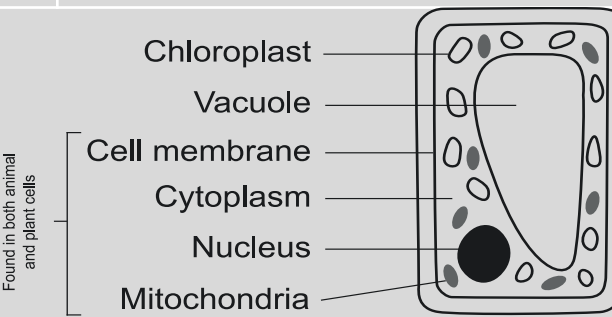
Asking Questions and Cells

12	Science is about...
a)	observing the world (watching and listening)
b)	asking questions about nature and how the world works
c)	coming up with ideas and explanations that explain what we see
d)	testing our ideas to see if they are true
e)	using our knowledge and skills to solve problems and improve lives
13	A scientific question is one that...
a)	Can be answered
b)	Can be tested or measured
14	Living Organisms
	- Living things are called organisms - All organisms carry out the 7 life processes: movement, respiration, sensitivity, growth, reproduction, excretion and nutrition - All living things are made of cells - Unicellular organisms are made of only one cell e.g. bacteria - Multicellular organisms are made of many cells e.g. humans

15 Animal Cells



16 Plant Cells



Specialised Cells and Microscopes

17 Specialised Cells

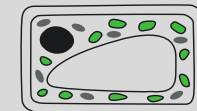
Sperm cells: Their function is to swim to the egg cell for fertilisation. The structure that helps them to do this is a tail for swimming



Neurons (nerve cells): Their function is to send messages to control the body. The structure that helps them to do this is a long axon and connections at the end



Palisade cells: Their function is to take in lots of sunlight (for photosynthesis to make food). Their structure helps them to do this as they have lots of chloroplasts



Root hair cells: Their function is to take in lots of water. To help them to do this, their structure consists of a large surface area to take water in



18 Microscopes

- A microscope is used to make something small appear much larger.
- To calculate the magnification of an image seen under the microscope, this equation can be used:
- Magnification = eyepiece magnification x objective lens magnification

19 Organisation

- A group of the same cells working together is called a tissue
- A group of tissues working together for the same function is called an organ
- A group of organs working together for the same function is called an organ system
- There are many organ systems in the human body including: respiratory, excretory, nervous, muscular, circulatory, skeletal and digestive

Year 7 Science Autumn Term Knowledge Organiser Particles

Key Vocabulary:

1	States of matter	They are solids, liquids and gases.
2	Melting	A substance changes from a solid to a liquid.
3	Freezing	A substance freezes when it changes from a liquid to a solid.
4	Melting Point	The temperature at where the melting and freezing of a substance happens.
5	Boiling	A substance changes from a liquid to a gas.
6	Condensation	When a substance changes from a gas to a liquid.
7	Boiling Point	The temperature at which boiling and condensing happens.
8	Diffusion	Diffusion is the movement of particles from a high concentration to a low concentration.
9	Independent Variable (IV)	The variable you want to change/investigate.
10	Dependent Variable (DV)	The variable you measure because it depends on the IV.
11	Control Variable (CV)	The variables you keep the same because they could affect the dependent variable.
12	Density	Defined as the mass per unit volume of a substance.
13	Density	Density = mass ÷ volume
14	Volume	Volume = mass x width x height

Properties of State of Matter

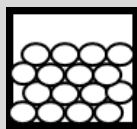
The three states of matter have different properties.

Property	Solid	Liquid	Gas
Does the object flow?	No	Yes	Yes
Can the object be compressed?	No	No	Yes
Does the object fill to fit the container?	No	No	Yes
Does the object have a fixed shape?	Yes	No	No
Does the object have a fixed volume?	Yes	Yes	No

16

The Particle Model

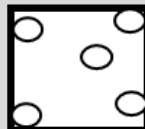
- All matter is made from tiny particles.
- The arrangement of particles affects the properties of the substance.
- The three states of matter can be represented by a simple model.



Solid



Liquid



Gas

- Particles in a solid are arranged in a regular pattern, touch each other and vibrate on the spot
- Particles in a liquid are arranged randomly, are touching and move freely
- Particles in a gas are arranged randomly, do not touch and move freely
- Some substances expand when heated. This is because when heated, particles have more energy. They vibrate more. The space between particles is bigger.

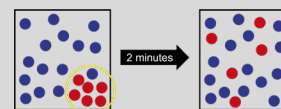
17

Changing State

- When a solid melts, the particles gain **energy** from the surroundings, so they begin to **vibrate faster**. The particles move away from their places in the arrangement and start to move around more.
- When a liquid starts to freeze, its particles move more slowly as they **lose** energy to the surroundings. The particles form a **regular arrangement** and vibrate on the spot.
- During boiling, a liquid is heated. The particles gain energy. They move further apart. This forms a gas.
- During condensation, a gas cools. The particles lose energy. They move closer together until they are touching. This forms a liquid.
- When boiling occurs, Bubbles of the substance rise up to the surface and escape into the air.
- The particles in a solid can vibrate in a fixed position and cannot move from place to place because there are strong forces, which attract the particles towards each other
- The particles in a liquid are able to move around each other because the bonds are strong enough to keep the particles close together, but weak enough to let them move around each other

18

Diffusion

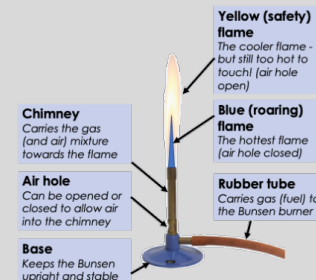


● Air particles
● Air freshener particles

- Diffusion happens in liquids and gases because particles are free to move.
- Diffusion cannot happen in solids because particles in a solid are not free to move.
- Diffusion happens faster when the particles in a liquid or gas are moving faster after heating.

19

Heating Substances



20

Gas Pressure

- Gas pressure happens because of particles colliding with the walls of a container
- Increasing the size of the container decreases the gas pressure as there will be less collisions.
- Decreasing the size of the container increases the gas pressure as there will be more collisions.
- The deeper underwater you travel, the greater the pressure.
- The higher up you go into the atmosphere, the less the pressure.
- Greater pressure compresses gas particles so they are closer together and have a smaller volume.

21

Density and Volume

- If an object has an irregular shape, the volume can be measured using a displacement can, or Eureka can.
- The displaced water in the cylinder occupies the same amount of space as the irregular object. The volume of water in the graduated cylinder is equal to the volume of the object.

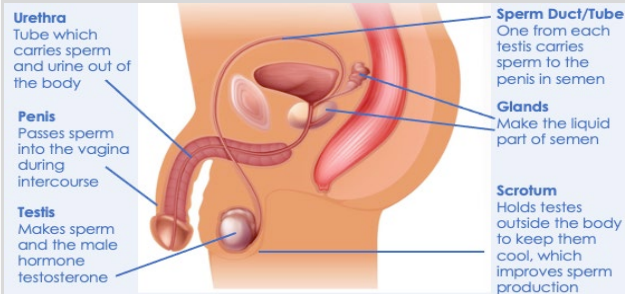
Year 7 Science Autumn Term Knowledge Organiser - Reproduction

Key Vocabulary:

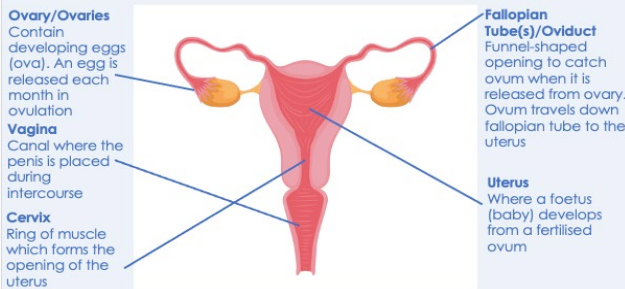
1	Asexual Reproduction	When an organism makes an exact copy of itself to make a new individual.
2	Sexual Reproduction	When sex cells from two individuals fuse to form a new individual
3	Gametes	Sex cells
4	Hormone	A chemical messenger transported in the blood
5	Ovulation	When an egg is released by the ovary
6	Fertilisation	When the gametes meet and the nuclei fuse to make a new cell
7	Implantation	When the embryo embeds into the uterus wall.
8	Amniotic sac	Contains fluid which protects the foetus from knocks and bumps
9	Placenta	Where the exchange of substances between the mother and embryo occurs
10	Umbilical cord	Connects the foetus to the placenta
11	Pollination	The transfer of pollen from the anther of one plant to the stigma of another plant
12	Germination	The process of a plant growing from a seed
13	Seed dispersal	Where seeds are transported away from the parent plant by various means; Animals externally (stuck to fur), animals internally (eaten), wind and explosion and water.

Reproductive Systems

14 Male Reproductive System



15 Female Reproductive System



16 Puberty

- The body goes through changes during puberty or adolescence (e.g. body and pubic hair grow).
- This prepares the body for sexual maturity and the production of gametes.
- These changes are controlled by sex hormones.
- A hormone is a chemical messenger transported in the blood

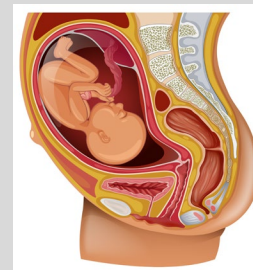
17 Menstrual Cycle

The female reproductive cycle is called the menstrual cycle. The menstrual cycle prepares a woman's body for pregnancy. The menstrual cycle is controlled by sex hormones. On average, one menstrual cycle lasts 28 days. Ovulation is when the egg is released. Ovulation occurs on day 14. The uterus lining builds up to allow the embryo to develop. If fertilisation does not take place then the uterus lining is shed between days 1-5. This is called menstruation

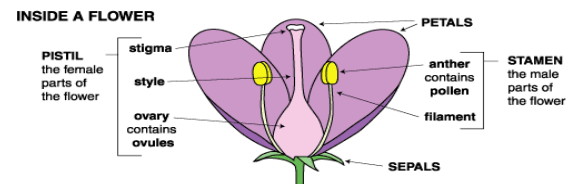
Fertilisation and Sexual Reproduction in Plants

18 Fertilisation and Gestation

- Fertilisation is when the gametes meet and the nuclei fuse to make a new cell.
- After fertilisation, the cell multiplies to make an embryo.
- Implantation is when the embryo embeds into the uterus wall.
- After implantation, the embryo grows and develops into a foetus until it is ready to be born. This is called gestation.
- The amniotic sac contains fluid which protects the foetus from knocks and bumps.
- The placenta is where the exchange of substances between the mother and embryo occurs.
- The umbilical cord connects the foetus to the placenta.



19 Sexual Reproduction in Plants



- The male gamete is the pollen grain.
- Pollen is produced by the anther.
- The female gamete is the egg found in the ovule. The ovule is in the ovary.
- Pollination is the transfer of pollen from the anther of one plant to the stigma of another plant.
- Pollination can be carried out by insects, animals or the wind.
- Seed dispersal is needed so that the new plant grows far away from the parent plant so they don't compete for water and light.

Year 7 Design and Technology Autumn Term Knowledge Organiser

Key Vocabulary:

1	Rotary	Rotation around a fixed axis is a special case of rotational motion. Familiar examples of rotary include a washing machine drum and wheels on the bus go round and round.
2	Linear	Linear motion is one-dimensional motion along a straight line, and can therefore be described mathematically using only one spatial dimension. Familiar examples of linear include a train moves on a straight line track and drawing a straight using a ruler.
3	Oscillating	Oscillation is the repetitive or periodic variation of some measure about a central value (often a point of equilibrium). Familiar examples of oscillation include a swinging pendulum and alternating current.
4	Reciprocating	Reciprocating is a repetitive up-and-down or back-and-forth linear motion. It is found in a wide range of mechanisms, including reciprocating engines and pumps. Familiar examples of reciprocating include jumping up and down on a trampoline and using a coping saw to cut a piece of wood.
5	Fulcrum	A fulcrum is the support about which a lever pivots.
6	Load	Something lifted up and carried or a mass or weight supported by something.
7	Effort	The power directly applied to a machine to lift a load is called Effort.

Mechanisms

8 Mechanisms - What are they?

In engineering, a mechanism is a device that transforms input forces and movement into a desired set of output forces and movement. Mechanisms generally consist of moving components.

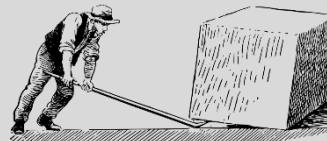
Mechanical motion is defined as one of the four types of motion that you will find in a mechanical system. The different types of motion are: rotary, linear, oscillating and reciprocating.



9 Lever - What is it?

A lever is a simple machine consisting of a beam or rigid rod pivoted at a fixed hinge, or fulcrum. A lever is a rigid body capable of rotating on a point on itself.

On the basis of the locations of fulcrum, load and effort, the lever is divided into three types.



10 Gear Train - What is it?

A gear train is a mechanical system formed by mounting gears on a frame so the teeth of the gears engage. Gear teeth are designed to ensure the pitch circles of engaging gears roll on each other without slipping, providing a smooth transmission of rotation from one gear to the next.

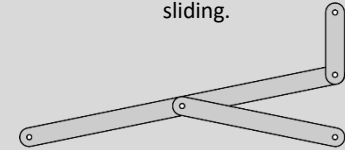
Gear ratio of the pitch circles of mating gears defines the speed ratio and the mechanical advantage of the gear set.



2D Design

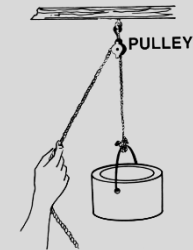
13 Linkage - What is it?

A mechanical linkage mechanism is an assembly of bodies connected to manage forces and movement. The movement of a body, or link, is studied using geometry so the link is considered to be rigid. The connections between links are modelled as providing ideal movement, pure rotation or sliding.



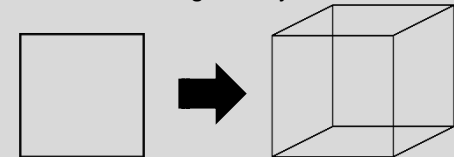
14 Pulley - What is it?

A pulley is a wheel on an axle or shaft that is designed to support movement and change of direction of a taut cable or belt, or transfer of power between the shaft and cable.



15 Oblique Projection

It is a simple type of technical drawing of graphical projection used for producing three-dimensional (3D) images of objects.



16 Evaluation

Designers evaluate their finished products to test whether they work well and if design can be corrected or improved. It is important to evaluate your work constantly during the project to see if it is on track and so that improvements can be built-in throughout the design process, not just at the end.

Year 7 Food Technology Autumn Term Knowledge Organiser

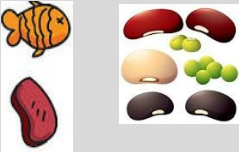
Key Vocabulary: Nutrition

1	The Eatwell Guide	A healthy eating model showing the types and proportions of foods needed in the diet.
2	Hydration	The process of replacing water in the body.
3	Dietary Fibre	A type of carbohydrate found in plant foods.
4	Combination Food	Food made with ingredients from more than one food group.
5	Macronutrients	Nutrients needed to provide energy and as the building blocks for growth and maintenance of the body.
6	Micronutrients	Nutrients which are needed in the diet in very small amounts.
7	Energy	The power the body requires to stay alive and function.

Key Vocabulary: Cooking

1	cut, slice and chop	
2	grate	
3	peel	
4	mix and combine	
5	use the grill	
6	use the hob	
7	use the oven	

Key Vocabulary: The Eatwell Guide

1	The Eatwell Guide	
2	Fruit and vegetables.	
3	Potatoes, bread, rice, pasta or other starchy carbohydrates.	
4	Dairy and alternatives.	
5	Beans, pulses, fish, eggs, meat and other protein.	
6	Oil and spreads.	
7	Foods high fat, salt and sugar.	

Year 7 Mathematics Knowledge Organiser – Algebraic Notation

Key Vocabulary:

1	Operation	A mathematical process. The most common operations are add, subtract, multiply and divide (+, -, ×, ÷) but there are many more, such as square, square root, etc.
2	Inverse Operation	The operation that reverses the effect of another operation. Addition and subtraction are inverse operations. Multiplication and division are inverse operations.
3	Commutative	A calculation is commutative when we get the same answer no matter which order we put the numbers in. Addition and multiplication are commutative.
4	Expression	Numbers, symbols and operators (such as + and ×) grouped together that show the value of something.
5	Variable	A symbol for a value we do not know yet, usually a letter like x or y (but can be others). A variable could be a single value or it could have many values.
6	Substitute	To replace letters with numerical values.
7	Evaluate	To calculate the numerical value of something.

8 Single Function Machines

We can use function machines to find the input and/or the output, using **inverse operations**.



9 Using Letters to Represent Numbers

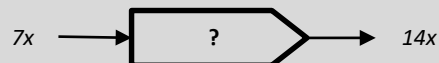
- Addition and multiplication can be done in any order; these are **commutative** calculations, for example:
 $5 + 5 + 5$
 3×5
 5×3
- We can represent 4 lots of y in the following ways:
 $y + y + y + y$
 $y \times 4$
 $4 \times y$
 $4y$
- We can represent 20 shared into h number of groups:
 $20 \div h$

10 Single Function Machines (Algebra)



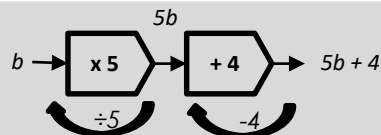
11 Finding Functions from Expressions

We can use function machines to find the relationship between the input and output.
Sometimes there could be a number of possible functions...



...possible functions could be $+7x$ or $\times 2$!

12 Two Step Function Machines



13 Substituting into Expressions

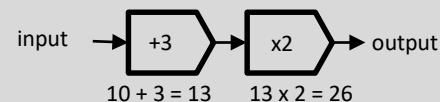
If $y = 7...$

$4y$ means 4 lots of y, so the expression is asking for 4 lots of 7
 4×7 OR $7 + 7 + 7 + 7$ OR $7 \times 4 = 28$

$y - 2$ means y subtract 2, so $7 - 2 = 5$

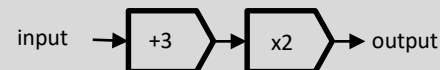
If $x = 10...$

$2(x+3)$ means take the input, add 3, then multiply by 2



14 Representing Functions Graphically

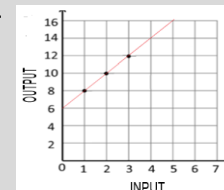
Using the function $2(x + 3)$



To represent graphically, the input becomes x coordinates and the output becomes y coordinates.
 $y = 2(x + 3)$

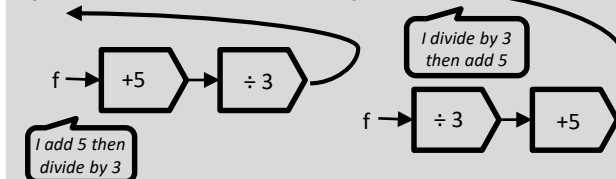
INPUT (x)	1	2	3
OUTPUT (y)	8	10	12

This becomes a coordinate pair.



15 Finding Functions from Expressions

$\frac{f+5}{3}$ is different to the expression $\frac{f}{3} + 5$



Sometimes it helps to explain the expression in words first!

16 Forming a Sequence

The term that we want to find in the sequence is the input value.

The answer we get when we substitute the input value gives us the output values, which become our sequence.

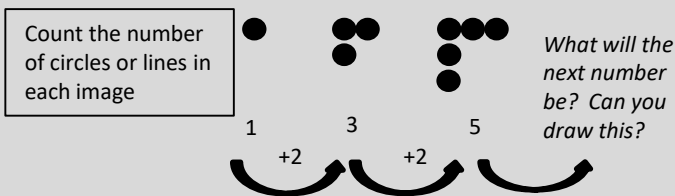
INPUT	1	2	3	
OUTPUT	8	10	12	← This is the sequence.

Year 7 - Sequences - Knowledge Organiser- Autumn Term

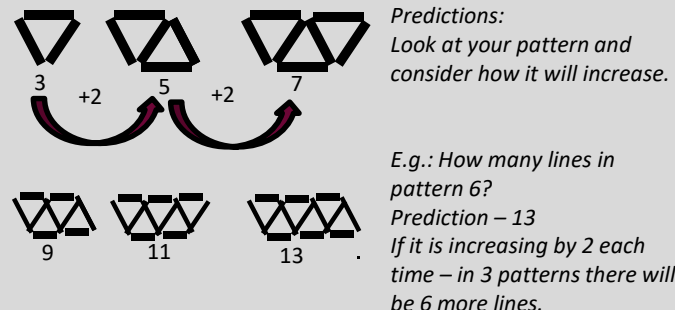
Key Vocabulary:

1	Sequence	A number or picture pattern with a specific rule.
2	Pattern	A systematic arrangement of numbers, shapes or other elements according to a rule
3	Term:	Each value in a sequence is called a term.
4	Linear / arithmetic sequence	Increase by addition or subtractions and the same amount each time. Produces a straight line when represented as a graph
5	Non-linear sequence	Do not increase by a constant amount – quadratic, geometric and Fibonacci. - Do not plot as straight lines on a graph. - The differences between terms can be found by addition, subtraction, multiplication or division.
6	Numerical	Written or shown as numbers.
7	Arithmetic sequence	A sequence that increases or decreases by the same number between each term.
8	Difference	The common difference of an arithmetic sequence is the difference between two consecutive terms.
9	Graphical	Represented as a graph.

8 Describe and continue a sequence given diagrammatically.

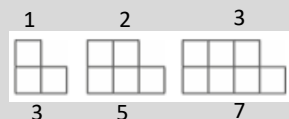


9 Predict and check the next term(s) of a sequence



10 Represent sequences in tabular and graphical forms

Position the place in the sequence



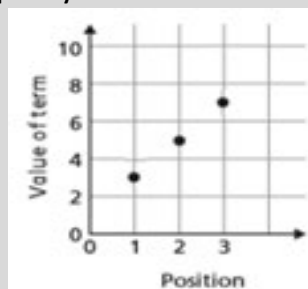
"The term in position 3 has 7 squares."

In a table:

Position	1	2	3
Term	3	5	7



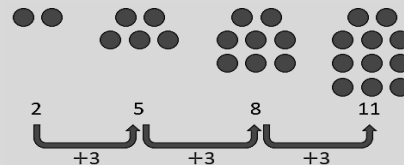
Graphically:



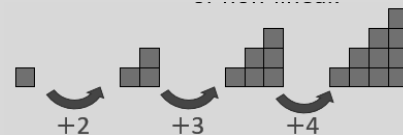
Because the terms increase by the same addition each time this is linear – as seen in the graph

11 Recognise the difference between linear and non-linear sequences..

A linear sequence has a constant difference between each term.
Example:



A non linear sequence has not a constant difference between each term.
Example:



12 Continue non-linear sequences

1, 2, 4, 8, 16...

How do I know this is a non-linear sequence?

It increases by multiplying the previous term by 2 – this is a geometric sequence because the constant is multiply by 2.

You need at least 4 terms to find the constant

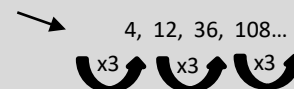
How do I continue the sequence?

You continue to repeat the same difference through the next positions in the sequence.

13 Explain the term-to-term rule

Try to explain this in full sentences, not just with mathematical notation.
Use key maths language – doubles, halves, multiply by two, add four to the previous term etc.

Must say which number the sequence begins with



The next term is found by tripling the previous term. The sequence begins at 4