Year 8 Art: Environment

THE LEARNING JOURNEY

- Produce Research on the Theme/ Title
- Produce detailed drawings from images/ photographs
- Focus on The Formal Elements
 - LINE
 - TONE
 - TEXTURE
 - COLOUR
 - SHAPE
 - FORM
 - PATTERN
- Explore different media & techniques
- Look at the featured artist(s)
- Produce evidence of your understanding of the artist's work
- Develop ideas taking influence from the artist
- Evaluate, What can you improve?
- Produce a response to the theme/ artist
- Display



Examples of students work



During this project, the environment will be your inspiration. There will be a focus on recording in a range of media from primary and secondary sources, with a three-dimensional final outcome.



FEATURED ARTISTS- pupils will look at one or more of these.











Yellena James

Swapna Namboodiri Y

Yayoi Kusama

Elin Thomas

Carston Holler

KEY VOCABULARY

line	Path of a moving point
tone	Areas of light and darkness in a drawing or painting
shape	The outline. A 2-dimensional space
form	A 3-dimensional shape or sculpture
colour	One of the formal elements
pattern	A repeated design or motif
texture	The surface quality of something, it can be real or implied
construct	Create or make

MEDIA

Pencil



Painting



Oil or chalk pastel



3D mixed media



Year 8 Art: Creatures

THE LEARNING JOURNEY

- Produce Research on the Theme/ Title
- Produce detailed drawings from images/ photographs
- Focus on The Formal Elements
 - LINE
 - TONE
 - TEXTURE
 - COLOUR
 - SHAPE
 - FORM
 - PATTERN
- Explore different media & techniques
- Look at the featured artist(s)
- Produce evidence of your understanding of the artist's work
- Develop ideas taking influence from the artist
- Evaluate, What can you improve?
- Produce a response to the theme/ artist
- Display

Example of students work





During this project, your inspiration will be creatures. There will be a focus on the exploration of different media which will lead to a collaborative final piece.



FEATURED ARTISTS- pupils will look at one or more of these.









Gwen Seeml

Lilia D

KEY VOCABULARY

composition	The way an artwork is put together using the formal elements
collaborate	Work jointly on a piece of artwork.
painting	The action of using paint to create an image or decorate a surface
photography	The art or practice of taking and editing photos
colour	One of the formal elements
pattern	A repeated design or motif
texture	The surface quality of something it can be real or implied
illustration	A representation of an image through the eyes of an artist.

MEDIA

Pencil



Watercolours or inks



Digital media or photography

Carolyn Gavin



The Car Trip by Michael Rosen

A page to stage group performance of Michael Rosen's 'The Car Trip' which introduces the skills of mime and vocalisation.

What is mime?

Mime is the theatrical technique of suggesting action, character or emotion without words, using only gesture, expression and movement; to use only gesture and movement to act out a play or role.

What is vocalisation?

An actor uses the voice to build their character with these considerations: pitch, pace, tone, volume, emphasis, intonation, age, dialect, speech pattern, and personality.

Who is Michael Rosen?

One of the best-known figures in the children's book world, he is renowned for his work as a poet, performer, broadcaster and scriptwriter. As an author and by selecting other writers' works for anthologies he has been involved with over 140 books.









The Car Trip by Michael Rosen

What disciplinary knowledge and key skills do I need to master in this topic?

Disciplinary knowledge	Definition	
Vocalisation	Building character through the voice.	
Performing	To share a piece of drama with an audience.	
Mime	Performing without words	

Skills to consider	Additional Links	
How am I showing my character?	<u>What is mime?</u>	
How am I using body language?	<u>On-stage: voice</u>	
What is my character feeling? Do my facial expressions match this?	The Car Trip by Michael Rosen	
How do I physically react to others?	Michael Rosen YouTube channel	
Take it Further		

Lower School Theatrical Society is an extracurricular club dedicated to taking the skills learned in the classroom further. Check the <u>extracurricular timetable</u>.

The Seven Ages of Man by William Shakespeare

An ensemble performance of Shakespeare's most famous speech from 'As You Like It', using Vocal Collage and Physical Theatre, working in a group using devising, rehearsing and performing skills.

Who was William Shakespeare?

Shakespeare was a prolific writer during the Elizabethan and Jacobean ages of British theatre (sometimes called the English Renaissance or the Early Modern Period). Shakespeare's plays are perhaps his most enduring legacy, but they are not all he wrote. Shakespeare's poems also remain popular to this day.

What is a vocal collage?

Soundscape, sound collage: the combination of sounds, which may include vocal and instrumental sounds, to create a specific atmosphere or to accompany important moments of a scene.









The Seven Ages of Man by William Shakespeare

What disciplinary knowledge and key skills will I need to master in this topic?

Disciplinary knowledge	Definition
Devising	Creating a piece of drama. You will use this in a more advanced way than topic 1.
Physical Theatre	Use your body to make an object like a bench or tree.
Performing To share a piece of drama with an audience	
Vocal collage	Creating a soundscape or feeling out of a combination of sounds.

Skills to consider	Additional Links	
How are you using vocal skills? Are you confident?	Shakespeare in a nutshell	
How well are you working collaboratively in your group?	Why Shakespeare still matters	
How can you change your facial expression to convey		
mood?	Creating vocal collage	
Can I offer constructive criticism to improve the outcomes of my ensemble and others?	Benedict Cumberbatch reads 'The Seven Ages of Man'	

Take it Further

Lower School Theatrical Society is an extracurricular club dedicated to taking the skills learned in the classroom further. Check the <u>extracurricular timetable</u>.

Year 8 Crime Writing - Key Learning Outcome: Writing Assessment



Does your detective story opening includ	e: What	might the Detective be like?	Sentence Openers:
An exciting beginning to hook the reader in?	3 ; 1 ; ;	Ambitious, assertive, calm, composed, daring, dedicated, determined, direct, fearless,	After a few moments, Amazed by the discovery,
A mysterious setting or surprise event?		intelligent, knowledgeable, perceptive, revise, straight- talking, suspicious, thorough,	As the light filtered through the small window,
A buildup to give clues about what is		witty.	As the wind howled,
going to happen?			As their heart raced,
			Examining a misplaced ornament,
A dilemma?		Word Bank	Frustrated at the lack of evidence,
Short, snappy sentences used for	Alib	i, dread, inspector, sleuth.	In alarm,
			Reading through the witness
Flashbacks to reveal missing	Detectiv	e, footprints, red herring, villain.	Returning to the scene of the crime,
information?	Distre	ess, fright, shadows, witness.	Revealing the final clue,
Crime Fiction texts studied:		Powerful verbs	While inspecting the evidence,
Lamb to the Slaughter, Roald Dahl. Nightmare in Yellow, Frederick Brown.	examined, inquir	red, investigated, mumbled, pounded,	Without hesitation,
	quiverea, scrut	sneaked, whispered.	Without warning,

Year 8 Crime Writing Assessment



Key Features	Mystery at the Museum (an extract)	Crime Fiction Texts:
An exciting beginning to hook the reader in	Detective Inspector Rossi circled the museum. Shards of broken glass littered the floor, reflecting under the glaring, artificial lights. Yellow and black tape cornered the scene of the unbelievable crime, highlighting where the offence had happened. Carefully and attentively, forensic officers dusted for fingerprints and scrutinised the scene for any traces of evidence. The transparent display box was	Lamb to the Slaughter, Roald Dahl. The Sculptress, Minnette Walters. Nightmare in Yellow, Fredrick Brown.
A mysterious setting or surprise event	empty. The ancient Egyptian artefact, the renowned, world-famous bust of Queen Nefertiti, had been stolen. The arrival of the bust of Queen Nefertiti had been long-awaited by the British	About His Person, Simon Armitage. The Ballad of Charlotte Dymond, Charles Causey.
A buildup to give clues about what is going to happen	public after spending years displayed in a museum in Berlin. After long negotiations, the bust was transferred to a London museum yesterday evening, to be displayed in an ancient Egyptian exhibition in a world-breaking financial deal. By morning, it had disappeared. While examining the evidence, Detective Inspector Rossi heard a voice behind her	The Whole Town's Sleeping, Ray Bradbury.
Dialogue to advance the action	'We've checked the scene. There was no sign of forced entry, and the CCTV cameras seem to have conveniently stopped working', Constable Graham	Taking it Further: Research the background of one of the crime authors you have studied during this unit –
Short, snappy sentences used for effect	Detective Inspector Rossi nodded and sighed. The lack of CCTV footage would be a huge misfortune in terms of their investigation. She contemplated	(i.e., Roald Dahl, Fredrick Brown, Sir Arthur Conan Doyle.) Wider Reading: It's proven that reading for
A dilemma	CCTV cameras were not working. The bust had only been in the museum for one night. It has to be someone who worked at the museum	pleasure is the single most important indicator of a child's future success. Link to accelerated reader. Link to wider reading list



English Year 8 – Prose Study

Key Term	Definition
Prose	Verbal or written language that follows the
	natural flow of speech.
Analyse	To study or examine something in detail, to
	discover or understand more about it.
Evaluate	The process of deciding if something has been
	done in the best way, and wondering
	what could be improved.
Context	The circumstances in which a text is written, and
	the circumstances in which the text is read.
Structure	How written text is organised - the way the story
	is ordered and shaped.
Symbolism	The use of words or images to symbolise specific
	concepts, people, objects, or events.
Refugee	A person who has been forced to leave their
	country to escape war, persecution, or natural
	disaster.
Asylum	The protection granted by a state to someone
	who has left their home country as a political
	refugee.
Displaced	Take over the place, position, or role of.
Persecution	Hostility and ill-treatment, especially because of
	ethnicity, religion, or sexual orientation or political beliefs.
L	

Key Learning Outcome: Reading Assessment

This may take the form of a character study, review, or analysis of a section of the novel, but will look at the writer's craft and choice of language for effect.

LEARNING PROCESS

VISIT

- Read the text with your class and teacher.
- Complete comprehension tasks.
- Consider your personal response.

ANALYSE

- 'Zoom' in on key quotes.
 Track themes and symbols throughout the text.
- Complete a reading assessment: review, character study or extract question.





COLLABORATE



- Peers.
 Create persuasive arguments both written and
- arguments, both written and verbal.
- Present key ideas to the group.

REFLECT

- Complete DIRT task related to your assessment.
- Reflect on key skills covered.
- Consider how this unit can help you in your future learning.



English Year 8 – Prose Study

Key Skills



Creative Tasks:

- Character profile.
- Storyboard.
- Diary entry.
- Newspaper article.

Analytical Tasks:

- 'Exploding' key quotes.
- Tracking key themes.
- Responding to extract questions.

Reflection Tasks:

- Peer and self-assessment.
- Directed Improvement and Reflection Time.



Taking it further



 Research the context of your prose text (i.e., research the sinking of the Wilhelm Gustloff, a German refugee ship fleeing the Soviets in 1945 for Salt to the Sea.)

Wider Reading:

It has been proven that reading for pleasure is the single most important indicator of a child's future success.

Link to accelerated reader

Link to wider reading list

Extended Writing:

- Book reviews.
- Film reviews.
- Fictional writing (e.g., a letter to your favourite character.)

Extra-curricular Activities:

- Carnegie Reading Group.
- Book Club.

Learning Checklist:

- I can write in a critical style.
- I can use quotes from the text to support my interpretations.
- I can analyse the use of language and comment on its effect.
- I can examine the structure of a text and its effect on the reader.
- I can sustain depth in my writing.
- I can identify and comment on key themes in a novel.
- \circ $\,$ I can provide my own personal response to a text.
- I can evaluate the effect of key quotes on the text.



Year 8: Food and Nutrition

Key Vocabulary

High Risk Food	A food that is an ideal medium for the growth of bacteria or microorganisms.	
4C of Food Hygiene	Cooking, cleaning, chilling and cross contamination.	
Food Poisoning	An illness caused by eating contaminated food.	
Food Poisoning Bacteria	Micro-organisms in food which can cause illness.	
Personal Hygiene	Covers handwashing, clothing, fitness for work and training	
Macronutrients	Are needed in large amounts by the body and are called protein, fats and carbohydrates	
Micronutrients	Are needed by the body in smaller amounts and are called vitamins and minerals.	
Allergens	Substances or foods that may cause an allergic reaction.	

Making

Key Skills





Evaluating

Planning

danger zone.
Key Temperatures: 100oC boiling point of water, reheat and cook food to 75oC or

Making & Skills

method.

Plannina

moisture.

layering & setting.

whisk /presentation

Bread – dough making

products accidently.

Stir fry-Using a wok/Stir frying

Upside Down Cake - Creaming Method.

American Pancakes – Portion control/use

Whisked Sponge–Use of the oven/electric

Tikka Naan – marinading/portion control

Food Poisoning – 4 conditions bacteria

need to grow: Food, time, warmth and

bacteria or traces of allergens get into

Food Storage: to prevent or reduce the

important to keep hot food hot, cold food

cold and keep prepared food out of the

speed at which bacteria multiply it is

Cross Contamination occurs when

Cheesecake – Checking for readiness,

Scones-Shaping, glazing rubbing in

of raising agents/batter making

water, reheat and cook food to 75oC or above, danger zone 5oC- 63oC, fridge temperature 0oC – 5oC and freezer temperature -18oC

Nutrition & Health

- What's on a food label: name of the product; date of durability, instructions for use; origin; manufacturer's name & address; nutrients; storage; net quantity; allergens and ingredients.
- Nutritional Labelling: information on nutrients must be listed in this order: energy; fat; saturates; carbohydrates; sugars; fibre (not required by law); protein, salt; vitamins & minerals.
- Traffic light system fat, saturated fat, salt & sugar are labelled on a food product in either green, amber or red.
- 14 common food allergens: celery, cereals containing gluten (such as wheat, barley and oats),crustaceans, eggs, fish, lupin, milk, molluscs, mustard, peanuts, sesame, soy beans, sulphur dioxide & sulphites and tree nuts.
- Macro Nutrients: needed in large amounts by the body and are called protein, fats and carbohydrates
- Micronutrients: needed by the body in smaller amounts and are called vitamins and minerals.

Food Poisoning Chain







Year 8: Food and Nutrition

Food Science

- Dextrinization: Breaking up of the starch molecules into smaller groups of glucose molecules when exposed to dry heat, e.g. toast
- Gelatinisation: when starches are heated with liquid, they swell and will thicken. This is a key process in sauce making.
- Enzymic Browning: oxidation reaction that takes place in some foods, mostly fruit and vegetables, causing the food to turn brown.
- Maillard reaction: is the process that is responsible for the golden-brown colour and crust that forms on well-grilled meat.
- Heat transfer: heat energy can flow by conduction; convection or radiation. It always flow from a hot source to a cold source.

Sustainability

Factors affecting food choice

- Budget: the amount of money available to buy ٠ food.
- Seasonality: foods that are only available at certain times of the year.
- Sustainability: meets the needs of the present, ٠ without making it difficult for future generations to meet their own needs.
- Food Preservation: processes that allow foods to ٠ last longer e.g., drying, canning, chilling & freezing

Taking it Further Macro & Micronutrients video



https://www.youtube.com/watch?v=zl2XR1a 4DU&t=2s

Food Safety



https://www.voutube.com/watch?v=flxmB8NKMzE

Food Labelling



Learning Checklist

- □ I can use a variety of practical skills to make high quality outcomes.
- □ I can name the four conditions that bacteria need to grow
- □ I can explain how to prevent cross contamination.
- □ I can name 5 key temperatures for food storage and cooking.
- □ I can explain the traffic light food label
- □ I can name and explain the main functions of the macronutrients
- □ I can name the two groups of micronutrients and explain the functions of Vitamin A & C. calcium and iron.
- □ I can explain a range of food science turns.





Year 8 French

All about me	Key PhrasesJe m'appelleI am calledJ'habite àI live inJ'aiI haveJe suisI amC'estIt isCommentWhat are yout'appelles tu?called?	OpinionsOpinionsJ'adoreI loveJ'aime beaucoupI like a lotJ'aimeI likeJe n'aime pasI don't likeJe détesteI hateJe préfèreI preferA mon avisIn my opinion	BonjourHelloSalutHi / ByeBonsoirGood eveningBonne nuitGoodnightAu revoirGoodbye
les animaux (m pl)animalsles araignées (f pl)spidersla capoeiraa Brazilian danceles chats (m pl)catsles chiens (m pl)dogsle cinémacinemales consoles de jeux (f pl)games consolesla dansedancingle footfootballles gâteaux (m pl)cakesle hard rockhard rockl'injustice (f)injusticeles insectes (m pl)insectsles jeux vidéo (m pl)video gamesles mangas (m pl)mangasles maths (f pl)mathsles pizzas (f pl)pizzasla poésiepoetryle racismeracismle rapraple reggaereggaeles reptiles (m pl)reptilesle rollerroller-skatingle rollersportla tecktoniktecktonik (dance)la téléTVle tennistennis	Moi et les autresMe and other peopleje suisI amje ne suis pasI am nottu esyou areil/elle s'appellehe/she is calledil/elle esthe/she isbeau/bellegood-lookingbranché(e)trendycharmant(e)charmingcoolcoolcurieux/curieusecuriousde taille moyenneaverage heightdrôlefunnygénéreux/généreusegenerousgentil(le)nicegrand(e)tallimpatient(e)intelligentmodestemodestpetit(e)smallpoli(e)polite	Les moisMonthsjanvierJanuaryfévrierFebruarymarsMarchavrilAprilmaiMayjuinJunejuilletJulyaoûtAugustseptembreSeptemberoctobreOctobernovembreNovemberdécembreDecemberMon anniversaire c'est le deuxfévrierMy birthday is the 2 nd FebruaryÇa va bienI am goodÇa va très bienI am very goodComme çiokaycomme çaBof pas malBof pas malnot badagura tabuarI arm bard	debx 2 trois3quatre4cinq5six6sept7huit8neuf9dix10onze11douze12treize13quatorze14quinze15seize16dix-neuf19vingt20vingt-et-un21vingt-deux22vingt-deux22vingt-deux22vingt-deux25vingt-six26vingt-sept27vingt-neuf29trente30
le théâtre theatre, drama les voyages (m pl) journeys la violence violence	et and aussi also	merci thank you et toi? and you?	trente-et-un 31 Quel âge as-tu ? How old are you ? J'ai 12 ans I am 12 years old

History - Year 8 - The Tudors: The Impact of the Reformation

K

Key Vocabulary

The English Reformation	The C.16 event where the Church of England broke away from the Catholic Church
Роре	The leader of the Catholic Church
Catholicism	The largest and oldest form of Christianity in the world
Protestantism	Created by Martin Luther. A form of Christianity created to reform the Catholic Church.
Monastery	A building, that in C.16 England, was home to Catholic monks. These were shut down by Henry VIII.
Vagrant	A person without a settled home or employment.
Heretic	A person practising religion that goes against the monarch.
Divine Right of Kings	The belief that a king's power comes from God.
Blackamoor	A C.16 term for a black person or dark-skinned person.
Armada	A fleet of warships.



Core knowledge

- In 1485, after the War of the Roses, the Tudor dynasty begun in England. This began with Henry VII.
- Henry VIII was the King of England between 1509 and 1547. Beginning in the 1530s, the English Reformation saw the creation of the Church of England.
- The Reformation continued into the reign of Edward VI (1547-1553), where the Act of Uniformity made religious worship consistent.
- The rule of Mary I (1553-1558) led to a rise in heresy and a return to Catholicism.
- Elizabeth I (1558-1603) saw the 'religious settlement', where she tried to seek a balance between Protestants and Catholics.
- In the Tudor period there was a black presence in England. Black people were known to be married, baptised and hold employment. This can be seen in the stories of John Blanke (a royal trumpeter) and Mary Fillis (a seamstress).
- In 1588 England went to war against Spain. Led by Phillip II, the Spanish Armada was defeated. This marked the military power of England and this furthered by the 'Age of Discovery'. The discovery of the Americas opened new lands to explore.

History - Year 8 - The Tudors: The Impact of the Reformation



Key Skills



Chronology



Cause and Consequence



Significance

Curriculum Concepts



Power



War



Empire

Taking it Further



Why was the Spanish Armada defeated (HistoryHit). CLICK HERE.

Watch



Listen

"Talking Tudors" series by Natalie Grueninger. CLICK HERE



"Black Tudors: The Untold Story" by Miranda Kauffman. CLICK HERE

Read

Learning Checklist

- □ I can accurately recall the chronology of the Tudor period.
- □ I can identify the difference between the Catholic and Protestant Churches.
- □ I can explain the consequences of the Reformation in England.
- □ I can understand the role that Black Tudors played in England.
- □ I can explain the nature of naval warfare in Elizabethan England.
- □ I can evaluate reasons for the defeat of the Spanish Armada.
- □ I can begin to understand England's role in exploration overseas in the C.16

History - Year 8 - The Stuarts: Conspiracy and Civil War

Treason	The crime of betraying your country, usually by attempting to kill the monarch, government or other 'authority.
Recusants	Catholics who refused to attend Protestant worship in England.
Conspiracy	A secret plot to do something unlawful or harmful.
The English Civil War	When Royalists (supporters of the King) and Parliamentarians (supporters of Parliament) went to war between 1642-1646,
Puritanism	A strict Protestant. Called for the reform of the Protestant Church.
New Model Army	England's first national fighting force.
Oliver Cromwell	Key figure in the New Model Army and Lord Protector in England during the interregnum.
The Battle of Naseby	A key battle of the English Civil War (1645) where Charles I was defeated.
Interregnum	The period where England was ruled without a Monarch.
Restoration	The return back to the monarchy – beginning with Charles II in 1660.

Key Vocabulary



Core knowledge

- The Stuart period begun in 1601, with King James I. Previously known as King James VI in Scotland.
- The Gunpowder Plot of 1605 was an attempt to overthrow James I. Led by Robert Catesby (a Catholic), the plot aimed to kill the King and other members of authority.
- The Gunpowder Plotters were tried and executed for their role in treason.
- Charles I came to the throne in 1625. Due to several unpopular laws and a firm belief in Divine Right of Kings, he was largely to blame for the outbreak of war.
- The English Civil War took place between 1642-1646. Parliament were victorious. Key battles include Edgehill, Marston Moor and Naseby.
- After the war, a serious of failed negotiations took place. Charles I was trialled and executed in January 1649.
- The country was ruled without a King during the Interregnum (1649-16600). Oliver Cromwell was a figurehead during this time, acting as Lord Protector of England.
- The Restoration of 1660 saw the Restoration, where the Stuarts were, once again, the Royal Family. Charles II became King and ruled until 1685.

History - Year 8 - The Stuarts: Conspiracy and Civil War



Key Skills



Chronology



Cause and Consequence



Evidence

Curriculum Concepts



Power



War

Taking it Further



Exploding the Legend – The Gunpowder Plot. CLICK HERE.

Watch



Charles I, Reconsidered (History Hit). <u>CLICK HERE</u>

Listen



"The English Civil War, Origins, Events and Legacy" by English Heritage. <u>CLICK HERE</u>

Read

Learning Checklist

- □ I can accurately recall the chronology of the Stuart period.
- □ I can identify the reasons Catholics were treated harshly in England.
- □ I can explain the consequences of the Gunpowder Plot.
- □ I can understand the role that Charles I played in causing the English Civil War.
- □ I can explain the nature of warfare in Stuart England.
- □ I can evaluate reasons for the defeat of Parliament in the English Civil War.
- □ I can use historical sources to make judgments about the past.

Y8 Citizenship: RSHE - Rotation 1 Reducing risk

Safeguarding	Ensuring safety
Highfields Safeguarding Team	safeguardinghighfields@hswv.co.uk
Signpost & support	Knowing where to go to for appropriate help
Gangs	Social groups
Influencing factors	Things that determine healthy outcomes or risky ones eg staying safe or being exposed to harm
Exit strategies	Ways to prevent, minimise and to step away from negative situations or people
Drug use and risk	Prescribed or recreational drug use and the harms involved
Law	The rules of the country
Sending inappropriate images (sexting/nudes)	Phone use and appropriate use of taking and sending images
Harassment, homophobia, sexual harassment and consent	Intentionally being mean and harmful to others in various way eg comments and actions and consent
Puberty and menopause	Development stages in life

Gangs

Social groups are beneficial to us. However, gangs are harmful and heavily linked with illegal activity. Gangs are ruled with fear and require young people to take serious risks.

Drugs and legality

Drugs are important in society to maintain health. Some people choose to use drugs which leads to harm. We look at risks in taking drugs which have not been recommended by a medic. We learn about the legal system and drugs.

Sending inappropriate images

Phones are how most people communicate today. Sending images is the norm in society. However, it is important to know what is appropriate and inappropriate. We learn what the law says and how to be safe and where to seek help.



We learn what is meant by: harassment, bullying, sexual harassment homophobia and transphobia. We consider how laws protect our rights. And we explore what consent is and why it is important in healthy relationships.

Puberty and Menopause

All young people will go through puberty and will learn how the changes will affect them. Menopause is a development stage that all females will go through. Both are important to be aware of.







Y8 Citizenship: RSHE - Rotation 1 Reducing risk



YGAM

We learn about the potential harm and risks around gaming and gambling. We learn about law and gambling.



Taking it Further

ChildLine https://www.childline.org.uk/

NSPCC helpline <u>https://www.nspcc.org.uk/keeping-children-safe/reporting-abuse/nspcc-helpline/</u>

Drug Education

We will use educational websites to realise risks in drug use.



Chathealth 07507 332 631 https://www.royalwolverhampton.nhs.uk/services/service-directory-a-z/0-19service/chathealth/

Childline

We explore Childline in most lessons and learn what sort of help that Childline can offer young people.



Learning Checklist

- □ I can ask for or seek help when I need to
- □ I can identify when situations are becoming risky
- □ I can reflect on mine and others' actions and consider the risks involved
- □ I can use positive coping strategies to improve my feelings
- □ I will have a better understanding of the development stages: puberty and menopause
- $\hfill\square$ I can tell my friends and peers where they can get help
- □ I can contact the safeguarding team if something serious happens

PE – Year 8: Basketball

Key Vocabulary:			
Passing	Moving th teammat	Moving the ball over various distances to a teammate to gain advantage up the court.	
Dribbling	Allows yo alternatir Introduce	Allows you to move the ball around the court, alternating hands to get closer to the basket. Introduce cross overs and ball manipulation.	
Outwitting opponents	To get the an oppor	To get the better of and gain the advantage over an opponent by using tactics and game strategies.	
Tactical defending	The team quickly go basket w	The team tracking back shows perseverance to quickly get into a defensive zone to defend their basket when possession is lost.	
Shooting	Shooting is used to score baskets in basketball. Students to use a range of shots including set shot, jump shot and lay-ups.		
Spatial awareness	Spatial awareness is the knowledge of how to use the body to get into space and away from opponents, using skills to evade defenders.		
	. !		
Year 8 Values: 'Playing your part'			
		Compassion	Perseverance
Responsibility To take ownership and accountability		Showing concern and understanding for others	To keep trying despite difficulties or delays in achieving success.



PE – Year 8: Basketball

Learning Checklist:

□ I can dribble the ball with control.





□ I can pass the ball to a teammate using a chest, bounce and overhead pass.

□ I can control the ball using my dominant and non-dominant hand.

□ I can shoot at the basket using the **BEEF** principle, Balance, Eyes, Elbow,

Follow through and apply the **lay-up** shot within a game situation.

Key knowledge of Rules and Regulations:	
Starting a game	The game starts when the referee throws a jump ball. This is when a player from either team has the chance to jump and gain possession for their team.
Double dribble	In basketball, an illegal dribble occurs when a player ends their dribble by catching or causing the ball to come to rest in one or both hands, then dribbles again. In this case, the ball will then be given to the other team.
Travel	In basketball, traveling is a violation that occurs when a player takes too many steps without dribbling the ball. Max 2 steps, if you stop you should pass or shoot.
Foul	A foul is a breach of the rules more serious than a violation. Most fouls occur because of illegal personal contact with an opponent and/or unsportsmanlike behaviour.
Restart of play	An attacking team has 24 seconds from gaining possession of the ball to shoot at the basket. After a team scores a basket, the ball is returned to the opposition to start again.
Scoring	2 points inside the D, 3 points from outside the D. If a team is awarded a technical foul, then they will receive between one and three free shots. Each shot scored will be awarded with one point.

Learning Checklist:

- I can move into space in a game to support my team when in possession of the ball.
- □ I can apply the key character values of **responsibility**, **compassion** and **perseverance** in Basketball.
- □ I can play a small sided basketball match, following the basic rules.

PE – Year 8 Dance

*
\checkmark

Key Vocabulary:		Key knowledge of Technical Skills:
Professional Work	Original choreography by an individual or company that is recognised nationally or internationally	ZooNation – Mad Hatters Tea Party
Choreographic Intention	The aim of the dance	The study of the professional work focusing on mental health
Motif Development	Ways in which a movement phrase can be varied	Choreograp Explore intent of
Characterisation	The creation of a fictional character	hy dance/characters
Facial Expressions	The use of the face to show mood, character or meaning	
Movement memory	The automatic recall of learned movement material	Select and order Develop and movement dynamics and space
Prop	A portable object that is used in dance	vary motifs material to portray intent
Performance Skills	Acquisition and development of physical and expressive skills	
Heart Character V	alues:	Self-assessment/peer
Year 8 Value Responsibe To take owners accountabe	es: 'Playing your part' ility hip and lity Showing concern and understanding for others Derseverance To keep trying despite difficulties or delays in achieving success.	assessment for improvements Rehearse Perform

PE – Year 8: Dance





perseverance in dance

□ I can use facial expressions within my performance

PE – Year 8: Football

Key Vocabulary:		
Passing	Moving the ball to a teammate in space.	
Dribbling	Moving the ball around the pitch using your feet.	
Turning	Changing direction in order to create space. This can be with or without the ball.	
Shielding	Putting your body in between the defender and the ball in order to protect the ball	
Shooting	Using the foot or head to strike the ball towards the goal in order to score	
Semi-opposed	The defender puts pressure on the player in a drill however, does not actively try to win the ball.	
Movement	Moving into a better position on the pitch when not in possession of the ball	
Creating an Angle	Moving to a position so that you, the defender and your teammate are not in a straight line to create space for a pass.	







PE – Year 8: Football



Key knowledge of Tactics and Strategies :







Movement to create an angle for pass

e Individual defending (Closing down space)

Movement and Spacing out

Movement	When your team is in possession of the ball you should be looking to
to create	move into space to support your teammate. You should aim to
angle for a	move away from the person marking you into space (making an
pass	angle for the pass)
Individual	When your team doesn't have the ball, you should quickly close
defending	down the space of the person with the ball. If you are not near the
(closing	person with the ball, you should be 'goal side' of the player you are
down)	marking (closer to your goal than they are)
Movement and spacing out	Players should be using more of the space on the pitch. Players should be using width to make the pitch bigger and look to move the ball to teammates in space.

Le	arning Checklist:	Le
	I can pass and control the ball accurately in increasingly opposed	
	situations	
	I move into space to create an angle for the pass	
	I dribble with control in increasingly opposed situations	
	I can turn with the ball in order to create space	

(ey knowledge of Rules and Regulations:		
Free- kick	 A non-contested pass or shot that is give when an offence is committed. Opposing players need to stand 10 yards from the ball 	
Throw- in	• This is used to restart play when the ball leaves the pitch at the side. The play must have both feet on the floor and the ball should be thrown with two hands from behind the head.	
Goal kick	 Is awarded when a ball passes wholly over the goal line, to either side of the goal, having last touched an attacking team player. The ball is kicked from a stationary position from the 6-yard box. 	
Corner	• Is awarded when a ball passes wholly over the goal line, to either side of the goal, having last touched a defending team player. The ball is kicked in from the corner spot by the attacking team.	
Offside	• When there are not two defending players (1 is usually the goalkeeper) between the goal and the attacker when the ball is passed through.	
Indirect free- kick	• When a free-kick must be passed to another player and a shot cannot be taken. This can be awarded for a goalkeeper picking up a back pass.	

Learning Checklist:

- I can use individual defensive strategies such as closing down and 'jockeying'
- □ I can shield the ball in order to maintain possession
- \Box I can shoot the ball effectively in 1v1 situations by creating an angle

PE – Year 8: Netball

Key Vocabulary:		
Pivot	Swivel or turn on your landing foot to change direction.	
Receiving	Catching a ball that has been thrown to you.	
Throw/pass	Propel a ball through the air by a forward motion of the hand and arm for a team mate to catch.	
Jump stop	Jumping and landing on both feet at the same time.	
Footwork	On receiving the ball, a player lands on one foot and can then pivot using the other foot.	
Shooting	From the semi-circle, GS or GA propels the ball up towards the net aiming for a goal.	
Defend	Stop the attacking team by marking your player or making it difficult to execute a pass.	
Movement	Getting into positions on the court to support your teammates in possession.	
Opposition	The team you are playing against.	

Heart Character Values:



Key knowledge of Technical Skills:



Shootina







Ball Familiarisation Footwork

Pivoting

Shooting



Opposition Throwing Defend Receiving **Pivoting** • Jump and land on the ball of one foot. • Pivot by rotating yourself on the ball of your landing foot. • Use your non landing foot to move you round. Receiving • Keep your head up and focus on the ball. Extend your arms towards the ball with hands spread. Watch the ball all the way into your hands. Passina/ • Hold the ball in one or two hands with fingers spread. • Propel or push the ball towards your receiver/player. Throwing Defending • Face your player no closer than a meter. • Try and block their pass with your arms.

Feet are shoulder width apart, facing the net.
Place your shooting hand underneath the ball and your non-shooting hand to the side.

```
• Bend your knees and arms. Extend both towards the goal.
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PE – Year 8: Netball





Key knowledge of Rules and Regulations:		
Starting a game	• A game is started with a center pass. All players, other than C must be outside the center third.	
Footwork	• When receiving the ball, jump and land one foot followed by the other. If you lift and put down the landing foot that is footwork. A free pass is awarded.	
Out of play	 When the ball goes off the court it is called 'out of play'. 	
Obstruction	• When defending a player with the ball you must stand a meter away. Any closer and that is obstruction. A penalty pass is awarded.	
Contact	You are not allowed to touch another player in netball. If you do it is called 'contact'. A penalty pass is awarded.	
Offside	• Players in netball are only allowed in certain areas of the court. If a player goes into an area they are not allowed, this is called 'offside'. A free pass is awarded.	
Held ball	When you have held onto the ball for more than 3 seconds	

Learning Checklist:	Learning Checklist:		
I can pass the ball accurately to a teammate (shoulder and chest)	I can dodge to lose my player and move into space		
I can receive a ball whilst moving	I can apply the key character values of respect, self-management and		
I can shoot from a close range partly defended	teamwork in netball		
I can land on one foot followed by the other and stop	I can play a small sided netball match, following the basic rules		

PE – Year 8: Trampolining

Key Vocabulary:	
Mount/dismount	Getting on and off the trampoline safely.
Straight jumps	Bouncing straight up in the air. You must bend your knees and straighten them whilst in the air. Toes must be pointed; legs must be together.
Stops/landing	Bend knees and get into a squat position, with your arms out in front for support to stop to stop your bounce dead on the trampoline.
Spotting	Positioning yourself around the trampoline to assist the trampolinist who may fall.
Trampoline bed	The fabric part of the trampoline that is stretched by springs. The thickness and width of the material affect the rebound power of the trampoline.
Routine	Putting together skills taught in a sequence.
	·
Year 8 Values:	'Playing your part'
Trees.	



Key knowled	ge of Technical Skills:		
Front lan	ding Back landing Swivel hips		
Seat drop into half twist exit	 Perform seat drop (year 7) then on exit keep the body upright and straight during the twist. When you are twisting, ensure you have a focus point. Keep arms vertical and straight during flight. Turn the shoulders and look where you are going. 		
Swivel hips	 Complete a seat drop (year 7) and when your lower part of the body is in contact with the bed, use hands to push off the bed. When rising from the bed of the trampoline, lift arms up and turn your head under your armpit. By turning your head and arms, your hips and body will follow into the twist. 		
Front landing	 Land with your belly button on the cross and legs slightly bent. Your hands will have fingertips meeting in the middle making a diamond shape in front of face. Your eyes should be focussed on the front of the trampoline Push off the trampoline and land back on feet 		
Back landing	 Land on your back with arms facing the ceiling. Your legs should be parallel with your arms, with toes pointed. Tuck your head forwards and do not tilt it backwards with your eyes focussed on your toes. Land back on feet 		

PE – Year 8: Trampolining





Learning Checklist:

- $\hfill\square$ I can mount and dismount the trampoline safely.
- □ I can spot my peers with safety and consideration in mind.
- □ I can perform a seat drop into half twist with the correct technique.
- □ I can perform swivel hips with the correct technique.

Learning Checklist:

- $\hfill\square$ I can perform some or all stages of front landing with the correct technique
- $\hfill\square$ I can perform some or all stages of back landing with the correct technique.
- I can put the skills that I have been taught into a routine and perform the routine to my teacher and potentially a small group.

PE – Year 8: Table Tennis

Key Vocabulary:		
Rally	Rally in table tennis is where both players keep the ball in play.	
Serve	The beginning of a point where one player strikes the ball to hit both sides of the table after tossing it.	
Alternate shots	During rallies in doubles games, partners must play shots alternately, refraining from hitting consecutive shots.	
Topspin	Shot played with either the forehand or backhand to create a higher bounce.	
Backspin	Shot played with either the forehand or backhand to slow the revolutions of the ball.	
Smash	Attacking shot played when the ball is high to hit powerfully past an opponent.	
Drop-shot	A low, softly played shot to bring the opponent to the front of the table.	

Heart Character Values:



Equipment:



Indoor Trainers

Key knowledge of Technical Skills:









Topspin Chop Drop shot Topspin Player glides the bottom side of the paddle, while holding it in a 45degree angle, over the ball to push it forwards with a full swing. Chop Staying away from the table the player uses the top side of the paddle, pushing it downwards at a 45-degree angle while making contact with the bottom half of the ball to achieve backspin. Drop-shot Player hits the ball softly with an upwards trajectory to land just over the net. Used when an opponent is behind the table with the aim of the ball bouncing twice. Smash The forehand smash is a fast, hard and powerful stroke that aims to force the opponent away from the table or to win a point outright.

Indoor PE kit



Bats, balls and tables (in school)

Smash

PE – Year 8: Table Tennis



Key knowledge of Tactics and Strategies :







Doubles play

Moving an opponent

Disguise

Moving an opponent	Directing the ball with drop/length shots to manipulate an opponent into creating space for passing shots.
Disguise	Adding disguise to service and placement shots in order to outwit an opponent into mistakes.
Doubles play	Adapting to the alternate shots rule and working as part of a team to beat an opposing pair.

(ey knowled	dge of Rules and Regulations:
Doubles play	 Players take alternate shots Serving from the right for even score and left for odd score – must be diagonal. Each server serves 5 times before swapping.
Advance d rulings	 Avoid contact with the table at all times. Serves must exit the table at the back rather than the sides.
Umpiring	 Each player serves 2 points in a row. Communicating scores correctly after each point.

- First to 11 points wins a game.
- If the score is tied at 10-10, the game ends when one player leads by 2 points (e.g. 15-13).



.earning Checklist:	Learning Checklist:
I can apply topspin to forehand and backhand shots.	I can add disguise to a variety of shots.
I can perform a chop shot with both forehand and backhand.	I can cooperate with a partner when playing alternate shots in
I understand and can apply doubles rulings to a competitive	doubles.
situation.	I can confidently umpire a game.

Mathematics – Year 8: Helpful Hints

Key Word	Definition
Factor	A number that divides a given number exactly, leaving no remainder.
Multiple	The result of one number multiplied by another number.
Square Number	The answer when a number has been multiplied by itself.
Cube Number	The answer when a number is multiplied by itself and then by itself again.
Prime Numbers	A whole number that has exactly two factors.

Multiplication Grid:

×	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Prime Number Grid:



Square Numbers:

1, 4, 9, 16, 25, 36, 49, 64, 81, 100, ...



The pattern of dots gives a clue as to where the name square numbers come from...

Cube Numbers:





Mathematics – Year 8: Number

Rounding

5, 6, 7, 8, 9 round up, 0, 1, 2, 3, 4 round down

Nearest 10: 6 | 5 \rightarrow 70 Nearest 100: 63 | 23 \rightarrow 6300 Nearest 1000: 9 | 763 \rightarrow 10000 Whole Number/Integer: 478 | .4389 \rightarrow 478 1 Decimal Place: 4.8 | 325 \rightarrow 4.8 2 Decimal Place: 1.89 | 7 \rightarrow 1.90 1 Significant Figure: 5 | 87 \rightarrow 600 1 Significant Figure: 0.006 | 488 \rightarrow 0.006 2 Significant Figures: 75 | 68 \rightarrow 7600 3 Significant Figures: 0.0799 | 7 \rightarrow 0.0800

Multiples:

Multiples of 4: 4, 8, 12, 16, 20, 24, ...

Find the Lowest Common Multiple of 3 and 8:

Multiples of 3: 3, 6, 9, 12, 15, 18, 21, 24, 27, Multiples of 8: 8, 16, 24, LCM = 24

Product of Prime Factors:

Write 60 as a product of its prime factors



Estimating

Anne spent \pounds 5.82 on lunch and \pounds 6.47 on dinner. Approximately how much did she spend in total?

 \approx £6 + £6 = £12

6. **35** × **7**. **662** ≈ 6 × 8 = 48

```
\frac{2.57+9.45}{0.5236} \approx \frac{3+9}{0.5} = \frac{12}{0.5} = 24
```

$$\frac{\sqrt{861.5} - 4.55^2}{24.5 + 4.91} \approx \frac{\sqrt{900} - 5^2}{20 + 5} = \frac{30 - 25}{25} = \frac{5}{25} = \frac{1}{5} \text{ or } 0.2$$

Factors:

Factors of 30- write these in multiplication pairs.

Find the Highest Common Factor of 16 and 20 Find all the factors of both numbers and

choose the highest factor that is in both lists.

Factors of 20

20

10

5

1

2

4

Fractions, Decimals and Percentages

Important ones to learn:

Fraction	Decimal	Percentage
$\frac{1}{2}$	0.5	50%
$\frac{1}{4}$	0.25	25%
$\frac{1}{5}$	0.2	20%
$\frac{1}{3}$	0.3	33.3%
$\frac{2}{3}$	0.Ġ	66. <i>Ġ</i> %
$\frac{1}{10}$	0.1	10%
$\frac{1}{100}$	0.01	1%



Factors of 16

16

8

4

Highest common factor = 4

1

2



Mathematics – Year 8: Number

Calculations with decimals

Addi	Adding Decimals				
	2.2	24 +	0.6		
	2 •	2	4		
+	0	• 6	0		_
	2 •	8	4		



Dividing Decimals

 $4.8 \div 0.6$

 $\frac{4.8}{0.6} = \frac{48}{6} = 8$

So $4.8 \div 0.6 = 8$

Calculations with Fractions

Adding Fractions

Fractions must have the same denominator.



Multiplying Fractions

Multiply the numerators and denominators together.







Subtracting Fractions

Fractions must have the same denominator.



Dividing Fractions Keep it, Change it, Flip it.



Mathematics – Year 8: Geometry



Key Word	Definition
Acute	Less than 90°
Obtuse	Between 90° and 180°
Reflex	More than 180°
Parallel Lines	Two lines that are equal distance from each other that will never meet.

Angle Facts:

Angles on a straight line add to 180°





Angles around a point add to 360°

Angles in a triangle add to 180°



Vertically opposite angles are equal



Angles in Parallel Lines

Alternate angles are equal



Corresponding angles are equal



Co-interior angles add to 180°





Mathematics – Year 8: Algebra

Key Definitions

Key Word	Definition
Simplify	Collecting like terms within an expression.
Expand	Multiply out a bracket.
Factorise	Put brackets into an expression by taking out the highest common factor.
Solve	Replacing variables in an expression with their numerical values.

Topic Vocabulary

Variable	A letter to represent a value. The value can change.	1 x+5	Changing the Subject of the Formula
Coefficient	The number attached a variable.	(2)x + 5	(Rearrange to make it $x = \dots$)
Term	The separate parts of expressions, Or equations	2x+5	y = 2x + 5
Expression	Any combination of letters & numbers.	2x+5	v - 5 = 2x
Equation	Two equal expressions. They can be solved to find the value of variables.	2x + 5 = 8	÷ 2 ÷ 2
Formula	Two equal expressions. Values are substituted to evaluate one variable.	$A = \frac{b \times h}{2}$	$\begin{array}{c} \begin{array}{c} y-5\\ 2\end{array} = x \end{array}$



Solving Equations

Solve:



Year 8 – Music: Reggae

Triplets

This is called a **triplet**. A triplet is a rhythmic device where three notes and played in the space of two.



The musical features of reggae.

1. Reggae normally sounds **major**, meaning it sounds positive and bright.

2. The **metre** of reggae is 4/4.

3. Reggae makes use of a device called syncopation.

4. Reggae features a fusion of pop instruments: piano, electric guitar, and drum kit as well as orchestral instruments: trumpet, trombone and saxophones.

Taking it further

All of Highfields musicians are expected to challenge themselves. They can achieve this by working through the pieces.

Beginner	Intermediate	Advanced
<u>Kingston Town</u>	Bob Marley - Sun Is Shining	<u>Bob Marley - Exodus</u>
<u>Gregory Issacs - Night Nurse</u>	<u>Althea & Donna - Up Town</u> <u>Top Rankin</u> '	<u>Inner Circle - "Sweat (A</u> <u>La La La La Long)"</u>
<u>Lee Perry - Soul Rebe</u> l	<u>The Abyssinians -</u> <u>"Satta</u> <u>Massagana</u> "	<u>Dennis Brown - "Money in</u> <u>My Pocket"</u>

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The Inter-Related Dimensions of Music



Element	Definition
Duration	How many beats the note is held for.
Pitch	The high or lowness of the tone.
Tempo	The speed of the piece.
Melody	A sequence of single notes that is musically satisfying; a tune
Structure	How the piece is built.
Dynamics	The volume of piece.
Timbre	Quality of a musical sound or voice as distinct from its pitch.
Texture	The layers of a piece.

Year 8 – Music: Reggae

Further vocabulary

*
\checkmark

Learning checklist

Symbol	Name	Definition	I can identify the key elements of reggae
(10)	Ukulele	A small four-stringed guitar of Hawaiian origin.	I can collaborate with my fellow ensemb members to establish a cohesive and synchronized performance, maintaining
4 4 4	Time Signature	Tells us how many beats are in a bar.	consistent timing and tempo. I can use proper fingerpicking or strummi
	Bend	You play a bend on your ukulele by grabbing the string and pushing it across the neck. This action	techniques to create the characteristic re sound on the ukulele.
		the pitch	I can confidently perform a reggae piece
- <u></u>	Slide	Sliding is an ukulele technique that allows articulation of a note by moving from one pitch to another smoothly.	ensemble's collective skills and musical expression.
	Vibrato	Vibrato is when you vary of the pitch of a note. This is done on the ukulele by moving the string slightly.	I can answer questions based on a Regg performance extract.
	Syncopation	Syncopation is when the strong accent is placed on what is normally a weak beat.	I can self-assess my performance.
	Reggae	A style of popular music with a strongly accented subsidiary beat, originating in Jamaica. Reggae evolved in the late 1960s	The Ukulele
	ТАВ	The notation system of strings.	
	Melody	The main tune that is plucked.	Frets
	Cho	All strings are strummed.	

Key skills: Reading TAB, Appraisal skills, Sight reading, Composition skills, Ukulele skills-Strumming & Plucking, Articulation

e music.

ble

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Year 8 – Music: Song Writing



<u>Composition –</u>

This topics composition task is to create a piece of music on 'Note Flight'. Below is a link to the 'Note Flight' you tube- this contains videos to assist in using Note Flight. <u>NoteflightVideo - YouTube</u>

Year 8 – Music: Song Writing

Melody terms

Term	Definition
Conjunct	To join together
Disjunct	Disjointed or jumpy rhythms
Melisma	Group of notes sang to one syllable of text
Syllabic	Lyrics that primarily have one syllable of text per note

Further Vocabulary

Symbol	Name	Definition
	Staff	Each line and space represents a note.
4 4	Time signature	This indicates how many beats are in a bar.
	Bar	The two line indicate the start and end of a bar.
	Pop Music	Music that is popular.
	Instrumentation	The instruments in a piece.
	Rhythm	The pattern of sound created by note duration.

Taking it further

<u>Glossary of musical terms - BBC Bitesize</u> Students will choose a key signature to write their song in. Below shows the difficulty of each key.

Beginner	Intermediate	Advanced
C Major	D Major	Db Major
G Major	Bb Major	Ab Major
F Major	A Major	E Major

Lead sheets

Free Rock and Pop Lead Sheets Sheet Music -8notes.com

- https://www.ultimate-guitar.com/ ٠
- https://www.mychordbook.com/ •
- https://chordseasy.com/

Learning checklist

I can I can identify the key elements of a song, including lyrics, melody, harmony, and rhythm.

I can brainstorm and generate creative ideas for song lyrics or

themes I can create a catchy and memorable melody for a

song.

I can use appropriate chord progressions to create an accompaniment that complements the melody and lyrics.

I can layer musical lines to thicken the texture i.e. drums, chords, voice.

Key skills

Composing, keyboard skills, Ukulele skills, Articulation, Technical accuracy, Digital music skills



Product Design – Year 8: Arkitainer

Key Vocabulary

Papers and Boards	Wood pulp formed into sheets. Comes in a range of sizes and thicknesses.
Scale	The size of a model compared to the size of the real product.
Architecture	The designing of buildings or structures.
Area	Height x Width, displayed as unit². E.g. 400mm²
Repurpose	To adapt something for a different use
Orthographic Projection	2D drawing showing a Top (plan) View, Front View and Side View
Isometric Drawing	Accurate drawing technique that uses 90° and 30° lines, measurements can be taken directly off them

Reading Drawings



Converting Units





Scale Conversion -

1:10 - 10 times smaller than the real product.2:1 - Twice the size of the real product.

Area -

Square/rectangle - Height x Width Triangle - (Height x Width) \div 2 Circle - (π x radius)²



 $10\text{mm} \rightarrow 1\text{cm} \rightarrow 0.01\text{m}$ $100\text{mm} \rightarrow 10\text{cm} \rightarrow 0.1\text{m}$ $1000\text{mm} \rightarrow 100\text{cm} \rightarrow 1\text{m}$

Key Skills





Isometric drawing

Orthographic projection



Workshop Skills

nd Cutting Urately (wastage)



Modelling/ Prototyping



Gluing (addition)

1000mm → 10

ic Measuring and marking out accurately

Product Design – Year 8: Arkitainer





Craft knife Safety ruler





Straight cutter

Heat resistant

gloves

Hot glue gun Compass cutter Cutting mat



Abrasive paper Masking tape

Materials

Foamboard Thin sheet of polystyrene sandwiched between paper, used for high-quality model making.

Balsa Liahtweiaht but strong hardwood that can be used for model making.



Wooden Dowel

Cylindrical shaped section of wood. Can be used for reinforcing joints and model making.



Taking it Further

Work through the tutorial videos below to develop your CAD skills.



Signing Up and **Getting Started** https://www.youtube.c om/watch?v=7BJDsbvp FF





Onshape Basics 1, 2, 3

https://www.youtube. com/watch?v=4dTMF 2iLOes&list=PLJdgIIj816 Ryk30CnzWAaX1kbn6 LR3F3L&index=1



D&T Futures - There are plenty of tutorials on the D&T Futures YouTube channel

Learning Checklist

- □ I can describe a range of common materials used in Product Design.
- □ I can measure and mark out materials accurately.
- □ I can explain how scale is used when designing products.
- □ I can select the correct tools and equipment and use them safely in the workshop.
- □ I can use an isometric grid to produce presentation design ideas.
- □ I can explain and understand an orthographic projection.
- □ I can explain the advantages and disadvantages of using CAD software to design products.



Product Design – Year 8: Desk Tidy

Key Vocabulary

Hardwood	A timber from deciduous trees.
Softwood	A timber from coniferous trees.
Manufactured board	Made from wood layers, chips or fibres compressed with glue.
Thermopolymer	A polymer that can be reshaped using heat.
Thermosetting polymer	A polymer that cannot be reshaped using heat.
Jigs	Used to help do the same thing multiple times. Holds the work in place to complete your task without the need to spend long times setting up.
Templates	Used to help to mark out the same shapes multiple times. Means you don't need to spend as long measuring and marking every time.

Wood Joints



Butt Joint Simple to make, weak and not aesthetically pleasing.

2

20mm

2cm

3

Converting Units

mm

0.5 m/m

cm

5mm

0.5cm



Housing Joint Stronger than a butt joint, not aesthetically pleasing.



Mitre Joint Weak, a bit harder to make but much more aesthetically pleasing

6 45mm 100mm 4.5cm

 $10 \text{mm} \rightarrow 1 \text{cm} \rightarrow 0.01 \text{m}$ $100 \text{mm} \rightarrow 10 \text{cm} \rightarrow 0.1 \text{m}$ $1000 \text{mm} \rightarrow 100 \text{cm} \rightarrow 1 \text{m}$

Key Skills



Isometric drawing



Front



Workshop Skills

Orthographic Measuring and projection marking out



Cutting (wastage)



Drilling (wastage)



0.1m

10cm



Laser cutting (wastage)

Line bending (forming)



Product Design – Year 8: Desk Tidy





Taking it Further

Work through the tutorial videos below to develop your sketching and CAD skills.



Click Here





Click Here

Learning Checklist

- □ I can describe a range of common materials used in Product Design.
- □ I know the purpose of a Design Brief and Design Specification.
- □ I can explain a variety of wood joints.
- □ I can measure and mark out materials accurately.
- □ I can select the correct tools and equipment and use them safely in the workshop.
- □ I can use an isometric grid to produce presentation design ideas.
- □ I can explain and understand an orthographic projection.
- I can explain the advantages and disadvantages of using CAM software to manufacture products.
- □ I can use a hot wire strip heater to bend and shape acrylic.



Product Design – Year 8: Fantastic Plastic

Key Vocabulary

Kev Skills	Workshop Skills
Microplastics	Small plastic pieces less than five millimetres long which can be harmful to our ocean and aquatic life.
Fossil fuels	Fuels are found in Earth's crust and contain carbon and hydrogen, which can be burned for energy such as coal, oil, and natural gas
Carbon footprint	The total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions.
Product Lifecycle	The length of time from a product first being introduced to consumers until it is removed from the market.
6 R's of Sustainability	These are all terms related to ways we can lead a more sustainable life and lessen our impact on the environment
Sustainability	Meeting the needs of the present without compromising the ability of future generations to meet their own needs.
Thermosetting polymer	A polymer that cannot be reshaped using heat.
Thermopolymer	A polymer that can be reshaped using heat.





CAD CAM (computer aided (computer aided drawing) manufacturing)

Measuring and marking out

Drilling (wastage)



Laser cutting (wastage)



Line bending (forming)







Product Design – Year 8: Fantastic Plastic



Tools and Equipment



Bench vice Quick clamp Steel ruler



Hand drill





Pillar drill Laser cutter





Strip heater Safety glasses

Materials



Taking it Further

Work through the tutorial videos below to develop your sketching and CAD skills.



<u>Click Here</u>



Click Here

Learning Checklist

- □ I can describe a range of common materials used in Product Design.
- □ I can explain sustainability and the 6 R's.
- □ I can measure and mark out materials accurately.
- □ I can select the correct tools and equipment and use them safely in the workshop.
- □ I can use various strategies to produce presentation design ideas.
- I can explain the advantages and disadvantages of using CAD and CAM software to manufacture products.
- $\hfill\square$ I can use a hot wire strip heater to bend and shape acrylic .

Click Here



Product Design – Year 8: Arkitainer

Key Vocabulary

Papers and Boards	Wood pulp formed into sheets. Comes in a range of sizes and thicknesses.
Scale	The size of a model compared to the size of the real product.
Architecture	The designing of buildings or structures.
Area	Height x Width, displayed as unit². E.g. 400mm²
Repurpose	To adapt something for a different use
Orthographic Projection	2D drawing showing a Top (plan) View, Front View and Side View
Isometric Drawing	Accurate drawing technique that uses 90° and 30° lines, measurements can be taken directly off them

Reading Drawings



Converting Units





Scale Conversion -

1:10 - 10 times smaller than the real product.2:1 - Twice the size of the real product.

Area -

Square/rectangle - Height x Width Triangle - (Height x Width) \div 2 Circle - (π x radius)²



 $10\text{mm} \rightarrow 1\text{cm} \rightarrow 0.01\text{m}$ $100\text{mm} \rightarrow 10\text{cm} \rightarrow 0.1\text{m}$ $1000\text{mm} \rightarrow 100\text{cm} \rightarrow 1\text{m}$

Key Skills





Isometric drawing

Orthographic projection



Measuring and Cutting marking out accurately (wastage)



Modelling/ Prototyping



Gluing (addition)

1000mm → 10

Workshop Skills

Product Design – Year 8: Arkitainer





Craft knife Safety ruler





Straight cutter

Heat resistant

gloves

Hot glue gun Compass cutter Cutting mat



Abrasive paper Masking tape

Materials

Foamboard Thin sheet of polystyrene sandwiched between paper, used for high-quality model making.

Balsa Liahtweiaht but strong hardwood that can be used for model making.



Wooden Dowel

Cylindrical shaped section of wood. Can be used for reinforcing joints and model making.



Taking it Further

Work through the tutorial videos below to develop your CAD skills.



Signing Up and **Getting Started** https://www.youtube.c om/watch?v=7BJDsbvp FF





Onshape Basics 1, 2, 3

https://www.youtube. com/watch?v=4dTMF 2iLOes&list=PLJdgIIj816 Ryk30CnzWAaX1kbn6 LR3F3L&index=1



D&T Futures - There are plenty of tutorials on the D&T Futures YouTube channel

Learning Checklist

- □ I can describe a range of common materials used in Product Design.
- □ I can measure and mark out materials accurately.
- □ I can explain how scale is used when designing products.
- □ I can select the correct tools and equipment and use them safely in the workshop.
- □ I can use an isometric grid to produce presentation design ideas.
- □ I can explain and understand an orthographic projection.
- □ I can explain the advantages and disadvantages of using CAD software to design products.



Product Design – Year 8: Desk Tidy

Key Vocabulary

Hardwood	A timber from deciduous trees.
Softwood	A timber from coniferous trees.
Manufactured board	Made from wood layers, chips or fibres compressed with glue.
Thermopolymer	A polymer that can be reshaped using heat.
Thermosetting polymer	A polymer that cannot be reshaped using heat.
Jigs	Used to help do the same thing multiple times. Holds the work in place to complete your task without the need to spend long times setting up.
Templates	Used to help to mark out the same shapes multiple times. Means you don't need to spend as long measuring and marking every time.

Wood Joints



Butt Joint Simple to make, weak and not aesthetically pleasing.

2

20mm

2cm

3

Converting Units

mm

0.5 m/m

cm

5mm

0.5cm



Housing Joint Stronger than a butt joint, not aesthetically pleasing.



Mitre Joint Weak, a bit harder to make but much more aesthetically pleasing

6 45mm 100mm 4.5cm

 $10 \text{mm} \rightarrow 1 \text{cm} \rightarrow 0.01 \text{m}$ $100 \text{mm} \rightarrow 10 \text{cm} \rightarrow 0.1 \text{m}$ $1000 \text{mm} \rightarrow 100 \text{cm} \rightarrow 1 \text{m}$

Key Skills



Isometric drawing



Front



Workshop Skills

Orthographic Measuring and projection marking out



Cutting (wastage)



Drilling (wastage)



0.1m

10cm



Laser cutting (wastage)

Line bending (forming)



Product Design – Year 8: Desk Tidy





Taking it Further

Work through the tutorial videos below to develop your sketching and CAD skills.



Click Here





Click Here

Learning Checklist

- □ I can describe a range of common materials used in Product Design.
- □ I know the purpose of a Design Brief and Design Specification.
- □ I can explain a variety of wood joints.
- □ I can measure and mark out materials accurately.
- □ I can select the correct tools and equipment and use them safely in the workshop.
- □ I can use an isometric grid to produce presentation design ideas.
- □ I can explain and understand an orthographic projection.
- I can explain the advantages and disadvantages of using CAM software to manufacture products.
- □ I can use a hot wire strip heater to bend and shape acrylic.



Religious Education – Year 8: Topic 1 'Creation'

Key Vocabulary

Fact (Non-Fiction)	A true story telling of actual events	
Myth (Fiction)	A made-up story to entertain or try to explain how something happened.	World Relig
Legend	Based on a factual story but has been added to and exaggerated.	
Parable	A story with a meaning or moral message.	
Creation Story	The religious explanation of how the word was created.	
Cosmology	The scientific study of the origins of the universe.	
Big Bang	The accepted scientific theory of how the Universe was created.	The ultimate questions upo
Evolution	The scientific theory about the origins of life on Earth.	be reflecting
Genesis	The First book of the Bible which tells the story of how the world was created.	What do the different World F How did the world Reliaions B
Rig Veda	The Hindu Holy book that contains the story of creation.	Why are we here?
Theology	The study of beliefs about God.	Why do people suffer?
Creationist	A person who accepts the religious explanation for the creation of the universe.	Do we have a soul?
Stewardship	The belief that God created the world and put Humans in charge of it, to care for it.	What is the meaning of life ?
Dominion	The belief that God created the world for Humanity to use however it wants.	What does it mean to be spiri How was the world created?





ne ultimate questions upon which we will e reflecting

Vhat do the different World Religions believe? low did the world Religions Begin (Founders)? Vhy are we here? there a God ? Vhy do people suffer? o we have a soul? there an afterlife ? Vhat is the meaning of life ? Vhat does it mean to be spiritual?



Religious Education Key Skills we will be developing in Year 8

- A Knowledge and understanding of the key events of the stories of Creation.
- B Awareness of the influence that beliefs in the creation of the universe have on people today.
- C Comparison of similarities and differences in and between the various creation stories.
- D Sense of personal identity and community. To reflect on the concept of Stewardship as a focus for caring for the Environment.
- E Reflection and evaluation To reflect on the creation

stories and decide on which they find the most convincing and why?

Creation Stories studied in Year 8

The Six Days of Creation Story



The Hindu Creation Story



The Adam and Eve Story



The Big Bang and **Evolution Theories**



Religious Education – Year 8: Topic 1 'Creation'

Key Concepts to be examined in the Founders Topic

The Six Days of Creation – Genesis Ch1 God made the **DAYS OF CREATION** THE FIRST BOOK OF MOSES, GENESIS IN GENESIS ONE world from nothing. God made the world in six days. Humans are made in God's Image Stewardship.

The Story of Adam and Eve – Genesis Ch2.



Hindu Creation

Story

- Humanity is made in God's Image.
- Temptation.
- Sin.
- Good and Evil. Salvation.



The Hindu Creation Story.

- **Rig Veda**
- Brahma the Creator
- Vishnu the Preserver
- Shiva as Judge.
- Lotus Flower
- Reincarnation



The Big Band and Evolution.

- Cosmoloav Evidence
- **Stephen Hawking**
- **Charles Darwin**
- Evolution
- Theory



Taking it Further – YouTube Introductions

You can watch these videos as an introduction to Creation Stories.

Click Here C is for creation **Click Here** Christian Creation Hindu Creation **Click Here** The Big Bang **Click Here** D is for Darwin



Taking it Further – BBC Bitesize

You can use these links to find out more about the Creation Stories.

Christian Creation **Click Here** Hindu Creation **Click Here** Big Bang **Click Here Evolution Click Here**



Learning Checklist

- I can define the words, Fact, Myth, Parable and Legend. I know the Six days of Creation story. (Genesis Ch1) I Know the Adam and Eve Story. (Genesis Ch1) I know the Hindu Story of Creation (Rig Veda) I understand the Scientific Theories of the Big Bang and Evolution. I understand the concepts of Stewardship and Dominion. I am able to reflect on my own understanding of how the Universe was created and the evidence that supports my view.

Religious Education – Year 8: Topic 2 'Festivals'

Key Vocabulary

Easter	Christian festival celebrating Jesus' resurrection. 21 st March – 25 th April.
Resurrection	Raising from the dead.
Paschal Candle	Large candle lit and blessed during Holy Week of Easter and put on a church altar.
Vaisakhi	Sikh Harvest festival celebrated on 13 th /14 th of April.
Diwali	Festival of Light - Hindus and Sikhs celebrate good overcoming evil.
Pesach	Passover – Jewish festival remembering the escape from slavery in Egypt.
Seder	Traditional meal eaten on the first evening of Passover in Judaism.
Eid-al-Fitr	Muslim festival which marks the end of fasting and Ramadan.
Eid-al-Adha	Muslim festival which marks the end of the annual pilgrimage to Mecca.
Ramadan	Muslim month of fasting.
Crucifixion	Jesus was executed nailed to a cross.
Sacrifice	Giving something up.
Hajj	Muslim pilgrimage to Mecca.
Reflection	Serious thought or consideration.
Meditation	Focusing on something to clear the mind. For example, a religious truth.





The ultimate questions upon which we will be reflecting

What do the different World Religions believe? How did the world Religions Begin (Founders)? Why are we here? Is there a God ? Why do people suffer? Do we have a soul? Is there an afterlife ? What is the meaning of life ? What does it mean to belong (Festivals)? How was the world created?



Religious Education Key Skills we will be developing in Year 8!

- A Knowledge and understanding of the key events which started the festivals.
- B Awareness of the influence of the celebrations and traditions of the festivals on followers of the religions today.
- C Comparison of similarities and differences in and between festivals.
- D Sense of personal identity and community found within the festivals.
- E Reflection and evaluation of what are the meanings of the festivals as an inspiration for people today?

Religious Festivals studied in Year 8

Easter/Holy Week

Eid-al-Fitr / Eid-al-Adha



Pesach / Seder meal





Vaisakhi/ Diwali



Religious Education – Year 8: Topic 2 'Festivals'

Key Concepts to be examined in the Festivals Topic



Easter and Holy Week

- Last week of Jesus' life
- Light Paschal Candle
- Jesus' trial, crucifixion and resurrection
- Easter Vigil and reflection



Vaisakhi and Diwali



- Good overcoming Evil
- Release of Guru Har Gobind from prison



Pesach / Passover.



ubasak



- Seder Meal
- Cleaning / Chametz
- Matzah bread
- Shabbat



Ramadan, Eid-al-Fitr and Eid-al-Adha.

- Ramadan
 - FastingQuran
 - Sacrifice
 - 5 Pillars
 - 5 Pillars





Taking it Further – YouTube Introductions

You can watch these videos as an introduction to Festivals.

Easter Story Easter Celebration Vaisakhi Celebration Ramadan & Eid Pesach (Passover)



Taking it Further – BBC Bitesize

You can use these links to find out more about the Festivals.

Easter	Click Here
Eid-ul-Adha & Eid-ul-Fitr	Click Here
Vaisakhi	Click Here
Pesach (Passover)	Click Here



Learning Checklist

- □ I can name the Festivals of Christianity, Sikhism, Judaism and Islam.
- □ I know the story or event behind each Festival studied.
- □ I Know the main ways each Festival is celebrated by followers.
- □ I understand the meaning of the Festivals for believers today.
- □ I understand the concepts of Fasting and Sacrifice.
- □ I am able to reflect on the main reasons that make each of the Festivals relevant to believers today.



Year 8 Physics

Keyword List	Physics term 1 checklist
Permanent magnet – a object with a permanent magnetic field	To understand properties of a permar
Magnetic field – region around a magnet showing magnetism force	Name magnetic materials
Longitudinal wave – a wave vibrating in a direction if motion	State that magnets have both north o
Transverse wave – a wave where the medium vibrates at right angels	Be able to draw a magnetic field arou
Amplitude – how high one wave is	Describe how to make an electromag
Frequency – number of waves per second	State ways we can increase the stren
Crest – peak or top point of a transverse wave	Sidie ways we can increase the silen
Trough – bottom point of a transverse wave	State how sound travels
Electromagnet – a magnet made using current/power source	Label a transverse wave
Reflection – the bounce back of light without absorption	Describe how to show reflection using
Refraction – change in direction of wave through a medium	Describe how refraction works using a
Incidence ray – the ray of light coming into an object	Be able to show the composition of w

Reflected ray – the ray coming off an object

Physics term 1 checklist
To understand properties of a permanent magnet
Name magnetic materials
State that magnets have both north and south poles
Be able to draw a magnetic field around a magnet
Describe how to make an electromagnet
State ways we can increase the strength of an electromagnet
State how sound travels
Label a transverse wave

a ray diagram

a ray diagram

Be able to show the composition of white light using a glass prism and ray box

Physics – Magnets

Magnets

Magnetic materials (Not all metals). Only three metals (Iron, Cobalt, Nickel) can be used in making magnets and be attracted by a magnet. Alloys containing iron are also magnetic (Steel).

Magnets have two ends called the North and South Poles. Magnets also produce a force field which means they can produce a force on something without touching it. Called a non-contact force



North + North = Repel South + North = Attract

Electromagnets

When current passes through a wire it creates a maanetic field which can be detected using a plotting compass.



When the wire is made into a coil, it can increase the strength of the magnetic field produced. If a soft iron is placed in the middle of the coil and current passed through



the wire, an electromagnet is made which can be turned on or off to attract magnetic materials such as nails or not.

Magnetic fields and the Earth

Magnetic field lines show where magnetic forces act as well as the strength of the field. It always goes from **North** to South and strongest where the lines are closest.

north and south.

fillinas

be produced using





- Magnetic field lines can plotting compasses or iron
- The strength of the electromagnet depend on a number of factors:
- the number of turns of the coil
- The magnetic material in the coil
- The amount of current flowing through the wire

Uses of Electromagnets

Electromagnets have found many uses in industry and our homes. It has been used in scrap yards to pick engines and vehicles and bit of iron.



Electric speake bell



applications in electric / magnetic doors, loud speakers, microphones and electric bells.

Physics – Waves

The Speed of Light

Light travels fastest in a vacuum – a vacuum doesn't contain anything. Longitudinal waves

Speed of light = $3 \times 10^8 \text{ m/s}$

White light





Reflection

Light rays reflect of different surfaces:

Angle of incidence = Angle of reflection

We use a protractor to measure angles.



Refraction

REFRACTION – when a wave changes direction (bends) as it crosses a boundary between one medium and another.



Light travels through transparent materials e.g. glass



Year 8 Chemistry



Keyword List	Chemistry term 1 checklist	
Malleable – the ability to bend a material into shape	Position of metals and non-metals on the periodic	
Conductor/insulator – to be able to/no be able to transfer heat or electricity	table	
Sonorous – an object which makes a ringing sound when hit	Properties of metal and non-metal elements	
Acid - a substance which has a pH ranging from 0-6	Describe the reactivity of Group 1 alkali metals	
Base – a substance which can neutralise an acid		
Alkali – are bases which can dissolve in water	Describe the reactivity of Group 7 the halogens	
Neutral/ Neutralisation – a substance which has a pH of 7		
Concentrated – a substance which has more water particles then solute	Describe the properties of oxides	
Dilute – a substance which has less water particles then solute	State the difference between an acid, alkali and	
pH – ranges from 0-14 to show if a substance is an acid, alkali or neutral	Understand parts of the pH scale and give some examples of items	
Indicator – a substance to show the pH of another substance		
Chemical change – a reaction which cannot be reversed	Define a neutralisation reaction	
Physical change – a reaction which can be reversed	Name different salts	
Conservation of Mass – the law that the mass of a reaction is the same at the start and at the end	Describe the differences between chemical and physical changes	
Exothermic – a reaction which releases energy		
Endothermic – a reaction which takes energy in	Be able to write equations for acid reactions	
Combustion – a reaction which burns fuel with oxygen to give carbon dioxide and water	Define the terms exothermic and endothermic reaction	
Oxidation – a reaction where oxygen is added		
Decomposition – when a substance breaks down into smaller substances	State what is meant by conservation of mass	
Thermal decomposition - when a substance breaks down into smaller substances using heat	Describe reactions for thermal decomposition, oxidation and combustion	

Chemistry – Metals and non-metals

Most elements in the periodic table are metals and these are found on the left-hand side of the periodic table



Property	Metals	Non-metals
Appearance	Shiny	Mostly dull
Melting/boiling point	High (solid at room temp. except mercury)	Generally low (about half are gases)
Density	High	Low
Strength	Strong and malleable (can bend)	Weak and brittle (shatter when hit)
Conduction	Good conductors of heat and electricity	Poor conductors (good insulators) except carbon
Sound when hit	Ringing sound (sonorous)	Non-sonorous

Metal oxides are bases. Group 1 – alkali metals Soft, shiny, low density (some float on water) and very reactive.



More reactive as you move down the group. React with water to form metal hydroxides. Non-metal oxides are often gases and make acidic solutions.

Group 7 – the halogens.

Less reactive as you move down the group. Low melting and boiling points.

Chemistry – Acids and Alkalis

What are acids and bases?

Acid – Corrosive substance with a pH lower than 7.

Base – A substance that reacts with an acid to neutralise it and produce a salt.
Alkali – A base that dissolves in water.
Neutral – A substance that is not acid or alkaline.

Acids	Alkalis	Neutral
Vinegar	Soap	Water
Fruit Juice	Oven Cleaner	Cooking oil

pH Scale and Universal Indicator

Indicators

Indicators – A substance that will change colour depending on if a substance is acid or alkali.

*

Litmus paper can be red or blue.



Blue litmus turns red in acid Red litmus turns blue in alklali

Universal indicator solution show what colour a certain pH is:



pH Scale – number scale from 0-14 telling us how acid or alkaline a substance is. Neutral substances are exactly pH 7 | Acids have a pH of less than 7 | Alkalis have a pH of more than 7.

The further from 7 the stronger the acid or alkali.

Chemistry – Acids and Alkalis

Rules for Naming Salts

Salts always have **two** names. **First name – metal** taken from the **base**.

E.g. Salts made with **sodium** hydroxide will always start with **sodium**.

Second name – comes from the type of **acid** used.

Hydrochloric acid – chloride Sulfuric acid – sulfate Nitric acid – nitrate

Making a Neutral Solution

To make a neutral solution you need to mix together **exactly** the right amount of acid and alkali.

An indicator is needed to know when we have added the right amount. Universal indicator will turn **green**.



Neutralisation Reactions

If you mix an acid and base together a **neutralisation** reaction occurs. A **neutral** solution is made.

 $\textbf{Acid} + \textbf{Base} \rightarrow \textbf{Salt} + \textbf{Water}$

 $\textbf{Acid} + \textbf{Metal} \rightarrow \textbf{Salt} + \textbf{Hydrogen}$

 $\label{eq:acid} \mbox{Acid} + \mbox{Carbonate} \rightarrow \mbox{Salt Water} + \mbox{Carbon} \\ \mbox{dioxide}$

Concentrated and Dilute

acid
water



Dilute Many water particles to few acid particles. Often irritant

Chemistry – Types of Reaction

Chemical and Physical Reactions

Physical Changes

In a physical reaction the atoms are simply moved or their pattern is rearranged. They are reversible changes.

Example: State changes



Conservation of Mass

CONSERVATION – something is being saved and is not lost

Conservation of Mass

We cannot create mass and we cannot lose mass, so whatever we start with must be there at the end.

This is called Conservation of Mass.

Example:

lron + Oxygen → lron oxide 0.52g + 1.14g → 1.66g

Chemical Changes

In a chemical reaction, the bonds between the atoms are broken and the atoms put back together differently. This produces something new. This is not easily reversible.



Thermal Decomposition

DECOMPOSITION – when something is broken down into smaller pieces

Thermal Decomposition

Thermal decomposition reactions are when a compound is broken down using heat.

You start with a compound and end with 2 or more products.

When a metal carbonate decomposes under heat, it produces a metal oxide and carbon dioxide.

Metal carbonate \rightarrow Metal oxide + carbon dioxide

Chemistry – Types of Reaction

Exothermic and Endothermic Reactions

EXOTHERMIC REACTIONS Reactions that release energy are called exothermic.

Exo = give out, exit -thermic = heat, heat energy

Therefore, exothermic reactions feel like they get hotter (their temperature increases).



Example:

- Camp fire
- Rusting
- Respiration

Oxidation and Combustion

Oxidation

Oxidation is the addition of oxygen.

Example: Rusting is an example of an oxidation reaction.

iron + oxygen \rightarrow iron oxide

ENDOTHERMIC REACTIONS Reactions that need to take in energy are called endothermic.

Endo = inside -thermic = heat, heat energy

Therefore, endothermic reactions feel like they get cooler (their temperature decreases).



- Example: • Photosynthesis
- Cooking an egg
- Baking bread

Combustion

When a fuel combusts (burns), it combines with oxyge from the air and makes a new substance. The general word equation for this reaction is: Fuel + oxygen → carbon dioxide + water





Biology – Key terms and Checklist

Biology term 1 checklist

Understand what is meant by a healthy diet

State the purpose of different diet food categories

Understand the pathway of food in the digestive systems

Describe the function of organs in digestion

Understand the parts of the body involved in movement

Name parts of the human skeleton

Describe the purpose of muscles in movement



Year 8 Biology

Keyword List

- Diet the combination of food and drink an organism consumes
- Protein a biological molecule which help growth and repair
- Fats a biological molecule which is used as an energy store
- Carbohydrates a biological molecule used for energy, growth and repair
- Vitamins nutrients which help overall health
- Minerals nutrients which help overall health
- Fiber helps the digestive system
- Digestive system/Digestion the process of breaking down food
- Oesophagus the organ which carries food to the stomach
- Liver organ responsible for break down substances and storing glucose
- Pancreas organ responsible to control sugar
- Small intestine organ responsible for absorbing nutrients from food
- Skelton the basic unit which makes up most living organisms
- Muscle cover the skeleton and function to contract and relax
- Ligaments connect one bone to another bone
- Femur a human thigh bone
- Pelvis bone which makes up the hip
- Ulna lower arm bone
- Humerus upper arm bone
- Rib cage bones which protect the heart and lungs
- Tendons connect bones to muscle

Biology – Digestion



Healthy diet and food groups



$\begin{array}{c} \text{Journey of food} \\ \text{Mouth } \rightarrow \text{oesophagus} \rightarrow \text{stomach} \rightarrow \text{small intestine} \rightarrow \text{large intestine} \rightarrow \text{rectum} \rightarrow \text{anus} \end{array}$

Biology – Movement



The skeleton

The skeleton has 4 main functions:

- Support
- Protection of the organs
- Movement
- Making blood cells

Where bones meet there are joints such as **hinge joints**, **ball and socket joints** and **fused joints**.

Muscles



Muscles move the bones in the skeleton by contracting and relaxing

Ligaments and tendons



4 R's And Scientific Vocabulary

Revision is a very important part of education and here at Highfields we break it down into the 4 R's:

- 1. Revisit after a set time, come back to review past content
- 2. **Reduce** summarise content learnt into smaller pieces e.g. mind map, flashcards, abbreviation and acronyms
- 3. Rehearse practice learning the information
- 4. Retrieve bringing back and remembering content learnt in the past 🗱

Key scientific vocabulary which is important throughout all years of Science and during practical work:

- Independent variable: variable which is purposely changed in an experiment.
- **Dependent variable:** variable which is measured in an experiment.
- **Control variable:** variables which are kept the same throughout an experiment.
- **Reliability:** how trustworthy the result are. We increase this by repeating an experiment.
- Accuracy: how close a result is to its true value.
- Validity: How suited the method used in an experiment is for the purpose.
- Average: adding up the values and dividing the value by how many they are
- Anomaly: an odd result, which does not fir the pattern of results.
- Data: the results from an experiment



Year 8 – Computer Science: Python





Specification:

"Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems."

"Use 2 or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables, or arrays]; design and develop modular programs that use procedures or functions."

"Understand simple Boolean logic [for example, and, or and not]"

Key Information:

Algorithm	An algorithm is a plan, a set of step-by-step instructions to resolve a problem.	Remember that in Scratch you are creating an algorithm whenever you start a new project.
Decomposition	Decomposition helps by breaking down complex problems into more manageable parts.	When you create your quiz in Scratch you will be breaking down that problem into smaller steps.
Variable	A variable is a storage location that can change.	age = 21 subject = "Computer Science"
Casting	Converting a variable from one data type to another is called casting.	age = "21" age = int(age) age = 18 age = str(age)

Year 8 – Computer Science: Python



Midpoint low stakes assessment on Microsoft Forms. Python programming practical standard assessment at the end of the unit.

Take it Further:

https://www.101computing.net/category/python-beginner/

Support: https://www.csnewbs.com/keystage3 https://www.w3schools.com/python/



Sequence ? - O ? - O O	When designing algorithms, it is important to make sure that all the steps are presented in the correct order. This is known as sequencing and can be displayed in pseudocode or flowcharts.	<pre>def ticketprice(adultTicket, childTicket): adult = 19.99 child = 8.99 totalAdult = adultTicket * adult totalChild = childTicket * child total = totalAdult + totalChild + 2.50 return total print(ticketprice(6,10))</pre>
Selection	Selection is a decision or question. At some point in an algorithm there may need to be a question because the algorithm has reached a step where one or more options are available. Depending on the answer given, the algorithm will follow certain steps and ignore others.	<pre>age = 18 if age == 18: print("You are 18") else: print("You are not 18")</pre>
Data Types	 String – A sequence of alphanumeric characters (e.g. "Hello!" or "Toy Story 4" or "Boeing 747") Integer – A whole number (e.g. 1470 or 0 or -34) Float (also called Real) – A decimal number (e.g32.12 or 3.14) Boolean – A logical operation (True or False) 	film = "Toy Story" year = 2023 pi = 3.14

Year 8 – Computer Science: Scratch





Specification:

"Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems."

"Use 2 or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables, or arrays]; design and develop modular programs that use procedures or functions."

"Understand simple Boolean logic [for example, and, or and not]"

"Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design, and usability.

Key Information:

Algorithm	An algorithm is a plan, a set of step-by-step instructions to resolve a problem.	Remember that in Scratch you are creating an algorithm whenever you start a new project.	
Decomposition	Decomposition Decomposition helps by breaking down complex problems into more manageable parts.		
Variable	A variable is a storage location that can change.	set number - to 10	

*

Year 8 – Computer Science: Scratch



Assessment:

•Midpoint low stakes assessment on Microsoft Forms /10 •Written standard assessment at the end of the unit /20

Take it Further:

https://thepixelgang.co.uk/free/index.php https://www.codewizardshq.com/scratch-tutorial-for-kids/

Support: https://www.bbc.co.uk/bitesize/topics/z7d634j https://scratch.mit.edu/ https://classroom.thenational.academy/units/programmingessentials-in-scratch-part-i-b4aa https://classroom.thenational.academy/units/programmingessentials-in-scratch-part-ii-02a3



Sequence	When designing algorithms, it is important to make sure that all the steps are presented in the correct order. This is known as sequencing and can be displayed in pseudocode or flowcharts.	when a cloud say Helic for 2 seconds say fim Big Ed from the year 2182 for 4 seconds mak What's your name? and wat set name to anower say foin (Helic) name for 2 seconds
Selection	Selection is a decision or question. At some point in an algorithm there may need to be a question because the algorithm has reached a step where one or more options are available. Depending on the answer given, the algorithm will follow certain steps and ignore others.	if weather = warm then say Enjoy the nice weather for 2 seconds else say Put your coat on for 2 seconds say Have a nice day for 2 seconds
Iteration	Iteration in programming means repeating steps, or instructions, repeatedly. This is often called a 'loop'.	when Clicked repeat 24 move 30 steps turn C ^a 15 degrees

Year 8 - Viva 2 Module 2: Todo sobre mi vida (All about my life)



¿Qué haces con tu móvil?	What do you do with your mobile?
Chateo con mis	I chat with my friends
amigos	
Comparto mis vídeos	l share my favourite
favoritos	videos
Descargo melodías o	I download ringtones
aplicaciones	or apps
Hablo por Skype	I talk on Skype
Juego	l play
Leo mis SMS	I read my texts
Mando SMS	I send texts
Saco fotos	I take photos
Veo vídeos o películas	I watch videos or films
¿Qué tipo de música te gusta?	What type of music do you like?
;Qué tipo de música te gusta? El rap	What type of music do you like? Rap
¿Qué tipo de música te gusta? El rap El R'n'B	What type of music do you like? Rap R'n'B
¿Qué tipo de música te gusta? El rap El R'n'B El rock	What type of music do you like? Rap R'n'B Rock
¿Qué tipo de música te gusta? El rap El R'n'B El rock La música clásica	What type of music do you like? Rap R'n'B Rock Classical music
¿Qué tipo de música te gusta? El rap El R'n'B El rock La música clásica La música electronica	What type of music do you like? Rap R'n'B Rock Classical music Electronic music
;Qué tipo de música te gusta? El rap El R'n'B El rock La música clásica La música electronica	What type of music do you like? Rap R'n'B Rock Classical music Electronic music Pop music
¿Qué tipo de música te gusta? El rap El R'n'B El rock La música clásica La música electronica La música pop ¿Qué tipo de música te gusta?	What type of music do you like? Rap R'n'B Rock Classical music Electronic music Pop music What type of music do you like?
¿Qué tipo de música te gusta? El rap El R'n'B El rock La música clásica La música electronica La música pop ¿Qué tipo de música te gusta? Escucho rap	What type of music do you like? Rap R'n'B Rock Classical music Electronic music Pop music What type of music do you like? I listen to rap
¿Qué tipo de música te gusta? El rap El R'n'B El rock La música clásica La música electronica La música pop ¿Qué tipo de música te gusta? Escucho rap Escucho la música de Adele	What type of music do you like?RapR'n'BRockClassical musicElectronic musicPop musicWhat type of music do you like?I listen to rapI listen to Adele's music



Me gustan las comedias	I like comedies
Un programa de música	a music programme
Un programa de deportes	a sports programme
Un concurso	a game show
Un documental	a documentary
Un reality	a reality show
Una comedia	a comedy
Una serie policíaca	a police series
Una telenovela	a soap opera
El telediario	The news
Los concursos	Gameshows
Más que	Morethan
Divertido	Funny
Informativo / informativa	Informative
Interesante	Interesting
Aburrido / aburrida	Boring
Emocionante	Exciting
Entretenido / entretenida	entertaining
Una pérdida de tiempo	A waste of time
Es	it is
Son	They are

¿Con qué frecuencia?	How often?
Todos los días	Everyday
Dos o tres veces a la	Twice or three
semana	times a week
A veces	Sometimes
De vez en cuando	From time to time
Nunca	never

Palabras muy frecuentes	Frequently used words
Así que	So (that)
Más que	More than
mi / mis	my
Su / sus	His / her
Normalmente	Normally
No	No, not
Nunca	Never
0	Or
Porque / dado que	Because
También / además	Also, furthermore
sin embargo	however

Year 8 - Viva 2 Module 2: Todo sobre mi vida (All about my life)



Gramática

When you want to compare two things, you use the comparative.

más + adjective + que... more... than...

The adjective must agree with the noun.

Los realitys son más divertidos que los concursos. Reality shows are funnier than game shows.

Las series policíacas son más aburrid<mark>as que</mark> las telenovelas.

Police series are more boring than soap operas.

≥≥ p46

¿Qué <mark>hiciste</mark> ayer?	What did you do yesterday?
Bailé en mi cuarto	I danced in my bedroom
Fui al cine	I went to the cinema
Hablé por Skype	I talked on Skype
Mandé SMS	I sent texts
Monté en bici	l rode my bike
Hice gimnasia	I did gymnastics
Hice karate	l did karate
<mark>Jugué</mark> en línea con mis amigos	I played online with my friends
Jugué tres horas.	I played (for) three hours
Vi una película	l watched a film
<mark>Bebí</mark> una limonada	l drank a lemonade
Comí paella	l ate paella
Salí con mis amigos	I went out with my friends
No hice mis deberes	I did not do my homework
Ayer	Yesterday
Luego	Then
Por la mañana	In the morning
Por la tarde	In the afternoon
Un poco más tarde	a little later

Opiniones	Opinions
Me gusta(n)	l like
Me gusta(n) mucho	I really like
Me encanta(n)	l love
No me gusta(n)	I don't like
No me gusta(n) nada	I really don't like
La letra	the lyrics
La melodía	the tune
El ritmo	the rhythm
porque es	Because it is
Guay	Cool
Triste	Sad
Horrible	Horrible
¿Te gusta la música de One Direction?	Do you like the music of 1D?
Mi canción favorita	My favourite song
Mi cantante favorito/a	My favourite singer
Mi grupo favorito	My favourite group
En mi opinión	In my opinion

Year 8 - Viva 2 Module 2: Todo sobre mi vida (All about my life)



Gramática Preferir (to prefer) is a stem-changing verb. Some people call these 'boot' verbs. prefiero I prefer preferimos we prefer

prefieres

res you prefer he/she prefers

fers preferime

you (plural) prefer

Present tense regular verbs

To conjugate / change the verb from Infinitive (ending in -ar, -er, ir)... You need to take off the "-ar, -er, -ir," of the verb and then add the relevant endings depending on who you are talking about.

AR	adivinar	ER	creer	IR	discutir
en inglés	to guess	en inglés	to believe	en <u>inglés</u>	to discuss
L.	adivin o	I.	<u>cre</u> o	I.	discut o
You (sing)	adivin as	You (sing)	cre es	You (sing)	discut es
He/She/It	adivina	He/She/It	<u>cre</u> e	He/She/It	discut e
We	adivin amos	We	cre emos	We	discut imos
You (lot)	adivin áis	You (lot)	cre éis	You (lot)	discut ís
They	adivin an	They	cre en	They	discut en

Grade Criteria

1 Understand and produce a few short sentences with support and using **frequently used** verbs.

2 Understand and produce several short, linked sentences (**pero**, **también**, **y**) including giving **opinions**.

3 Understand and produce short texts referring to **two-time frames**. These should include **justified opinions**.

4 Understand and produce short texts referring to **Past**, **Present and Future**. Link work with connectives and include **justified opinions** 5 Understand and produce coherent longer texts including **lots of** personal opinions and justification in **at least three tenses**. Link sentences and paragraphs with **a range of connectives**.

Module 2 Complete Blooket link https://dashboard.blooket.com/se t/629f02c92c35ab87743d08e6

Module 2 Complete Quizlet link



YEAR 8 TERM 1 GEOGRAPHY: BQ1 – Is our world unequal?

What is development?

Development: Development in geography is the continued improvement in **quality of life.**

Measuring Development

Access to safe water	The percentage of people who have access to safe, clean water.
Birth rate	The number of live births per 1,000 people. Birth rates are often high in a less developed country.
Death rate	The number of deaths per 1,000 people. High death rates can indicate a less developed country.
GNI per capita	Gross national income per person. The value of a country's income, divided by the number of people in that country.
Infant mortality rate	The number of babies who don't survive to the age of 1 per 1,000 live births.
Life expectancy	The average age that a person may live to.
Literacy rate	The percentage of adults who can read and write.
People per doctor	A ratio to show the number of people per doctor. A lower ratio can indicate a richer country.
Human Development Index (HDI)	A better measure of development using 3 elements living standards, health and education.

What causes poverty?

- Location.
- Politics
- War
- Gender Inequality
- Climate
- Natural hazards
- A lack of Access to education and healthcare

KEYWORDS



Common misconception

Countries are either rich or poor – There are inequalities within countries even within HICs.

Inequalities do not exist in the UK – The UK is no exception. There are people living in relative poverty in the UK. **READ THIS**

https://www.bbc. co.uk/bitesize/top ics/zvwtsbk/articl es/zbcajsa





YEAR 8 TERM 1 GEOGRAPHY: BQ2 – Why is Planet Earth so restless?

KEYWORDS	The layers of the Earth The Earth is made up of 4 main lar mantle and then crust. There are 2 and oceanic.	yers; inner core; outer core; 2 types of crust, continental	Why do plates move	?
Tectonic Plate	These are pieces of the rocky outer layer of the Earth known as the crust.	Constructive margin	2 ³⁹ convection convection traction	nvection traction
Continental Drift	The gradual movement of the continents across the earth's surface through geological time.		Convection currents are a c warmer material; when soft	current of rock is heated
Convection Current	The rising, spread, and sinking of gas, liquid, or molten material caused by the application of heat		from below, the warmer ma convection current	aterial rises in a
Primary Effect	These occur in the minutes and hours after the natural disaster.	Destructive margin		READ THIS
Secondary Effect	Happen because of the primary effect. These occur in the days, weeks and months after the natural disaster.		Earthquakes can be predicted – Currently there are no ways to predict when an parthquake will	c.co.uk/bitesiz e/topics/zn476 sg/articles/zc4r cmn?course=z armtrd
Earthquake	A sudden violent movement of the Earth's surface.	- www.	 happen. Volcances are always 	https://www.bb
Focus	The location that the earthquake starts.		explosive. Some volcanoes only erupt	c.co.uk/bitesiz e/topics/zn476
Epicentre	The point directly above the focus.		lava which can be	sg/articles/z9k
Seismic waves	The waves of energy caused by the earthquake.	Conservative margin	controlled by digging trenches.	<u>496f?course=zc</u> <u>rmtrd</u>
Volcano	Openings or cracks in the lithosphere where magma from inside the Earth can escape onto the surface.		cause damage in HICs – Hazards mainly cause economic damage to	
Tsunami	A long, high sea wave caused by an earthquake or other disturbance.	V Vilanda	HICs, but some can still cause social problems.	
Wildfire	Wildfires are uncontrolled fires that occur in nature			