

Year 5

Knowledge Mats – Term 5

Year 5 : Art & Design - Tudor Portrait Artists

Subject Specific Vocabulary	
miniature	A copy of something that is much smaller than the original.
patronage	The support or money given by someone to a person or a group.
portrait	A painting, drawing, photograph or sculpture of a person, usually showing the face.
posture	The way in which the body is positioned when sitting or standing.
self-portrait	A picture of the artist drawing it.
symbolism	When an idea, feeling, emotion, or other concept is used to represent something else.



Key Skills
Recognise and name some Tudor monarchs from their miniature portraits.
Understand and explain the role of symbolism in Tudor portraiture.
Draw conclusions about the way patronage could influence the work of well-known artists.
Use sketchbooks to practise and refine sketching skills (line, shape, texture, perspective).
Select the appropriate tools.

Evaluate own and others' work, , identifying similarities and differences with the work of Hans Holbein.

Lines of Enquiry
Who gave and received miniature portraits and why?
Who was Hans Holbein and under who patronage did he work?
In what ways can we make meaningful improvements to our artwork?

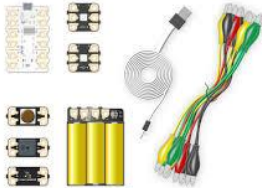


How does choosing the most appropriate tools and materials have a positive impact on the finished work?

How does careful refining of a piece of artwork help to progress skills and techniques.

How does evaluating a piece of work help to identify improvements to be made?

Year 5 : Computing – Selection in Physical Computing

Vocabulary		E-safety	Key Skills
condition	A statement that can be either True or False	<p>I can assess and justify when it is acceptable to use the work of others</p> <p>I can give examples of content that is permitted to be reused and know how this content can be found online.</p>	I can create a simple circuit and connect it to a microcontroller.
count-controlled loop	A command that repeatedly runs a defined section of code a predefined number of times		I can program a microcontroller to make an LED switch on.
infinite loop	A command that repeatedly runs a defined section of code indefinitely.		I can explain what an infinite loop does.
Input	Data that is sent to a program to be processed.		I can connect more than one output component to a microcontroller.
microcontroller	A computer chip		I can use a count-controlled loop to control outputs.
output component	A piece of hardware that is controlled by outputs from a computer		I can design sequences that use count-controlled loops.
program	A set of ordered commands that can be run by a computer to complete a task.	<p>Unit Overview</p> <p>In this unit, learners will use physical computing to explore the concept of selection in programming through the use of the Crumble programming environment. Learners will be introduced to a microcontroller (Crumble controller) and learn how to connect and program components (including output devices- LEDs and motors) through the application of their existing programming knowledge. Learners are introduced to conditions as a means of controlling the flow of actions and make use of their knowledge of repetition and conditions when introduced to the concept of selection (through the if, then structure).</p>	I can explain that a condition is either true or false and design a conditional loop.
repetition	Part of a program where one or more commands are run multiple times in a loop.		I can program a microcontroller to respond to an input.
selection	Part of a program where, if a condition is met, then a set of commands is run.		I can explain that a condition being met can start an action.
switch	A device that manages the flow of data packets within a computer program		I can use selection (an 'if...then...' statement) to direct the flow of a program.
			I can identify a real world example of a condition starting an action.
			I describe and create a detailed drawing of my project.
			I can write an algorithm that describes what my model will do.
			I can test and debug my project.

Year 5 : Making a Tudor Fruit Pudding (D&T)

Subject Specific Vocabulary

carbohydrate	a substance (as a starch or sugar) that is rich in energy and is made up of carbon, hydrogen, and oxygen
export	sending something to another country to be sold.
fat	nutrients in food that the body uses as fuel
fibre	the parts of plants or seeds that your body cannot digest; it is useful because it makes food pass quickly through your body
flavour	the quality of something that affects the sense of taste.
import	a good or service bought in one country that was produced in another.
protein	is essential for building, maintaining, and repairing the tissues in our body. Protein is in foods such as lean meat, poultry, fish, eggs, tofu, nuts, seeds and beans.
seasonal	happening, available, or used at a certain season
seasonality	the state or quality of being seasonal or dependent on the seasons

Key Skills

Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Know how to prepare a variety of dishes.

Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, chopping, mixing].

Follow procedures for safety and hygiene.

Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.



Sticky Knowledge

What is a fruit compote?

What were the main seasonal fruits in Tudor times?

How does researching existing recipes inform the design of new recipes that are fit for purpose?

How does choosing the correct tools and using them appropriately help to develop effective techniques.

What substances can be found in different foods and drinks?

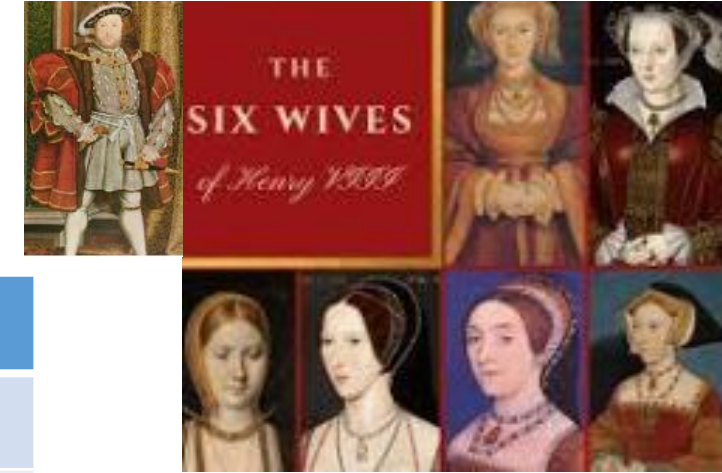
What can we do to improve our work?



Year 5 : History – What did the Tudors do for us?

Subject Specific Vocabulary – Key words

Age of discovery	A period from the early 15 th Century to the early 17 th Century, during which European ships travelled around the world to search for new trading routes and partners.
Battle of Bosworth	The battle fought on 22 nd August 1485 between the Yorkist King Richard III (the last of the Plantagenet dynasty) and the Lancastrian Henry, Earl of Richmond, who wanted to become king.
Catholic	The Roman Catholic Church is led by the Pope. The Pope rules the church from the Vatican City, which is a separate country, inside Rome.
Jousting	Jousting was where two knights would charge each other and try to knock the other off their horse with a lance.
New World	The lands in the western hemisphere and especially North and South America.
Printing press	The printing press is a machine for printing. It makes many copies of identical pages.
privateer	A privateer was a private person or private warship authorised by a country's government to attack foreign shipping.
Protestant	Protestantism is a form of Christian faith and practice. It began in Northern Europe in the early 16 th Century.
Standard English	Standard English is the correct English we use when we want to make a good impression. It is more formal when written than when spoken.



Key Skills

Recall the names of Henry VIII's six wives and **explain** why he married six times.

Summarise the main factors leading up to England breaking with Rome to become a Protestant country.

Evaluate the importance of the invention of the printing press and **reach informed conclusions** about the subsequent translation of the Bible in English.

Describe the actions of Elizabeth I's 'privateers' and **explain** their actions in claiming foreign territories for England.

Make reasoned judgements about Tudor pastimes and justify why rich and poor spent their free time in different ways.



Lines of Enquiry

Why was the Battle of Bosworth so significant for Henry Tudor?

Why did Henry VIII marry six times?

Why did England reject Roman Catholicism and become a Protestant country?

What is the legacy of William Tyndale and William Caxton?

How did Elizabeth I's explorers change Tudor life?

How did rich and poor spend their free time?

Year 5: Spanish – ¿Tienes Una Mascota?



Subject Specific Vocabulary	
tienes	do you have
un perro	a dog
un gato	a cat
Un conejo	a rabbit
un ratón	a mouse
un hámster	a hamster
un pez	a fish
una coturra	a parrot
una tortuga	a tortoise
tengo	I have
y	and
mascota	pet
Que se llama	That is called



Key Skills

To say, understand and use the phrase 'do you have...' in Spanish.

To name, understand and use the names of different pets.

To ask and answer the question ¿Tienes una mascota?

To use the word 'tengo' to explain what pets you have,

To use the phrase 'Que se llama' to name their pets.

Lines of Enquiry

What are the Spanish words for eight different pets?

How do I ask and answer questions about whether I have any pets and what they are?

How do I describe pets by stating their name in Spanish?

How do I say that I have more than one pet?



Year 5: Music – How does Music shape our way of life?



Subject Specific Vocabulary

Time signature	the type and number of beats in a bar
Key signature	where it shows what key the music is in.
Minim	a note which lasts two beats.
Dotted minim	a note that lasts for three beats.
Crotchet	a note which lasts one beat.
Quaver	a note which lasts half a beat.
Improvise	to make up a tune and play it on the spot.
Major	a key with a bright/happy sound
Minor	a key with a dark /sad sound
Rhythmic pattern	combinations of long and short sounds and silences
Tempo	the speed of the music.
Texture	layers of sound in music.



Sticky Knowledge

The 20th and 21st centuries have seen orchestral instruments played all over the world in new ways and different contexts. Some composers have written in earlier styles of music, such as Baroque and Romantic. Many composers have combined orchestral music with other contemporary styles, such as Pop and Jazz, as well as traditional styles like Classical Arabic music and Gamelan. Other composers have challenged audiences to listen to all sound as though it is music - even sound that they might usually think of as just noise.

Though this song is sung in English, it takes its inspiration from Korean Pop, or K-pop. Korean Pop as we know it today was first created in the 1990s, and K-pop musicians like Blackpink, BTS and Super Junior have become superstars around the world. Like all Pop styles, the music responds to the changing tastes of audiences, and recent K-pop has focused on Hip Hop-style beats, heavy electronic production and memorable, catchy melodies.

In **scat singing**, the singer improvises melodies and rhythms using the voice as an instrument rather than a speaking medium.

Vaughan Williams (1872 - 1958) was an English composer, choral conductor, organist, violinist and violist. He became very interested in English Folk music, which he included in a lot of his compositions. Over his career, he notated and recorded more than 800 Folk tunes.

Key Skills

Listening:

- Talk about the song together.
- Explore the song's musical style through the style indicators of the music and its performers
- Embed a deeper understanding of the musical concepts related to the song.

Singing:

Learn to sing the song as part of an ensemble/choir.

- Follow a leader/conductor.
- Understand the meaning of the song.
- Demonstrate and maintain correct posture and breath control.
- Listen to each other and sing in tune together.

Composing and improvising:

- Create and explain a simple melody with a musical shape using three, five or seven notes Identify melodic intervals (a melody that leaps) and melodic steps (a melody that moves to the next note).
- Keep a record of the composition to play it again.
- Structure musical ideas (eg using echo or question and answer phrases) to create music that has a beginning, middle and end.
- Compose in response to different stimuli, eg stories, verse, images (paintings and photographs) and musical sources.
- Combine known rhythmic notation with letter names to create rising and falling phrases using just three notes (do, re and mi).
- Compose song accompaniments on untuned percussion using known rhythms and note values.

Playing:

- Play and perform an instrumental part as part of the song being learnt by ear or from standard notation.

Performing:

- Share and start to take responsibility for a performance of the learning that has taken place in the lesson.
- To use the following notes on the glockenspiel: F, G, A, C, D.

Year 5: PE - Athletics

Subject Specific Vocabulary – Key words	
Pacing	Sprint finish
Long distance	Run up
Bend knees	Swing arms
Power	On your marks
Get set	Go
Acceleration	Throwing
Pushing	Change over
Deliverer	Receiver
Measuring	Scoring
	Olympics

Key Skills - Objectives
To learn how to pace to run a <u>long distance</u> race
To learn the correct technique to perform the standing long jump and the running long jump
To learn how to use and perform the sprint start technique
To experiment different techniques required to take part in a <u>number of</u> throwing events
To learn how to preform relay races with a relay baton
To compete in a <u>number of</u> exercises, performing the skills they have learnt

Athletic Events

The 2020 Tokyo Olympics has been postponed until 2021 due to the Covid-19 pandemic.



Famous People
Mariya Lasitskene – Russian high jumper
Noah Lyles – American sprinter
Sydney McLaughlin – American hurdles
Andre de Grasse - Canadian
Dina Asher-Smith - British



running sprint



Year 5: PE –Kwik Cricket

Subject Specific Vocabulary – Key words	
Opposite leg to throwing arm	Follow through with arm
Point at target	Body side on
Balanced body position	Transfer weight from back foot to front foot
Roll	Relay
Keep head down	Keep bat close to the front leg
Make sure that the bat is facing down towards the floor	Soft hands
Let the ball hit the bat not 'striking' the ball	Keep the arm straight
Get body sideways on	Reach for the target
Backing up	Umpire
Wide	Over
Bowlers end	Backing up
Crease	Slide the bat
Correct calling	



Key Skills - Objectives
To develop accuracy of throwing whilst fielding the ball
To develop retrieving, catching and returning the ball whilst fielding
To develop batting and learning how to play a defensive shot
To develop speed and accuracy in the overarm bowling
Developing rules in kwik cricket game with the use of overarm bowling
To understand the rules of Kwik Cricket and how to run between the wickets



Rules of the Pairs Kwik Cricket
Each batting pair's turn comprises of 12 balls
The bowler should bowl accurately to the batter
The batting pair should try to get as many runs as possible
Batters lose 3 runs each time they are bowled out

Fair Play
Cricket has always been seen as the gentleman's game - and that means there are certain traditions which must be respected.
Walk when you are out
Umpires decision is final – no arguing!
Applaud the new batsman

Famous People
Heather Clare Knight OBE is an English cricketer who is captain of the England women's cricket team.
Eoin Joseph Gerard Morgan CBE is an Irish-born cricketer who captains the England cricket team in limited overs cricket.
Joseph Edward Root MBE is an English international cricketer who is the current captain of the England Test team.

Year 5 : PSHE - Valuing Difference

Vocabulary	
Friend/Friendship	A friend is a person who you know, like and enjoy spending time with.
Qualities	A distinctive attribute or characteristic possessed by someone or something.
Communication	The act of giving, receiving, and sharing information.
Tolerance	Accepting people for who they are
British Values	Fundamental British Values underpin what it is to be a citizen in Great Britain.
Bullying	Bullying is intentionally harmful behaviour that is often repeated over time.
Prejudice	Hatred or unfair treatment toward a person or group without cause or reason.
Racism	Racism is when people are treated unfairly because of their skin color or background.
Discrimination	Discrimination is when someone treats you differently, unfairly or worse because of characteristics such as a your age, gender, race or sexuality.
Diversity	Diversity is about embracing differences and including people from all walks of life.
Self-esteem	Your self worth and how you feel about yourself.
Sexual Orientation	Who someone feels physically and emotionally attracted to.
Gender Expression / Identity	a way to describe and express how someone feels about their gender.



Learning Outcomes
Explain why friendships sometimes end.
Demonstrate respectfulness in responding to others.
Respond appropriately to others.
Develop an understanding of discrimination and its injustice, and describe this using examples.
Consider how discriminatory behaviour can be challenged.
Identify and describe the different groups that make up their school/wider community/other parts of the UK.
Describe the benefits of living in a diverse society.
Explain the importance of mutual respect for different faiths and beliefs and how we demonstrate this.
Recognise that some people post things online about themselves that aren't true, sometimes this is so that people will like them.
Understand and explain the difference between sex, gender identity, gender expression and sexual orientation.
Skills
Define some key qualities of friendship.
Describe ways of making a friendship last.
Rehearse active listening skills:
Empathise with people who have been, and currently are, subjected to injustice, including through racism.
Understand that the information we see online, either text or images, is not always true or accurate.

Year 5 : RE (Sikhism) – What is the best way for a Sikh to show commitment to God?

Subject Specific Vocabulary – Key words	
Amrit	sugar water stirred with a dagger
Amrit Ceremony	joining the Khalsa
Commitment	loyal and willing to give your time and energy to something that you believe in
Guru Granth Sahib	Sikh Holy Book
Gurdwara	Sikh place of worship
Kirat Karni	to work honestly, live honestly, and practice honesty
Khalsa	a group which committed Sikhs can join to show their devotion to their faith
Sewa	selfless service (to others)
Waheguru	a word used in Sikhism to refer to God

Key Skills - Objectives
To understand the importance of the Amrit Ceremony.
To understand why and identify how Sikhs look for ways of helping in their local community, as well as nationally and globally.
To name the symbols of the Khalsa and to explain what they represent.
To understand the importance of equality in the Sikh religion and to describe ways in which it is put into practice.
To use knowledge of the Sikh religion to describe ways in which a Sikh can show commitment to God.



Lines of Enquiry
What promises do a baptised Sikh make?
Why do Sikhs wear a turban?
What are the Three Golden Rules?
What is the Akal Takhat and why does it symbolise equality?
How do Sikhs show their commitment to God?



Year 5 : Living Things and their Habitats



Working Scientifically - Key Skills

Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.

Use test results to make predictions to set up further comparative and fair tests.

Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

Identify scientific evidence that has been used to support or refute ideas or arguments.

Vocabulary

Asexual reproduction	To reproduce without a mate.
Bulb	A part of a plant that stores food underground, can grow a new shoot.
External fertilisation	When sperm and eggs join outside of the body.
Fertilisation	When an egg and pollen (or sperm) join together.
Gestation	When a baby and animal develops inside its mother.
Internal fertilisation	When sperm and egg join inside the body.
Larva	The young form of some animals, which looks very different to the parents.
Metamorphosis	A dramatic change in the life cycle of the an animal in which it ends up looking totally different
Pollination	When pollen from one plant is transferred to the ovary of another.
Sexual reproduction	When a male and female reproduce.
Sperm	Male animals make this.



Lines of Enquiry

What is the reproductive cycle of a flower?

How does a plant grow from a cutting?

What is the life cycle of a butterfly?

What are the life cycles of different animals?

Why are different animals becoming endangered?