YEAR 8

Home Learning

05 / 10 / 26

Home Learning – Parent/Carer guide

These home learning booklets will be emailed to all parents/carers of all students in Years 7, 8 and 9 every *2 weeks* on a Monday A week.

The idea is that, across 12 subjects, you will be able to speak with your child about the key pieces of knowledge that they will need to know across that 2 week period. Key Stage 3 is all about students being exposed to a knowledge-rich curriculum so that they know more and remember more about each area of study.

This E-booklet allows all parents and carers to quiz their children, to talk to them about the knowledge and maybe learn things together. Much like the primary model of learning spellings every week, this allows all parents/carers to know the key knowledge that your child will be learning in the next two weeks and also how well your child is doing in remembering these key pieces of knowledge and information.

It is to be expected that students can remember more towards the end of the two weeks than at the beginning and you should be able to see your child make progress.

This can all be done with no pen, no paper, just discussion. Quiz your child whilst having dinner maybe, or even let them quiz you if you would like to learn together! Of course, you can get your child to write down answers but it is not necessary.

I hope that this new initiative allows parents to be more involved with your child's home learning without the pressure and stress that some homework tasks can put on child/parent relationships.
If you have any questions or would like to know more about home-learning at Penketh High School then please get in touch with me directly on ***ifarrar@penkethhigh.org*** and I will only be too happy to assist in any way I can

Kind Regards

Ian Farrar
Vice Principal – Progress and Outcomes

ART

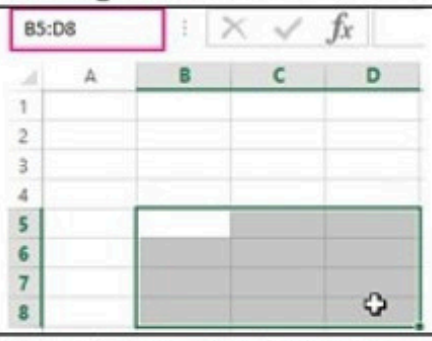
Current Learning

1	Surrealism	An art movement exploring dreamlike, illogical, or fantastical imagery that combines unexpected elements to challenge reality and spark imagination. Task: Draw a surreal object combination (e.g., a fish with bird wings).
2	Imagination	The creative ability of the mind to form new ideas, images, or concepts not present to the senses, driving original art-making. Task: Sketch a creature that does not exist, combining at least three real animals.
3	Drawing	The act of creating marks on a surface using tools like pencils, pens, or charcoal to represent ideas, objects, or feelings visually. Task: Create a quick line sketch of an everyday object (like your shoe) without erasing mistakes.
4	Tone	The range of lightness or darkness in artwork, used to create contrast, depth, and highlight form through shading techniques. Task: Shade a simple sphere with pencil, showing light to dark gradients.
5	Texture	The surface quality of an object, either real (tactile) or implied (visual), giving a sense of feel in art. Task: Draw three different textures (wood, fabric, metal) using only pencil marks.
6	Colour Blending	The technique of smoothly mixing two or more colours to create gradients, depth, or harmony, often used to show light, shadow, or atmosphere. Task: Blend three coloured pencils to create a smooth sunset effect.
7	Anthropomorphism	The artistic technique of giving human traits, emotions, or intentions to animals, objects, or natural elements, often used in storytelling and cartoons. Task: Draw an everyday object (like a teapot) with a human face and personality.

Prior Learning

8	Pattern	A repeated decorative design using shapes, colours, or lines that creates rhythm, structure, or visual interest in an artwork. Task: Fill a page with a repeated geometric or organic pattern.
9	Drawing	The act of creating marks on a surface using tools like pencils, pens, or charcoal to represent ideas, objects, or feelings visually. Task: Create a quick line sketch of an everyday object (like your shoe) without erasing mistakes.
10	Tone	The range of lightness or darkness in artwork, used to create contrast, depth, and highlight form through shading techniques. Task: Shade a simple sphere with pencil, showing light to dark gradients.
11	Detail	Small, precise features that add accuracy, character, or realism to an artwork by focusing on fine elements. Task: Draw a close-up of your hand, adding wrinkles, nails, and lines.
12	Observation	The careful study of subjects from life, noticing proportions, textures, and details to create accurate representations. Task: Spend 15 minutes drawing an object in front of you exactly as you see it.
13	Illustration	Artwork created to explain, decorate, or tell a story, often used in books, advertising, or design. Task: Illustrate a short scene from a favourite story using only pencil.

COMPUTER SCIENCE

1	**Spreadsheet**	A spreadsheet is a piece of software which is used to carry out calculations. Spreadsheets are very common in business, as they are excellent for handling data such as sales, engineering or financial data.
2	**Cell Reference**	Each cell in a spreadsheet has an 'address' that describes its position in the worksheet. The address is made of two parts a) its column position and b) its row position This address is called the 'cell reference'. A typical cell reference for the most top left cell in the workbook is A1 this means its sits along Column A and is also in Row 1
3	**Range**	 This can be one cell or a collection of cells
4	**Formula**	A formula is used to do every single calculation in the spreadsheet. A formula can be as simple as adding up two numbers in different cells or it can be as complex as working out a statistical result from millions of pieces of data collected over months. It always starts with =
5	**Drag handle**	 The handle will appear as a small square in the bottom-right corner of the selected cell. You can drag it to copy formulas
6	**Function**	A function does a very specific job within a spreadsheet. **SUM** – will add up at set of numbers **COUNTA**- counts the number of non-blank cells (not empty) in a cell range **MAX**- will find the highest value in a set of numbers **MIN**- will find the lowest value in a set of numbers **AVERAGE**- will find the average of a set of numbers **IF**- checks to see if a statement is true or false and then does one of two things depending on the result **COUNTIF**- will add up numbers only if those numbers meet certain conditions

DRAMA

Current Learning

1	What is a story whoosh?	Where we act out a story to learn the plot and the narrative.
2	What is devising?	Where we create the characters, lines and stories ourselves.
3	What is a script?	Where we act out the characters, lines and stories written by somebody else.
4	What is a stage direction?	The instructions in a script that we follow to act out the scenes as they were written.
5	What is exaggeration?	To make something bigger and more over the top.
6	What is a character?	Someone in the play who is part of the story.
7	What is a plot?	The sequence of events from the story.
8	What is characterisation?	The way you use physical and vocal skills to communicate a character to the audience.
9	What is musical theatre?	The combination of singing, dancing and acting.
10	What is a character relationship?	The way characters act with one another on stage.

Prior Learning

11	What is a physical skill?	Something you change about yourself that the audience can see.
12	What is a vocal skill?	Something you change about yourself that the audience can hear.
13	What is movement?	The way you move in the space as a character.
14	What is a gesture?	A small action to communicate meaning.
15	What is facial expression?	The way you change your face to express emotion.
16	What is proxemics?	The space or distance between characters to show their relationship.
17	What is mime?	Where we act out our emotions physically and without speaking.
18	What is volume?	How loud or quiet your voice is.
19	What is pitch?	How high or low your voice.
20	What is tone?	The way you say something.

DESIGN TECHNOLOGY

Current Learning

1	What is a wood joint?	Joinery is a part of woodworking that involves joining together pieces of wood or lumber, to produce more complex items
2	What is glass paper?	Paper covered with powdered glass, used for smoothing and polishing
3	What is a client?	A client is a person or organization using the services of a professional person or company
4	What are design ideas?	Realization of a concept or idea into a drawing that for fills what you set out to achieve.
5	What is a mitre saw?	A mite saw is a saw used to make accurate crosscuts and mites in a work piece by pulling a large backsaw back and forth across the work to cut at a desired angle.
6	What is a disc sander?	A machine having one or more flat circular disks faced with abrasive for smoothing wood surfaces
7	What is a laser cutter?	Laser cutting is a precise method of cutting a design from a given material using a CAD file to guide it, this is a CAM device
8	What is CAM?	Computer Aided Manufacture
9	What is sand sealer? And what does it do?	A sanding sealer can be used on bare timber products, it protects the timber making it resistant to water and adds a shinney finish
10	What does assemble mean?	To fit together the separate component parts of a machine or other object.

Prior Learning

11	What is a final design?	A Final design is a drawing that has been developed or selected from previous design ideas that might get made into a real item.
12	What is a vice? What do we use it for?	A vice is a mechanical piece of apparatus used to secure an object; it allows work to be performed on it
13	What does CAD stand for?	Computer Aided Design
14	Name 3 H/S rules in a DT classroom?	
15	What is an evaluation? And why do we use them?	Designers evaluate their finished products or prototypes to test whether they work well and if the design can be corrected or improved.

ENGLISH

Current Learning

1	Scythe	A tool used for cutting crops, often represented as a curved blade on a long handle; in the book, it symbolizes death and the role of reaping souls.
2	Dystopia	An imagined society that is undesirable or frightening, often characterized by oppressive societal control and the illusion of a perfect society
3	Immortality	The ability to live forever; in "Scythe," this concept is explored in the context of a world where people do not age or die.
4	Population	The total number of people living in a specific area; the book discusses the implications of controlling population growth.
5	Reaping	The act of harvesting crops; metaphorically used in the book to describe the act of taking lives by Scythes.
6	Controversial	Likely to cause disagreement or controversy; the actions of Scythes and their moral implications are central to the plot.
7	Ethics	The moral principles that govern a person's behaviour or the conducting of an activity; the book raises questions about the ethics of killing in a world of immortality.
8	Apprentice	A person who is learning a trade from a skilled employer; in "Scythe," characters train under experienced Scythes.
9	Legacy	Something handed down from an ancestor or predecessor; the characters in the book consider their legacies in the context of life and death.
10	Governance	The action or manner of governing a state, organization, or people; the book explores the governance of a society without death.

Prior Learning

11	Introduction to Heroes and Villains	Explore the characteristics of heroes and villains in literature and popular culture.
12	Character Creation	Students design their own hero or villain, focusing on backstory, appearance, personality, and motivations.
13	Descriptive Writing Skills	Learning techniques to describe characters vividly using sensory details, figurative language
14	The Hero's Journey	Looking into the famous 'Hero' structure found in many myths.
15	Villainous Motivations	Exploring the reasons behind a villain's actions (e.g., greed, revenge, trauma).
16	World-Building	Focusing on effective worlds and setting descriptions across stories.
17	Editing and Revising	Understanding the importance of editing and revising work.
18	Daedalus and Icarus	The famous tale of an overly-ambitious young man who flew too close to the sun.
19	Scylla	A deadly monster found in the myth linked to the witch 'Circe'
20	Figurative language	Recapping and mastering the understanding and usage of similes, metaphors, personification.

FOOD TECHNOLOGY

Current Learning

1	Special diet	Diet that has been adapted to the needs of an individual or group
2	pescatarian	person who does not eat meat but does eat fish.
3	Vegetarian	a person who does not eat meat or fish, and sometimes other animal products, especially for moral, religious, or health reasons.
4	vegan	a person who does not eat any food derived from animals and who typically does not use other animal products.
5	Omnivorous	an animal or person feeding on a variety of food of both plant and animal origin.
6	Boiling	the action of bringing a liquid to the temperature at which it bubbles and turns to vapour.
7	Frying	cook (food) in hot fat or oil, typically in a shallow pan.
8	Deep frying	cook (food) in hot fat or oil, typically in a deep pan.
9	Simmering	keep (food) just below boiling point when cooking or heating it

Prior Learning

10	High Risk food	Food poisoning bacteria grow more easily on some foods than others
11	Balanced diet	a healthy balanced diet containing foods from each food group, so they get a wide range of nutrients to help them stay healthy
12	Deficiency	the state of being deficient; lack; incompleteness; insufficiency.
13	Deficiency disease	a disease caused by a lack of one or more essential substances (as a vitamin or mineral) in the diet.
14	Scurvy	Lack of vitamin c

GEOGRAPHY

Current Learning

1	What happened in 1760?	The Industrial Revolution
2	Which continents have a dense population?	Europe and Asia
3	Which continents have a sparse population?	Oceania, Africa and South America
4	What factors increase population density?	Good healthcare, education, employment, housing and transport
5	What factors decrease population density?	Extreme climate, natural disasters, war/crime, lack of infrastructure
6	What is birth rate?	The number of births a year per 1000 of the total population
7	What is death rate?	The number of deaths a year per 1000 of the total population
8	What is immigration?	The action of coming to live permanently in another country
9	What is emigration?	When a person leaves a country to permanently live elsewhere
11	What 5 events caused a change in UK population?	The Black Death 1348, the Great Plague 1665, the Industrial Revolution 1760, World War I 1914-1918, and World War II 1939- 1945

Prior Learning

11	What has happened to population over time?	When birth rate exceeds death rate, so population grows.
12	What is natural increase?	Governments introduce policies to encourage people to have more children
13	What factors increase birth rate?	More women decide to delay having children and spend more time earning money
14	What factors decrease birth rate?	A severe drought destroys much of the world's food supply
15	What factors increase death rate?	Improvements in farming help to reduce food shortage and famine
16	What factors decrease death rate?	Improvements in medical care helps to wipe out diseases
17	What does densely populated mean?	Many people living in an area
18	What does sparsely populated mean?	Few people living in an area
19	What happened in 1760?	The Industrial Revolution
20	Which continents have a dense population?	Europe and Asia

HISTORY

Current Learning

1	What declaration did Charles II make prior to his restoration as King?	Declaration of Breda
2	In what year did Charles II's restoration take place?	1660
3	Who were the only Parliamentarians on whom Charles II took revenge?	The 59 'regicides' who signed his father's death warrant
4	What nickname was Charles II given due to his lack of seriousness and fun- loving lifestyle?	Merry Monarch
5	How many illegitimate children was Charles II known to have fathered?	14
6	Who humiliated Charles II in 1667 by stealing his greatest warship?	Dutch Navy
7	What secret treaty did Charles II agree with Louis XIV in 1670?	Treaty of Dover
8	What law did Parliament pass in 1673 requiring all who held public office to be Protestants?	Test Act
9	Who became king after the death of Charles II in 1685?	James II
10	Why were many English people concerned about having James II as king?	He was a Catholic

Prior Learning

11	What nickname was given to the remaining members of the Parliament after Charlesl's trial?	Rump Parliament
12	What was the dominant religion in Ireland during this period?	Catholicism
13	Where did Cromwell send the Irish Catholics who resisted his orders to work as slaves?	Barbados
14	How many Irish people are thought to have died due to the famine and war caused by Cromwell?	200,000
15	Where did Cromwell defeat a Scottish force led by Charles I's son in 1651?	Battle of Worcester
16	What term is given to Cromwell's belief that events were governed by the direct intervention of God?	Godly providence
17	What title was given to Oliver Cromwell as head of the English state in 1653?	Lord Protector
18	What style of government did Cromwell pursue through his 11 Major-Generals?	Military dictatorship
19	Who became Lord Protector following Oliver Cromwell's death?	His son Richard ('Tumbledown Dick')
20	How did Cromwell reportedly ask to be painted for his portrait?	'Warts and all'

MFL

Current Learning

1	Les maths	The maths
2	À midi	At midday
3	C’est propre	It’s clean
4	Le bâtiment est vieux	The building is old
5	Les informations	The news
6	Les comédies	The comedies
7	Je déteste	I hate
8	La musique rap	The rap music
9	Car c’est fort	As it’s loud
10	Je suis allé(e) à	I went to

Prior Learning

11	Le français	The French
12	À neuf heures	At 9am
13	Il y a une cantine	There is a canteen
14	C’est modern	It’s modern
15	Les documentaires	The documentaries
16	Les series télé	The TV series
17	J’aime	I like
18	La musique rock	The rock music
19	Car c’est entraînant	As it’s catchy
20	hier	Yesterday

MUSIC

Current Learning

1	Pulse	Steady beat heard throughout a piece
2	Beat	Main pulse
3	Polyrhythm	Many rhythms that are layered
4	Syncopation	Off-beat rhythms
5	Semibreve	4 beat note
6	Minim	2 beat note
7	Crotchet	1 beat note
8	Quaver	½ beat note
9	Semiquaver	¼ beat note
10	Intro, Verse, Chorus, Bridge	Different sections within a musical structure

Prior Learning

11	Major	Music sounds ‘happy’ in tone
12	Minor	Music sounds ‘sad’ in tone
13	Triad	Type of chord where 3 notes played together at the same time.
14	Accuracy	Parts are played correctly in terms of pitch and rhythm
15	Fluency	Parts/chords are joined together in a sequence with no stopping

RELIGIOUS EDUCATION

Current Learning

1	Allah	Arabic word for God.
2	Hajj	A pilgrimage (religious journey to a holy place) to Mecca, which Muslims should perform once in their lifetime. One of the five pillars of Islam.
3	Idol	A picture or object that people worship as part of their religion.
4	Ka'aba	A holy site in Mecca which Muhammad dedicated to God.
5	Monotheism	A belief in one God.
6	Muhammad	The final prophet, to whom God revealed messages to, to be shared with people about how they should live their lives.
7	Shirk	Comparing anyone or thing to God. Rejecting the oneness of God.
8	Tawhid	The oneness of God - there is only one God.
9	The Five Pillars	These are the main points that support the religion of Islam. Muslims should observe these to help lead a good life. They are five individual acts of worship.

Prior Learning

10	Apostles Creed	A summary of what the Christian church teaches.
11	Bible	Christian holy book
12	Incarnation	God in human form. 'God in flesh.'
13	Resurrection	To come back to life after death.
14	The Trinity	The Christian belief in one God, in three persons – The Father, son and holy spirit.

SCIENCE

Current Learning

1	Physical Change	A change that does not result in the formation of new chemical products.
2	Chemical Reaction	A change that results in the formation of new chemical products.
3	Reversible	A change that can be easily reversed, for example, melting ice.
4	Permanent	A change that cannot be easily reversed, for example, forming water from hydrogen and oxygen.
5	Conservation of Mass	The total mass of chemicals before and after a reaction remains the same.
6	Endothermic	A chemical reaction that absorbs thermal energy, causing the surrounding environment to cool.
7	Exothermic	A chemical reaction that releases thermal energy, causing the surrounding environment to heat.
8	Acid	A substance that produces hydrogen ions and has a pH between 1 and 6.
9	Base	A substance that neutralises an acid.
10	Alkali	A soluble base with a pH between 8 and 14.
11	Displacement Reaction	A reaction where a more reactive metal displaces a less reactive metal from a compound.

Prior Learning

12	What is a push or pull that causes a change in motion or shape of an object?	Force
13	What is the total movement of an object in a given direction, measured in meters (m)?	Distance
14	What is the ability of a material to return to its original shape after being stretched or compressed?	Elasticity
15	What is the force of attraction between objects due to their mass, which holds planets and moons in orbit?	Gravity
16	What term refers to the size or amount of a force, often represented in terms of strength?	Magnitude
17	What is the force opposing motion caused by the interaction of surfaces moving over one another, also called ‘drag’ if one is a fluid?	Friction
18	What measures how much distance is covered in how much time?	Speed
19	What type of friction acts on an object as it moves through air, causing it to slow down?	Air resistance
20	What is a measure of how concentrated (or spread out) a force is, measured in pascals (Pa)?	Pressure
21	What is the force of gravity acting on an object, measured in newtons (N)?	Weight