

YEAR 8



Home Learning

12 / 01 / 2026



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

Quick Task

1	Onomatopoeia	Words that sound like the noise they describe, often used in Pop Art (e.g. BAM, POW).	Write one onomatopoeia word in big bubble letters and decorate it using bold colours.
2	3D Paper Layering	Using layers of paper to make artwork stand out and look three-dimensional.	Cut out one shape and stick it on top of another shape so it sticks out from the page.
3	Roy Lichtenstein	A Pop Artist known for comic-style art, bold outlines, and Ben-Day dots.	Draw a simple face or object using thick black outlines and add dot patterns inside.
4	Andy Warhol	A Pop Artist famous for repeating images and using bright, bold colours.	Draw the same simple image four times and colour each one differently.
5	Colour	Pop Art uses bright, bold, eye-catching colours.	Create a small drawing using only bright colours (no shading or blending).
6	Typography	The style and design of letters and words.	Write one word in a comic-style font and add a thick black outline.
7	Outlines	Thick black lines used to make shapes stand out.	Draw a simple object and carefully go over the outline with thick black lines.
8	Ben-Day Dots	Small dots used in comic art to show colour and texture.	Fill one shape using neat dot patterns instead of colouring it in.
9	Speech Bubbles	Shapes used in comics to show what a character is saying or thinking.	Draw one object at least three times in a row and colour each differently.

Prior Learning

Quick Task

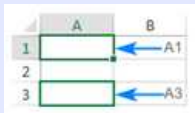

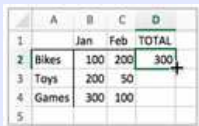
10	Surrealism	An art movement exploring dreamlike, illogical, or fantastical imagery that combines unexpected elements to challenge reality and spark imagination.	Task: Draw a surreal object combination (e.g., a fish with bird wings).
11	Imagination	The creative ability of the mind to form new ideas, 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.
12	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
13	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.
14	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.
15	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.
16	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.

COMPUTER SCIENCE

Current Learning

1	Binary	This is a digital coding system which uses two values to represent data, 0 and 1.
2	Denary	Base 10 number system. What we use every day 0-9
3	Nibble	The name given to 4 bits or half a byte.
4	Byte	Computer storage space is measured in bytes. A byte is a series of 8 bits. One character on a keyboard is a single byte.
5	Kilobyte	It is generally thought of as 1,000 bytes. However, to be completely correct, it is actually 1,024 bytes
6	Megabyte	It is generally thought of as one million bytes or 1,000 kilobytes. However, to be completely correct, it is actually 1,048,576 bytes or 1,024 kilobytes.
7	Gigabyte	It is equivalent to 1024 Megabytes although you will commonly see it referred to as 1,000 Megabytes.
8	Terabyte	1,000 (1024) Gigabytes.

Prior Learning

10	Spreadsheet	<p>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.</p>
11	Cell Reference	<p>Each cell in a spreadsheet has an 'address' that describes its position in the worksheet. The address is made of two parts</p> <ul style="list-style-type: none">a) its column position andb) its row position <p>This address is called the 'cell reference'.</p> <p>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</p> 
12	Range	<p>This can be one cell or a collection of cells</p> 
13	Formula	<p>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 =</p>
14	Drag handle	<p>The handle will appear as a small square in the bottom-right corner of the selected cell. You can drag it to copy formulas</p> 
15	Function	<p>A function does a very specific job within a spreadsheet.</p> <p>SUM - will add up at set of numbers</p> <p>COUNTA- counts the number of non-blank cells (not empty) in a cell range</p> <p>MAX- will find the highest value in a set of numbers</p> <p>MIN- will find the lowest value in a set of numbers</p> <p>AVERAGE- will find the average of a set of numbers</p> <p>IF- checks to see if a statement is true or false and then does one of two things depending on the result</p> <p>COUNTIF- will add up numbers only if those numbers meet certain conditions</p>

DRAMA

Current Learning

1	What is storytelling?	Where we communicate a narrative to an audience.
2	What does it mean to use movement to tell a story?	Creating a section of movement to represent a story.
3	What does represent mean?	To show something to the audience.
4	What is a still image?	A frozen picture or image.
5	What is mime?	Acting without speaking.
6	What is body-as-prop?	Using yourself and your own body to create the objects, prop and set on stage.
7	Why would we use body-as-prop?	To create a more interesting performance, because you don't have time to change set, and because you may not have access to everything you need.
8	What is slow motion?	Moving at an exaggerated slow pace.
9	Why would we use a still image?	To highlight a key moment.
10	What is a character relationship?	The way characters act with one another on stage.

Prior Learning

11	What is a narrator?	The person who tells a story to add information for the audience.
12	What are levels?	How high or low you are in the space.
13	What is facial expression?	The way you use your face to express emotion.
14	What is posture?	The way you hold your body.
15	What is space?	The distance / space between characters to show their relationships.

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	Tyrant	A ruler who uses power oppressively or unjustly.
2	Corrupt	Acting dishonestly or immorally, especially for personal gain.
3	Divine	Related to a god or higher power; holy or sacred.
4	Natural order	The idea that everything in the world has a proper place and order, often believed to be set by nature or a higher power.
5	Witchcraft	The practice of magical skills, spells, or abilities, often considered supernatural.
6	Deception	The act of making someone believe something that is not true.
7	Character Flaw	A weakness or fault in a character that leads to their downfall.
8	Machiavellian	Cunning, scheming, and unscrupulous, especially in politics.
9	Hamartia	A fatal flaw leading to the downfall of a tragic hero.
10	Tragic Hero	A main character in a tragedy who is noble but has a flaw that leads to their downfall.

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 is development?	Development is how rich or poor a country is compared to other countries.
2	What is economic development?	Economic development is the level of a country's wealth and standard of living.
3	What is social development?	Social development is the level of access to services and the well-being of people.
4	What is environmental development?	Environmental development is the quality of the built and natural environment.
5	What is political development?	Political development is the stability of the government (how effectively the country is run) and the freedom and rights of the people who live there.
6	What is a developing country?	Often poor compared to others, with fewer services and a lower standard of living.
7	What is an emerging country?	One which has rapidly developed and displays some characteristics of a developed country, but not all.
8	What is a developed country?	Often has lots of money, many services and a high standard of living.
9	What is Gross Domestic Product (GDP)?	The total number of goods and services sold by a country within a year.
10	What is standard of living?	The wealth and material comfort available to a person or country and is objective, which means it is based on factual evidence.
11	What is quality of life?	Standard of health, comfort and happiness and is subjective, which means it is influenced by people's opinions.

Prior Learning

12	What is counter-urbanisation?	When people move from urban areas to rural areas.
13	Why are people moving from urban to rural areas?	<div>Push factors</div> <ul style="list-style-type: none">• Congestion• Higher levels of air and noise pollution• Increased criminal activity• Cost of living <div>Pull factors</div> <ul style="list-style-type: none">• A perceived better quality of life• Lower rates of pollution• More aesthetically pleasing surroundings• More open spaces• Slower pace of life
14	What is urban sprawl?	The unplanned growth of a city into the countryside
15	What is a commuter settlement?	Where the residents live in the village but commute every day into the city to work
16	What are the advantages of counter-urbanisation?	<ul style="list-style-type: none">• Improvements in key infrastructure• Support for local businesses
17	What are the disadvantages of counter-urbanisation?	<ul style="list-style-type: none">• Pressure to build new homes on greenfield sites• Increase in house prices• Increased traffic in and out of rural areas• Noise and air pollution

HISTORY

Current Learning

1	What term was given to someone who publicly campaigned to end slavery or the slave trade?	Wind, water, and muscle
2	Which leading campaigner helped form the Society for the Abolition of the Slave Trade in 1787?	Efficiency
3	What term is given to a formal written request, often for a political cause, signed by many people?	James Watt
4	What product did abolitionists organise a boycott of?	1776
5	Who was the leading campaigner against the slave trade in the House of Commons?	Pumping water, weaving textiles, harvesting wheat, powering trains, printing newspapers, creating electricity
6	In what year did the British Parliament abolish the transatlantic slave trade?	Cottage industry
7	What was the name of the Royal Navy fleet sent by Britain to intercept slave ships?	Mechanise
8	Whose court case victory, led to it being widely understood that slavery was illegal in Britain?	Spinning jenny and water frame
9	What was the name of the campaign group established by formerly enslaved people in Britain?	Richard Arkwright
10	Who is thought to have been the first black man to have participated in a British election, in 1774?	Manchester

Prior Learning

11	What trade system imports and exports good to and from three destinations?	Abolitionist
12	What term is often given to the sea journey of slave ships from West Africa to the Americas?	Thomas Clarkson
13	Which British port cities grew particularly wealthy from the slave trade?	Petition
14	What ship massacre was publicised to highlight the cruelty and greed of the slave traders?	Sugar
15	Why did the European Merchants overfill the Zong ship for its transatlantic journey?	William Wilberforce
16	What happened on board the Zong ship that led to merchants throwing captives overboard?	1807
17	Which freed slave moved to London and wrote a book detailing his experiences as a slave in 1789?	West Africa Squadron
18	What term is given to marking a person or animal with a burning hot iron?	James Somerset
19	What large estates in the Americas were used to grow crops such as coffee, sugar and tobacco?	Sons of Africa
20	What name was given to escaped African slaves, who settled in the interior of Caribbean islands?	Ignatius Sancho

MFL

Current Learning

1	ma mère	my mum
2	sympa	nice
3	mon frère	my brother
4	il a les cheveux noirs	he has black hair
5	j'habite	I live
6	une cuisine	a kitchen
7	il y a	there is / there are
8	un parc	a park
9	près de chez moi	near my house
10	car	because

Prior Learning

11	les sciences	science
12	à quinze heures	at 3pm
13	c'est près de chez moi	it's near my house
14	le directeur est sévère	the headteacher is strict
15	les Jeux Olympiques	the Olympics
16	les jeux télévisés	game shows
17	Mon frère déteste	my brother hates
18	la musique indé	indie music
19	car c'est déprimant	because it's depressing
20	ils ont vu	they saw

MUSIC

Current Learning

1	Style/Genre	The type of music e.g. pop/rap
2	Decade	Period of 10 years
3	Chord	Three notes played together at the same - notes 1, 3 and 5 of the scale.
4	Tonic	First note/chord
5	Subdominant	Fourth note/chord
6	Dominant	Fifth note/chord
7	Staff Notation	Traditional music notation using a stave
8	Stave	Five lines used to write staff notation on
9	Primary Chords	Chords 1, 4 and 5
10	Chord Box	Diagram to display hand position on a guitar/ukulele to make a chord

Prior Learning

11	Scale	An ordered sequence of notes
12	Drone	Long continuous note in the bass line
13	Conjunct	Notes close together in the melody
14	Improvisation	Composing music on the spot as you go along
15	Gap	Distance between different note pitches

RELIGIOUS EDUCATION

Current Learning

1	Buddhism	A religion that started in India 2500 years ago, it is now the world's fourth largest religion.
2	Buddha	The awakened or enlightened one.
3	Caste System	A series of social classes that determine someone's job and status in Indian society.
4	Dharma	The Buddhist teachings.
5	Enlightenment	The state of being awakened to the truth about life.
6	Four Sights	Four things seen by Siddhartha when leaving the royal palace – old age, sickness, death and a holy man.
7	Five Precepts	Five rules all Buddhists are expected to follow.
8	Karma	The forces that influence people's fortune and future rebirth.
9	Samsara	A continual process of life, death, and rebirth.

Prior Learning

10	Allah	Arabic word for God.
11	Greater jihad	This refers to the duty of every Muslim to live a good life, staying faithful to the beliefs and obeying the commands of Islam.
12	Monotheism	A belief in one God.
13	Muhammad	The final prophet, to whom God revealed messages to, to be shared with people about how they should live their lives.
14	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.

SCIENCE

Current Learning

1	Classification	The process of placing living organisms into groups based on their structure and characteristics.
2	Organism	A term used to describe any living things such as a human or a bacterium.
3	Classification Key	A series of questions that allow an organism to be identified based on its characteristics.
4	Dichotomous	A classification key based around a series of pairs of phrases or descriptions.
5	Carl Linnaeus	A Swedish scientist who developed the system of classification we use today.
6	Genus	A rank of classification below family and above species. Its name must be written with a capital letter at the start.
7	Species	A group of similar organisms that can breed with one another to produce fertile offspring.
8	Vertebrate	Animal organisms that do have a backbone, for example, humans and snakes.
9	Invertebrate	Animal organisms that do not have a backbone, for example, insects or jellyfish.
10	Mammal	Vertebrate animals that are warm-blooded, have hair and feed their young with milk.
11	Insect	Invertebrate animals that have three body segments, three pairs of legs and most have two pairs of wings.

Prior Learning

12	Energy Store	The amount of energy held in an object or system, which can be transferred or transformed.
13	Kinetic Energy	The energy an object possesses due to its motion.
14	Gravitational Energy	Energy stored in an object due to its height in a gravitational field.
15	Chemical Energy	Energy stored in chemical bonds, which can be released during a chemical reaction.
16	Elastic Energy	Energy stored when an object is stretched or compressed, like a spring.
17	Thermal Energy	The internal energy of an object due to the motion of its particles, related to temperature.
18	Nuclear Energy	Energy stored in the nucleus of an atom, released in nuclear reactions.
19	Transfer	The movement of energy from one place or form to another.
20	Dissipate	When energy spreads out or is lost from a system, usually as heat.
21	Conservation of Energy	The principle stating that energy cannot be created or destroyed, only transferred or transformed.
22	What are invertebrate animals that have three body segments, three pairs of legs, and most have two pairs of wings?	Insect