

YEAR 9



Home Learning

11 / 05 / 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 - Curriculum and Progress

ART

| Current Learning | | | Quick Task |
|------------------|---------------------|---|--|
| 1 | Graffiti Lettering | Creating bold, stylised letters inspired by graffiti art. | Write your name or a word in bubble or block graffiti letters using pencil. Add outlines to make it stand out. |
| 2 | Tags | Using simple symbols or tags to represent identity or ideas. | Create three small graffiti-style symbols or tags that represent things important to you (e.g. hobbies, friends, music). |
| 3 | Visual Storytelling | Graffiti can tell stories or share messages through images and words. | Draw a simple graffiti-style image that tells a short story or shows a message (e.g. kindness, school life, friendship). |
| 4 | Shading/Tone | Using pencil shading to create depth and contrast instead of colour. | Create a small drawing using only pencil shading (light, medium, dark tones). |
| 5 | Pattern/Fill | Patterns and fills are used inside graffiti letters to decorate them. | Design a repeating pattern or fill inside your graffiti letters using lines, shapes, or textures. |
| 6 | Personal Space | Graffiti often reflects places that are important to the artist. | Draw a place that is important to you in a graffiti style, including letters, symbols, and patterns. |
| 7 | Respect | Understanding where graffiti comes from and using it responsibly. | Write two sentences explaining how you can create graffiti-style art respectfully in school using pencils. |
| Prior Learning | | | Quick Task |
| 8 | Dot Painting | A technique using small dots to create patterns and images. | Fill a small shape using only dots. Try to keep the dots similar in size. |
| 9 | Symbolism | Using symbols to represent ideas, objects, or stories. | Create three simple symbols that represent things important to you (e.g. home, water, family). |
| 10 | Storytelling | Aboriginal art is often used to tell stories. | Draw a simple picture that tells a short story about a journey or event. |
| 11 | Earth Colours | Natural colours such as brown, red, yellow, black, and white | Create a small drawing using only earth colours. |
| 12 | Pattern | Repeated shapes or lines used to decorate artwork. | Design a repeating pattern using lines, dots, or shapes. |
| 13 | Connection to Land | The strong link between Aboriginal people and the land. | Draw a place that is important to you using symbols and patterns. |
| 14 | Respect | Showing understanding and care for Aboriginal culture and traditions. | Write two sentences explaining why it is important to respect Aboriginal art and culture. |

COMPUTER SCIENCE

Current Learning

| | | |
|---|------------|--|
| 1 | Variable | A named value which can be changed as the program is running. |
| 2 | Constant | A named value which cannot be changed as the program is running. |
| 3 | Sequence | Sequence is one of the three basic logic flows in computing programming. Sequence means to set down instructions one after another for the computer to execute in turn |
| 4 | Selection | One of the three basic logic structures in computer programming. A question is asked, and depending on the answer, the program takes one of two courses of action, after which the program moves on to the next event. |
| 5 | Iteration | Repetition of a mathematical or computational procedure. In computer programming 'iteration' is used to loop around and around a piece of code until a condition is met. |
| 6 | Data types | <p>Programming languages store data as different types. For example:</p> <ul style="list-style-type: none">• Character• String• Integer• Boolean• Real (Float) |
| 7 | Debugging | <p>The process of removing bugs from your programs</p> <p>There are three main types of error:</p> <ul style="list-style-type: none">• Syntax error• Logic error• Runtime error |

Prior Learning

| | | |
|----|----------------------------|---|
| 8 | Digital artefact | Is any type of item produced and stored as a digital/electronic version. For example a presentation or audio files. |
| 9 | Random Access Memory (RAM) | Random access memory (RAM) is the memory in a computer that is used to store computer programs while they are running and also any data the programs need to undertake their task |
| 10 | Read Only Memory (ROM) | ROM is 'read only' memory. Its contents cannot be changed or overwritten (RAM can).It is non-volatile. It keeps its data when there is no power supply. |
| 11 | Virtual memory | As RAM fills to capacity, the operating system can temporarily mark sections of the hard disk to use as virtual memory. |
| 12 | Volatile memory | If the power fails i.e. the computer is switched off, even for a moment, then anything that was stored in the RAM will be lost. The term for this is 'volatile' memory |
| 13 | Non- Volatile memory | It is a type of memory that does not require power to keep its data intact. For example, ROM - Read Only Memory will retain its data even with the power switched off. |

DRAMA

Current Learning

| | | |
|---|--|---|
| 1 | What is a script? | The lines of the text that you follow to tell the story. |
| 2 | What is marking the moment? | Adding a non-naturalistic technique to a naturalistic scene to highlight an important moment. |
| 3 | Why is marking the moment important? | To make something stand out to the audience that has significance or that they need to focus on. |
| 4 | Which techniques could we use to mark a moment? | Physical theatre, choral speech / movement, narration, still image, thought track, mime, slow motion. |
| 5 | What is a sound effect? | A pre-recorded sound that is made artificially to create sounds for a production. |
| 6 | What is a soundscape? | A sound made using body, object or voice. Often created live. |
| 7 | What is a piece of music? | A melody / song with a particular pitch, beat and pace - with or without lyrics. |
| 8 | What impact can sound have on a play? | It can help create the mood and atmosphere of a scene, enhancing the impact on the audience. |
| 9 | What are the four things we need to consider when adding sound to a story? | When / cue (when it goes on and off), pitch, pace, volume. |

Prior Learning

| | | |
|----|--------------------------------|--|
| 8 | What is subtext? | The hidden meaning behind the lines of text. |
| 9 | Why is subtext important? | It makes the story more interesting as the characters aren't always saying exactly what they mean. |
| 10 | What is a dramatic technique? | What you add to a play to make it more interesting or entertaining for the audience. |
| 11 | What is the theme of a play? | What a play is about, what it tries to communicate to the audience. |
| 12 | What is a rehearsal technique? | A technique you use whilst rehearsing to help you develop character and story. |

DESIGN TECHNOLOGY

Current Learning

| | | |
|----|-----------------------------------|---|
| 1 | What is acrylic? | Acrylic is a transparent plastic material with outstanding strength, stiffness, and optical clarity |
| 2 | What is a LED? | Paper covered with powdered glass, used for smoothing and polishing |
| 3 | What is a client? | A client is a person or organisation 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 soldering? | Soldering is a process that joins two or more types of metals through melting solder |
| 6 | What does Quality assurance mean? | The maintenance of a desired level of quality in a product, actions or steps taken to ensure a high quality outcome. |
| 7 | What is an Interference fit? | A fit between two parts in which the external dimension of one part slightly exceeds the internal dimension of the part into which it has to fit. |
| 8 | What does Eco friendly? | Implies means Earth-friendly, being eco-friendly means being 'designed to have little or no damaging effect on the environment |
| 9 | What is Malleable? | A substance that is malleable is soft and can easily be made into different shapes |
| 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 | 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. |
| 15 | What is CAM? | Computer Aided Manufacture |

ENGLISH

Current Learning

| | | |
|----|---------------------|---|
| 1 | Perspective | Writing from another person's viewpoint to build empathy and emotional depth. |
| 2 | Voice | Crafting a believable, authentic voice that reflects the character's experiences and identity. |
| 3 | Emotion | Using language that conveys fear, hope, anger or determination through the character's eyes. |
| 4 | Inclusive Language | Using we, us, our to build unity or highlight division depending on the speaker. |
| 5 | Rhetorical Devices | Techniques such as repetition, emotive language, contrast, rhetorical questions and powerful imagery. |
| 6 | Imagery | Creating vivid pictures that show the character's world, struggles and hopes. |
| 7 | Structure | Organising the speech with a strong opening, developed middle and memorable ending. |
| 8 | Audience Awareness | Shaping the speech to influence how listeners feel about the character's experiences. |
| 9 | Model Analysis | Studying speeches written from personal or fictional perspectives to understand technique. |
| 10 | Drafting & Refining | Editing for clarity, authenticity and emotional impact. |

Prior Learning

| | | |
|----|----------------------------|---|
| 11 | Author & Purpose | Malorie Blackman explores themes of racism and injustice. |
| 12 | Segregation | A divided society where power lies with the Crosses. |
| 13 | Prejudice & Discrimination | Unfair treatment of characters based on race and social status. |
| 14 | Identity | The struggle characters face in understanding who they are in an unequal society. |
| 15 | Friendship & Love | Relationships (like Sephy and Callum) that are challenged by societal divisions. |
| 16 | Power & Control | How the ruling Crosses maintain authority over the Noughts. |
| 17 | Violence & Protest | Different responses to oppression, from peaceful resistance to rebellion. |
| 18 | Injustice | Unfair systems that shape and limit characters' lives and choices. |
| 19 | Perspective (Theme) | Understanding how different characters see the same events differently. |
| 20 | Themes | Key ideas such as racism, power, inequality, loyalty, courage and the cost of challenging the system. |

FOOD TECHNOLOGY

Current Learning

| | | |
|---|------------------|---|
| 1 | Food miles | measure the distance food travels from where it's grown or made to the person's plate |
| 2 | Carbon footprint | a measure of the amount of carbon dioxide released into the atmosphere as a result of the activities of humans. |
| 3 | Sustainable | using natural resources in a way that we could keep doing for a long time. We can be more sustainable by reducing our use of natural resources. |
| 4 | Agriculture | both growing and harvesting crops and raising animals, or livestock. |
| 5 | Emissions | is something that's been released or emitted into the world. Car exhaust, burps, and radio broadcasts are all examples of emissions. |
| 6 | Greenhouse gas | gases in the earth's atmosphere that trap heat. |
| 7 | Methane | Greenhouse gas produced by human activities like farming. |
| 8 | Synthetic | Made in a chemical process and isn't found naturally on earth eg synthetic rubber or plastic |
| 9 | Fertiliser | A substance (such as animal manure or an artificial chemical, particularly one that contains nitrogen, phosphorus, and potassium) that is added to soil to increase its productivity for crops. |

Prior Learning

| | | |
|----|------------------------------------|---|
| 11 | Low biological value protein (LBV) | Low biological value (LBV) proteins are missing one or more of the essential amino acids we need. |
| 12 | High biological protein (HBV) | High Biological value (HBV) proteins contain all the 10 essential amino acids. Functions in the body. |
| 13 | Amino Acids | Amino acids are molecules that combine to form proteins. Amino acids and proteins are the building blocks of life |
| 14 | Deficiency | a lack or shortage |
| 15 | Protein deficiency (Kwashiorkor) | Kwashiorkor is a disease marked by severe protein malnutrition and bilateral extremity swelling. It usually affects infants and children, most often around the age of weaning through age 5. The disease is seen in very severe cases of starvation and poverty-stricken regions worldwide |

GEOGRAPHY

Current Learning

| | | |
|----|--|--|
| 1 | What is industrial structure? | Industrial structure refers to the relative proportion of the workforce employed in different sectors of the economy (primary, secondary, tertiary, and quaternary). |
| 2 | What are tertiary industries? | The tertiary sector involves selling services and skills, including teaching, accounting, healthcare, and retail. |
| 3 | What are primary industries? | Primary industries involve collecting raw materials, such as logging trees, quarrying iron ore, and farming animals and crops. |
| 4 | What are secondary industries? | Secondary industries involve processing raw materials from the primary sector into manufactured goods and products, such as using wood to make desks. |
| 5 | Why is topography a significant factor in determining industrial location? | Flat land is generally preferred for building large industrial complexes because it is easier and cheaper to construct on. |
| 6 | What are the social impacts of industry? | Provide employment opportunities, improve infrastructure, and support local communities. |
| 7 | What are the economic impacts of industry? | Contributes to economic growth by creating jobs, generating income, and boosting local and national economies. |
| 8 | What are the environmental impacts of industry? | Significant environmental degradation, including air and water pollution, deforestation, and loss of biodiversity |
| 9 | What is mass tourism? | A form of tourism that involves tens of thousands of people going to the same resort often at the same time of the year. |
| 10 | What is the aim of ecotourism? | The aim of ecotourism is to reduce the impact that tourism has on naturally beautiful environments, ensuring that these areas are preserved for future generations. |

Prior Learning

| | | |
|----|---|--|
| 11 | How many continents does Russia span across? | 2 Europe and Asia |
| 12 | What % of the worlds water does Lake Baikal hold? | 20% |
| 13 | How much does tourism contribute to Russia's GDP? | 5% |
| 14 | What is population density? | The number of people who live within 1 km ² . |
| 15 | What is population distribution? | How many people are spread out over an area. |

HISTORY

Current Learning

| | | |
|----|--|----------------------|
| 1 | What name was given to the laws in Southern states enforcing segregation between white and black Americans? | “Jim Crow” Laws |
| 2 | What is the term for forced separation of different ethnic groups in most aspects of life? | Segregation |
| 3 | What kind of slave labour was still legal in America under the 13th Amendment to the US constitution? | Prison labour |
| 4 | What is the name of the highest court of the USA, possessing enormous power to shape American law? | Supreme Court |
| 5 | What is the term for the murder of a black person by a white mob? | Lynching |
| 6 | What is the name of the white supremacist organisation dedicated to enforcing the superior position of white Americans through violence? | Ku Klux Klan |
| 7 | What is the name of the political party traditionally representing the white South, later becoming America’s major progressive party? | Democrats |
| 8 | By the 1920s, how many members did the Klan have? | Four or five million |
| 9 | What is the name of the black teenager lynched in 1955, whose murder became a nationwide scandal? | Emmett Till |
| 10 | What caused a surge of black migration out of the south to the factories of the North? | The Second World War |

Prior Learning

| | | |
|----|--|-------------------------------|
| 11 | What was the name of the former slave who escaped and made it to the North in 1849? | Harriet Tubman |
| 12 | What was the name of the series of missions into the South to rescue slaves? | Underground railroad |
| 13 | Which political party was founded in 1854, dedicated to fighting “slave power”? | Republicans |
| 14 | Who was elected president, as the Republican candidate in 1860? | Abraham Lincoln |
| 15 | What term means ‘withdrawing from a nation or union to be independent?’ | Secede |
| 16 | What was the name of the breakaway nation formed by 11 southern states? | Confederate States of America |
| 17 | What is the name of the famous speech given by Lincoln on 19 November 1863? | The Gettysburg Address |
| 18 | What did Lincoln issue in 1863 that ended slavery and made all slaves in America free? | Emancipation Proclamation |
| 19 | How many died during the American Civil War? | 600000 |
| 20 | What is the name of the Southern fanatic who shot and killed Lincoln? | John Wilkes Booth |

MFL

Current Learning

| | | |
|----|-------------------------|-----------------------------|
| 1 | Comprar muchas cosas | To buy lots of things |
| 2 | Una escalera | Stairs |
| 3 | Gracioso/a | Funny |
| 4 | Es útil porque se puede | It's useful because you can |
| 5 | Trabajador/a | Hard working |
| 6 | Un jardín | a garden |
| 7 | Un edificio antiguo | An old building |
| 8 | Un bosque | a forest |
| 9 | Mi abuela | My gran |
| 10 | Mi abuelo | My grandad |

Prior Learning

| | | |
|----|-----------------------------|--------------------------------|
| 11 | tiene | It/he/she has |
| 12 | Mi tío | My uncle |
| 13 | Todos los días | Every day |
| 14 | Es práctico porque se puede | It's practical because you can |
| 15 | Mi tía | My aunt |
| 16 | No tiene | It/he/she doesn't have |
| 17 | No hay | There isn't |
| 18 | Un metro | An underground |
| 19 | Cerca del supermercado | Near to the supermarket |
| 20 | Listo/a | clever |

MUSIC

Current Learning

| | | |
|----|-------------------|---|
| 1 | Djembe/Dnun | Traditional West African hand drums made from wood and goat skin |
| 2 | Call and Response | Question and answer musical devices |
| 3 | Improvisation | Making up a music rhythm or phrase |
| 4 | Crescendo | Gradually getting louder |
| 5 | Diminuendo | Gradually getting quieter |
| 6 | Accelerando | Gradually getting faster |
| 7 | Rallentando | Gradually getting slower |
| 8 | Signal | Musical phase use to signify a change in section |
| 9 | Master Drummer | Leader of a drum performance |
| 10 | Triplets | A group of 3 evenly spaced notes played in the duration of 2 standard notes of the same value |

Prior Learning

| | | |
|----|--|--|
| 11 | Pulse | Constant steady beat, heartbeat of the music |
| 12 | Ostinato | Repeated rhythm |
| 13 | Polyrhythm | Many rhythms, layered rhythms |
| 14 | Note values: Semibreve = 4 Minim = 2 Crotchet = 1 Quaver = 1/2 Semiquaver = 1/4 | Duration of notes used in music notation |
| 15 | Syncopation | Off beat rhythms |
| 16 | Time Signature | Amount of beats in a bar |

RELIGIOUS EDUCATION

Current Learning

| | | |
|---|------------------|--|
| 1 | Anti Semitism | Hostility or prejudice to Jewish people. |
| 2 | Atonement | Making things better after sinning, asking for forgiveness from God. |
| 3 | Banality of Evil | Evil that can result from thoughtless behaviour, normal, common, and dull, not sadistic, evil actions. |
| 4 | Dignity | To treat someone with honour and respect. |
| 5 | Evil | That which is considered to be extremely immoral, wicked and wrong. |
| 6 | Free Will | The ability to choose between right and wrong for yourself. To follow your own path. |
| 7 | Moral Evil | It is manmade: it is evil created on purpose by humanity and often leads to suffering. |
| 8 | Natural Evil | Evil caused by nature; humans, have very little control over it and it does not discriminate. |
| 9 | Sin | Any thought or action which goes against God's will. |

Prior Learning

| | | |
|----|------------------|---|
| 11 | Discrimination | To act differently towards or against someone or a group on the basis of prejudice. |
| 12 | Equality | The state of being equal, especially in status, rights, or opportunities. |
| 13 | Prejudice | Believing some individuals or groups are inferior or superior without even knowing them, forming an unreasonable opinion without evidence for it. |
| 14 | Social Injustice | The wrongful actions against individuals within society. |
| 15 | Social Justice | Means ensuring there is equal distribution of wealth, opportunities, and privileges in society. |
| 16 | Time Signature | Amount of beats in a bar |

SCIENCE

Current Learning

| | | |
|----|---|--|
| 1 | If a car is driving north at 60 m/s, what word describes both its speed and direction? | Velocity, because it includes both speed and direction. |
| 2 | When you describe something as moving "10 m/s to the east," what kind of quantity is that? | A vector quantity, because it has both size (10 m/s) and direction (east). |
| 3 | What do we call something that only has size, like "50 m/s," but no direction? | A scalar quantity, because it only tells us the magnitude. |
| 4 | If you walk straight 5 meters from your door, what is the word for how far and in which direction you've moved? | Displacement, because it's the distance in a straight line from the starting point. |
| 5 | What does a distance-time graph show? | It shows how far something has traveled over time, with distance on the y-axis and time on the x-axis. |
| 6 | If a toy car isn't moving at all, what word would you use to describe it? | Stationary, because it's not moving. |
| 7 | On a hill, what does the steepness of the slope (gradient) tell us? | It tells us how fast something is moving; a steeper gradient means it's faster. |
| 8 | If you're sitting on a train and see another train passing by, how would you describe its motion compared to yours? | That's relative motion, because it's how the train moves compared to you. |
| 9 | Why might someone think heavier objects fall faster than lighter ones? | That's a misconception, because all objects fall at the same rate in the absence of air resistance. |
| 10 | What happens when you push a door near its handle to make it swing? | You create a moment, which is the turning effect of a force around a pivot (like the door hinge). |

Prior Learning

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|----|--|--|
| 11 | What do we call a substance that tastes sour, has a pH less than 7, and releases hydrogen ions in water? | An acid, because it releases H^+ ions and has a low pH. |
| 12 | If a substance feels slippery, has a pH greater than 7, and releases hydroxide ions, what is it? | An alkali, because it releases OH^- ions and is basic. |
| 13 | What happens when an acid and an alkali mix and cancel each other out? | Neutralisation, which forms water and a salt. |
| 14 | What is created when the hydrogen in an acid is replaced by a metal or other positive ion? | A salt, which is a compound formed in this reaction. |
| 15 | How do we measure if something is acidic, neutral, or alkaline? | Using the pH scale, which ranges from 0 (acidic) to 14 (alkaline). |
| 16 | If you dip a special paper into a liquid and it changes color, what is the paper showing? | It's an indicator, which tells whether the solution is acidic or alkaline. |
| 17 | What do we call a substance that can neutralize an acid? | A base, because it reacts with acids to form water and a salt. |
| 18 | If you heat up a reaction and it happens faster, what are you affecting? | The reaction rate, which is how quickly a chemical reaction occurs. |
| 19 | What is the name of a substance that speeds up a reaction but doesn't get used up? | A catalyst, which makes reactions faster without being consumed. |
| 20 | What forms when two solutions mix and a solid suddenly appears? | A precipitate, which is an insoluble solid formed in a chemical reaction. |