

YEAR 9



Home Learning



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

right
relation
point of
English
language
and the
reside

Current Learning

1	Rhetoric	Understanding the elements of rhetoric: Logos, pathos, ethos
2	Audience	Understanding your audience helps you choose the right language, tone, and style to persuade them effectively.
3	Purpose	This could be to inform, persuade, argue, or entertain. Clear purpose shapes your message.
4	Rhetorical devices	Techniques used to persuade and engage. These include repetition, rhetorical questions, alliteration, and figurative language.
5	DAFOREST	Helpful acronym to help with persuasive writing.
6	Powerful speakers	Analyse figures like Martin Luther King Jr. or Greta Thunberg to learn how they inspire and influence others.
7	Anecdote	A short personal story used to persuade. Anecdotes make arguments relatable and emotional, drawing the audience in.
8	Expert opinions	Quoting knowledgeable individuals. Using experts adds credibility and strengthens your argument.
9	Advertising	Advertisements rely on language, images, and emotional appeal to influence customers.
10	Customer manipulation	This can include emotional triggers, scarcity tactics, or creating a sense of urgency to make customers act.

Prior Learning

11	Dystopian short stories	The fame behind dystopian short stories and the wonder that follows them.
12	Shirley Jackson's fiction	Reading Examination Day and surrounding stories by Jackson.
13	The subversion of the exam process	Changing and twisting the reality of examinations by applying government control.
14	Fractured marriages	Highlighting how the 'newborn' experience can fracture marriages in the worst way.
15	Character flaws	The construction of character flaws and how they materialise through stories. The 'wrong' parts of a character.
16	Narrative arc	The typical journey through a narrative following the rise and fall in tension and events. See Freytag's pyramid.
17	Innocuous	Something harmless and inoffensive.
18	Deviant	A character or person who goes against agreed rules or expectations.
19	Religious allusion	A phrase or story which alludes to the works and stories of religion (not exclusive to one religion alone).
20	Science fiction	Fiction surrounding scientific themes and characters.



SCIENCE

Current Learning

1	Velocity	The speed of an object in a given direction.
2	Vector Quantity	A quantity that has both magnitude (size) and an associated direction. Example: velocity.
3	Scalar Quantity	A quantity that has magnitude (size) but no associated direction. Example: speed.
4	Displacement	The distance moved in a straight line, in a given direction, from the starting point.
5	Distance-Time Graph	A graph used to represent a journey with distance travelled on the y-axis and time on the x-axis.
6	Stationary	A word used to describe an object that is not moving.
7	Gradient	A measure of the slope of a line. The greater the gradient, the steeper the slope.
8	Relative Motion	A way of describing an object's motion relative to another object's motion.
9	Misconception	A commonly believed idea or fact that is incorrect.
10	Moment	The turning effect of a force which is created by a force acting around a pivot.

Prior Learning

11	Acid	A substance that releases hydrogen ions (H^+) in solution and has a pH less than 7.
12	Alkali	A substance that releases hydroxide ions (OH^-) in solution and has a pH greater than 7.
13	Neutralisation	A chemical reaction in which an acid and an alkali react to form water and a salt.
14	Salt	A compound formed when the hydrogen ion of an acid is replaced by a metal ion or another positive ion.
15	pH Scale	A scale from 0 to 14 used to measure the acidity or alkalinity of a solution.
16	Indicator	A substance that changes color to show the pH level of a solution, indicating if it's acidic or alkaline.
17	Base	A substance that can neutralize an acid, often forming a salt and water.
18	Reaction Rate	The speed at which a chemical reaction occurs, influenced by factors like temperature and concentration.
19	Catalyst	A substance that increases the rate of a chemical reaction without being used up in the reaction.
20	Precipitate	An insoluble solid that forms when two solutions are mixed in a chemical reaction.

HISTORY



Current Learning

1	What German form of warfare was based on rapid movement and regular, concentrated attacks?	Blitzkrieg
2	What countries did the Nazis conquer in 1940 and 1941?	Denmark, Norway, the Netherlands, Belgium, France, Yugoslavia, and Greece
3	How long was the Nazi campaign that led to the conquest and subsequent Fall of France?	6 Weeks
4	From what port were Allied troops evacuated to Britain during the fall of France?	Dunkirk
5	British victory in what battle was seen as the turning point of the war in Africa?	Battle of El Alamein
6	What was the name of Hitler's invasion of the Soviet Union on 22 June 1941?	Operation Barbarossa
7	What were two reasons why the invasion of the Soviet Union was unsuccessful?	Blitzkrieg ineffective over great distances, and troops unprepared for winter
8	What city did the Germans fail to capture in the first week of December 1941?	Moscow
9	What proportion of casualties in the Second World War were from the Soviet Union?	More than half
10	How many Soviet civilians were estimated to have died from German massacres, disease, and famine during the Second World War?	10 million

Prior Learning

11	What event in 1933 led to the arrest and imprisonment of political opponents in the thousands?	Reichstag Fire
12	What new law was introduced allowing Hitler to pass any law he wanted without going through the Reichstag?	Enabling Act
13	Following the death of President Hindenburg, what new role did Hitler create that combined the roles of President and Chancellor?	Führer
14	What did the Nazis use to spread their ideas?	Propaganda
15	Where did Hitler and the Nazis hold annual rallies?	Nuremberg
16	What organisations were established for boys and girls within Nazi Germany to teach them key skills and about Nazi ideology?	Hitler Youth and League of German Maidens
17	What term is used to describe the increase in the manufacturing of weapons, planes and other military equipment by the Nazis?	Rearmament
18	What did the Nazis use in 1936 to show off the power of the Third Reich?	1936 Berlin Olympics
19	What was the name of the secret police agency led by Reinhard Heydrich, that spied on the population?	Gestapo
20	Where did many of the people arrested by the Gestapo end up as political prisoners?	Concentration Camps

GEOGRAPHY



Current Learning

1	How much of Earth was covered by ice in the last ice age?	01-Mar
2	What is a glacier?	A large mass of ice that flows across land, and down slopes
3	What are giant glaciers called?	Ice sheets
4	Where are the two largest ice sheets on Earth located?	Greenland and Antarctica
5	How thick are these ice sheets?	4km in places
6	Where else are glaciers found apart from ice sheets?	In mountains
7	What do glaciers need to form?	Snow
8	What does compact snow form?	Ice
9	How do glaciers flow?	Ice crystals slide past each other and the base of the glacier melts.
10	When ice floats in water we call it?	An iceberg

Prior Learning

11	What are the environmental effects of climate change?	<ul style="list-style-type: none">• Melting ice sheets• Rising sea levels• Ocean warming
12	What are the human effects of climate change?	<ul style="list-style-type: none">• Droughts• Clean water availability• Flooding
13	What % of coral has been lost between 1985 and 2012?	50.70%
14	What is a drought?	A prolonged period of low rainfall, leading to a shortage of water.
15	What areas is a risk from coastal flooding?	Maldives and the Netherlands.

MFL

AHOJ TER HALLO
iHOLA ER OLA HEJ
HELLO HALLO
MERHABA KUMUSTA
BONJOUR

Current Learning GROUP 5 WORDS

1	Ich werde	I will
2	Oberstufe	college
3	gehen	to go
4	Arzt	doctor
5	Krankenschwester	nurse
6	Friseur	hairdresser
7	Polizist	policeman
8	sein	to be
9	arbeiten	to work
10	Jahre(n)	years

Prior Learning

11	Geschichte	history
12	zehn	10
13	faul	lazy
14	sehr	very
15	manchmal	sometimes

ART



Current Learning

1	Record	To set down in some form of permanence - Record through sketching, drawing, printing and painting- in our personal sketchbooks.
2	Develop	Refine and develop idea through changing our design when working from 2 dimensional drawings into 3d models.
3	Communication	Using visual elements to convey ideas
4	Secondary Research	Using our past observations and taking inspiration from books, the internet and studio resources.
5	Construct	Building our Seth Clark response in cardboard and collected materials.
6	Layers	More than one sheets or piece of materials, through our model making and collage.
7	Texture	The feel and appearance of a material, selected for our models.
8	De-collage	The opposite of collage; instead of an image being built up of all or parts of existing images, it is created by cutting, tearing away.
9	Single flute (cardboard) Double Flute (Cardboard)	1 layer of corrugated card trapped between 2 layers of flat sheet or 2 corrugated layers of card sandwiched in between 3 layers of flat card. Manipulation of these materials through model making

Prior Learning

10	Urban Decay	Urban - relating to a town or a city. Decay - the state or process of rotting or decomposition. Referencing the work of Seth Clark.
11	Contextual analysis: Derelict - Architecture	Selecting and recording form the from the design of buildings in very poor condition as a result of disuse and neglect.
12	Composition	The way in which element work together to produce an overall effect, within our sketchbooks to research and within our drawings.
13	Layout	The arrangement of images, text and style on a page - Seth Clark research page.
14	Shading	A slight variation of tones within our drawings and using the pressure of our pencil in our illustrations.

RELIGIOUS EDUCATION



Current Learning

1	Absolute Poverty	Defined by the United Nations in 1995 as severe deprivation of basic human needs including food, safe drinking water, sanitation facilities, health, shelter, education, and information.
2	Discrimination	To act differently towards or against someone or a group on the basis of prejudice.
3	Equality	The state of being equal, especially in status, rights, or opportunities.
4	Inequality	A condition of being unequal, or of being given an unequal share of treatment, status, or opportunity.
5	Poverty	Being extremely poor or lacking basics.
6	Prejudice	Believing some individuals or groups are inferior or superior without even knowing them, forming an unreasonable opinion without evidence for it.
7	Relative Poverty	Is the standard of poverty defined in terms of the country it is within, so the view of poverty may vary between countries.
8	Social Injustice	The wrongful actions against individuals within society.
9	Social Justice	Means ensuring there is equal distribution of wealth, opportunities, and privileges in society.

Prior Learning

10	Anti Semitism	Hostility or prejudice to Jewish people
11	Dignity	To treat someone with honour and respect.
12	Fairness	Impartial and just treatment or behaviour without favouritism or discrimination
13	Homophobia	An extreme dislike/fear of homosexuality and homosexual people.
14	Islamophobia	Dislike of or prejudice against Islam or Muslims, especially as a political force.

DRAMA



Current Learning

1	What is physical theatre?	Representing a story, emotion, event or idea using your body and movement to tell the story.
2	Who are Frantic Assembly?	A theatre company that work within physical theatre.
3	What is the shift stop?	Taking control of someone else and when they move and stop.
4	What is a counter balance?	Using each others weight to balance.
5	What is the round?	Moving around another person.
6	What is the through?	Moving through a space someone else has created.
7	What is a chair duet?	Physical movement based on two people, on and around chairs.
8	What is choral movement?	Moving together as a group at the same time.
9	What is choral speech?	Speaking together as a group at the same time.

Prior Learning

10	What does it mean to use movement to tell a story?	Creating a section of movement to represent a story.
11	What does represent mean?	To show something to the audience.
12	What are physical skills?	Things we can change about ourself that the audience can see.
13	What is slow motion?	Moving at an exaggerated slow pace.
14	Why would we use a still image?	To highlight a key moment.



**COMPUTER
SCIENCE**

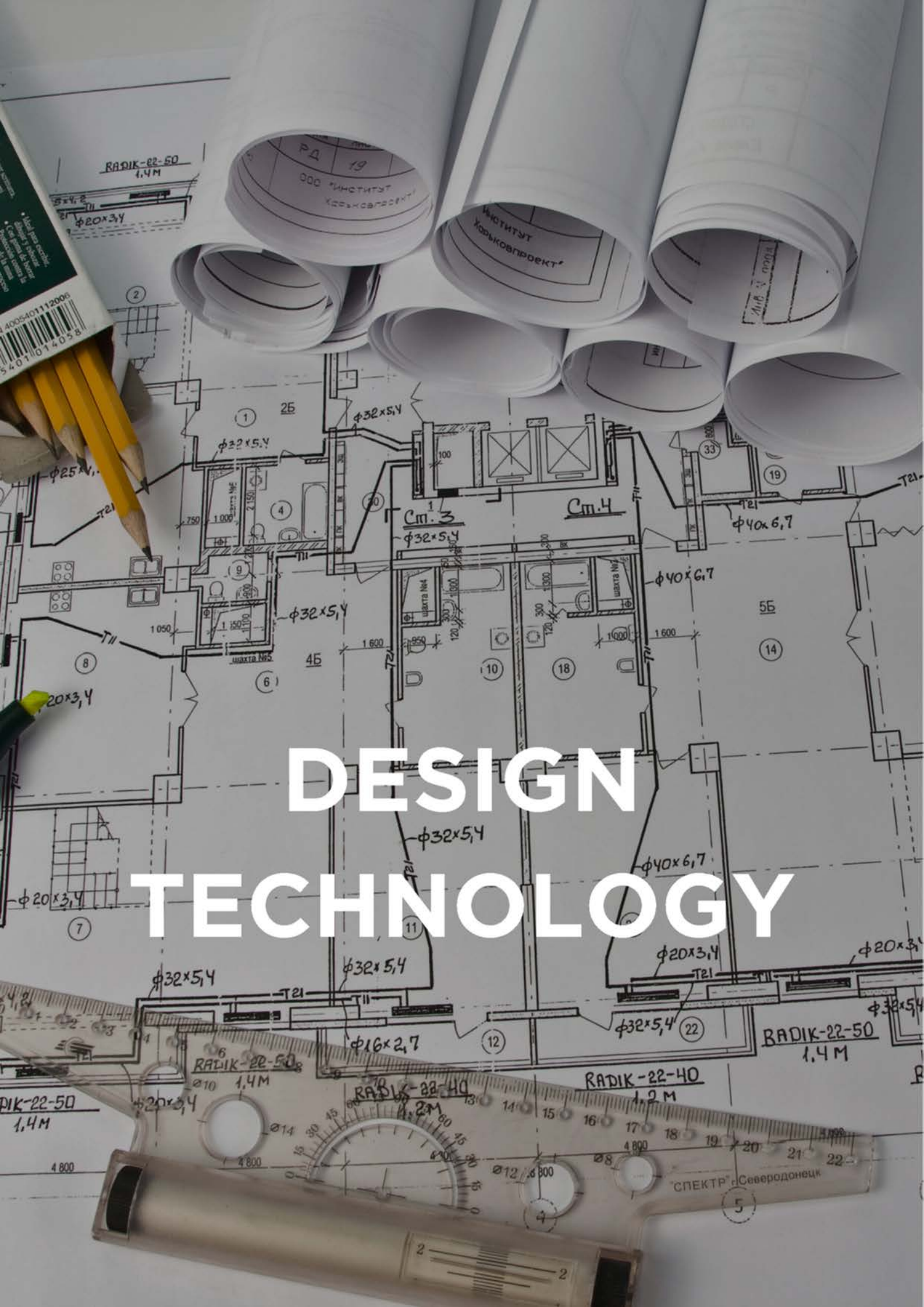
Current Learning

1	Computer System	A computer system takes a set of digital inputs, processes them and creates a set of outputs.
2	Embedded System	This is a control device that is built into a larger piece of equipment and do one specific job. Examples include SAT NAV, washing machine and traffic lights.
3	CPU	Central processing unit also known as a microprocessor, is the 'brain' at the core of any computer system
4	Input	Information or data needs into the system from input devices such as keyboards, mice, cameras, or sensors.
5	Process	The information collected needs to be processed and actions need to be carried out. E.g. carry out calculations.
6	Output	Once processed the result is presented by an output device such as a monitor or speaker or printer.
7	Hardware	Physical components of a computer system e.g. monitor, keyboard, mouse, CPU
8	Software	a set of instructions, data or programs used to operate computers and execute specific tasks. For example, email software like Outlook.

Prior Learning

9	Cyber attack	An attack on an organisation that tries to access their systems to steal large quantities of data.
10	Malware	Malicious software is intended to cause damage to files and systems.
11	Encryption	Converts information using a public encryption key into a meaningless form that cannot be read if intercepted.
12	Social engineering	The art of exploiting human psychology, rather than technical hacking techniques, to gain access to buildings, systems or data
13	Hacking	A term used to describe illegal access of computer systems by unauthorised users.
14	Personal data	Any data /information relating to an individual that can allow them to be identified e.g. first name, date of birth.
15	Firewall	Controls the transmission of data between a computer and other network computers on the Internet

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 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 soldering?	Soldering is a process that joins two or more types of metals through melting solder
6	What does Quality assurance mean?	A machine having one or more flat circular disks faced with abrasive for smoothing wood surfaces
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 Ecco friendly?	Imply 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

A chef in a white uniform is shown from the chest down, focused on slicing carrots on a green cutting board. The chef's hands are visible, holding a knife and a carrot. The cutting board is on a stainless steel countertop. In the foreground, there are several whole carrots and potatoes. The background shows a kitchen setting with stainless steel surfaces. The text "FOOD TECHNOLOGY" is overlaid in the center of the image.

FOOD TECHNOLOGY

Current Learning

1	Food miles	Food miles
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

10	Low biological value protein (LBV)	Low biological value (LBV) proteins are missing one or more of the essential amino acids we need.
11	High biological protein (HBV)	High Biological value (HBV) proteins contain all the 10 essential amino acids. Functions in the body.
12	Amino Acids	Amino acids are molecules that combine to form proteins. Amino acids and proteins are the building blocks of life
13	Deficiency	a lack or shortage
14	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