

	Autumn	Spring	Summer
Year 1	Tier 2 Balanced: Diet: Healthy: Packaging: Texture: Tier 3 Chop: Design brief: Dice: Grate:	Tier 2 Shape - the particular physical form or appearance of something Joining - to fix or fasten two things together Size - how large or small something or someone is Strong - having or using great force or control Weak - not physically strong Square - a flat shape with four sides of equal length and four angles of 90° Rectangle - a flat shape with four 90° angles and four sides, with opposite sides of equal length Triangle - a flat shape with three straight sides Tier 3 Fixing - to fasten something in position so that it cannot move Structure - something that has been made or built from parts, especially a large building Wall - a vertical structure, often made of stone or brick, that divides or surrounds something Roof - the covering that forms the top of a building Window - a space usually filled with glass in the wall of a building or in a vehicle, to allow light and air in and to allow people inside the building to see out Portcullis - a strong gate made of bars with points at the bottom that hangs above the entrance to a castle and in the past was brought down to the ground in order to close the entrance against enemies	Tier 2 Shape - the particular physical form or appearance of something Joining - to fix or fasten two things together Size - how large or small something or someone is Card - a piece of stiff paper Cut - Tier 3 Fixing - to fasten something in position so that it cannot move Hinge - join two things together so that one part can swing freely Movement an act of moving Handle - the part by which a thing is held, carried, or controlled Pivot - the central point on which a mechanism turns. Pull - to take something out of or away from a place, especially using physical effort Direction - a course along which someone or something moves. Balance - an even distribution of weight enabling someone or something to remain upright and steady Hole Punch - a device for punching holes in sheets of paper Paper Fastener - a fastener for holding a sheet of paper in place Planning - a detailed idea for achieving something. Label - a tag to give information Collage - a piece of art made by sticking together different materials to a background



		Ramparts - a large wall built round a town, castle, etc. to protect it  Drawbridge - a bridge that can be raised or brought down in order to protect a castle from attack or to allow big boats to go under it  Turret - a small, circular tower that is part of a castle or a large building  Hinge - join two things together so that one part can swing freely  Cube - a solid object with six square sides of equal size  Cuboid - a solid object with six rectangular sides  Cylinder - a solid or hollow tube with long straight sides and two circular ends the same size or an object shaped like this  Side - a flat outer surface of an object, especially one that is not the top, the bottom, the front, or the back  Edge - the outer or furthest point of something  Smaller Than - less than  Symmetrical - having two parts that match exactly, either when one half is like an image of the other half in a mirror	Forwards - in the direction that one is facing or travelling; towards the front  Backwards - towards the direction that is the opposite to the one in which you are facing  Lever - a bar used for lifting or lower an item  Slider - a bar used for sliding an item  Mechanism - is a piece of equipment which has lots of little parts that do a certain job  Rotate - something that turns with a circular movement
Year 2	Designing: user, list, label, drawings, ideas, choose, decide, evaluate, mock up, try out Making: plan, template, fabric, cutting out, sewing, needle, thread, running stitch, adding Knowledge and understanding: seam, stitch, strong, quality, features, strengthen	Tier 2 Wheel – A circular object which is part of a machine which allows it to move along the ground Shape - the particular physical form or appearance of something Joining – To fix or fasten two things together Lever – A bar used for lifting or lower an item Size - how large or small something or someone is Tier 3 Winding - to turn or cause something to turn Pulley - a piece of equipment for moving heavy objects up or down, consisting of a	Tier 2 Stitch - short pieces of thread that have been sewn in a piece of cloth Pin - attach or fasten with a pin or pins Joining - To fix or fasten two things together Size - how large or small something or someone is Design - a plan or drawing produced Tier 3 Adapt - to change, or to change something, to suit different conditions or uses Evaluate - to judge or calculate the quality, importance, amount or value or something Mock-up - a model of a structure

		small wheel over which a rope or chain attached to the object can be easily raised or lowered  Attaching- to fasten, join, or connect something  Combine - exist together  Vehicle - a machine such as a car, train, bus that are used to carry people from one place to another  Axle - a rod connecting a pair of wheels  Model - a thing used as an example to follow or imitate  Fixing - to fasten something in position so that it cannot move  Movement - an act of moving  Purpose - why you do something or why something exists  Function - the natural purpose (of something)  Hose - a long plastic or rubber pipe, used to direct water onto fires, gardens, etc.  Siren - a device for making a loud warning noise  Cab - the separate front part of a large vehicle, such as a truck, bus, or train, in which the driver sits  Connecting - to join or be joined with something else  Testing - a test is a deliberate action or experiment to find out how well something works  Chassis - the frame of a vehicle, usually including the wheels and engine, onto which the metal covering is fixed  Doweling - a rod, usually made of wood, that is used to hold two parts of something together by fitting into a hole in each part Logo - a design or symbol used by a company to advertise its products	Pattern – a repeated design  Measure - to discover the exact size or amount of something  Material - things that are needed for a particular job  Tape - a flexible ruler used to measure size or distance  Outline - the main shape or edge of something, without any details  Background - the things that can be seen behind the main things or people in a picture  Spacesuit - a piece of clothing worn by a person who travels in space to protect the body when outside a spacecraft  Astronaut - a person who has been trained for travelling in space  Seam - a line where two things join, especially a line of sewing joining two pieces of cloth  Centre - the middle point or part  Line - a long, thin mark on the surface of something  Flat - level and smooth, with no curved, high, or hollow parts  Symmetry - the quality of having parts that match each other, especially in a way that is attractive, or similarity of shape or contents  Strengthen - make stronger
Year 3	Tier 2  Quality – how good or bad something is.	Tier 2 Hinge – Join two things together so that one	Tier 2 Balanced:
	Purpose – the reason something is created.	part can swing freely	Carbohydrates:

**Rolling** – moving by turning over and over. **Stable** – an object/structure that won't give way

**Free-standing** – not attached or supported by another structure.

**Stiffen** – make or become stronger.

Sturdy - strongly built

**Reinforce** – strengthen or support with additional material

Distance - how far apart objects are.

Wide - a more than average width.

Narrow - less wide

**Deep-** far down from the top of a surface

Shallow - of little depth

Component – Parts that something is made of Finishing - the last covering of varnish, polish, or paint, that is put onto something

**Decorating** - to add something to an object or place, especially in order to make it more attractive

Constraints - something that controls what you do by keeping you within particular limits Evaluate - to judge or calculate the quality, importance, amount or value or something **Fixing** - to fasten something in position so that it cannot move

Lever – a beam which turns about a point
Attaching - to fasten, join, or connect
something

Tier 3

Component – Parts that something is made of Control - to order, limit, or rule something Pressure - the force you produce when you

press something

**Inflate** - to make something increase in size by filling it with air

**Deflate** - If something that has air or gas inside it deflates, or is deflated, it becomes smaller because it loses the air.

**Pump** - a piece of equipment that is used to cause liquid, air, or gas to move from one place to another

**Syringe** - a hollow, cylinder-shaped piece of equipment used for sucking liquid or air out of something or into something

**Tubing** - a long cylinder made from plastic, metal, rubber, or glass, especially used for moving or containing liquids or gases

**Finishing** - the last covering of varnish, polish, or paint, that is put onto something

**Decorating** - to add something to an object or place, especially in order to make it more attractive

Constraints - something that controls what you do by keeping you within particular limits Possible - able to be done or achieved Impossible - not able to be done or

achieved

Probable - likely to be true or likely to happen

Compressed – something that is squashed,
such as air in a tube.

Input – what goes into a system.

Output – what comes out of a system.

Pivot – a point about which a lever turns.

Diet:

Fats:

Function:

Healthy:

Packaging:

Proteins: Texture:

Tier 3

Chop:

Design brief:

Dice: Grate:



		Pneumatic – a system that works using gases (air).  Evaluate – to judge or calculate the quality, importance, amount or value or something	
Year 4	Tier 2 Component – Parts that something is made of Finishing - the last covering of varnish, polish, or paint, that is put onto something Decorating - to add something to an object or place, especially in order to make it more attractive Constraints - something that controls what you do by keeping you within certain limits Evaluate – to judge the quality of something Design - a plan or drawing produced to show the look and function of an object before it is made.  Mock-up – a model of a structure Plan – a detailed idea for achieving something. Fold - bend over on itself so that one part of it covers another.  Adhesive- to be able to stick fast to a surface or object Joining – link or connect Linkage – the action of linking something. Pivot -the central point on which a mechanism turns. Flexible – to bend easily without breaking. Joint - a point at which parts of a structure are joined.  Hinge - a movable joint or mechanism on which a door, gate, or lid swings as it opens and closes or which connects linked objects.  Mechanism - a device used to create movement in a product.  Lever - a rigid bar which moves around a pivot.	Tier 2 User - a person who uses or operates something Template – a thin piece of material used to cut other materials accurately Fabric – cloth or material produced by weaving Strengthen - make or become stronger Pattern – a repeated design  Tier 3 Embellish – to enhance Applique - ornamental needlework in which pieces of fabric are sewn or stuck on to a larger piece to form a picture or pattern Fastening – a clasp or zip used to fasten something and keep it shut Purpose - the reason for which something is done or created Design – a plan or drawing produced Criteria - a principle or standard by which something may be judged or decided Alternatives - one of two or more available possibilities Model - a thing used as an example to follow or imitate Specification - a detailed description of the design and materials used to make something Stiffening - support or strengthen (a garment or fabric), typically by adding tape or an adhesive layer Reinforcement - the action or process of reinforcing or strengthening Support - bear all or part of the weight of;	Tier 2 Join - To fix or fasten two things together Tier 3 Circuit - A complete route which an electrical current can flow around Battery - A small device that supplies the power for electrical items. A collection of cells. Cell - A single unit of electricity Wires - A long thin piece of metal that is used to carry electrical current Bulb - The glass part of an electrical item that gives out light. Electricity passes through it Switch - A small control used to turn an electrical device on and off Buzzer - An electrical device used to make a buzzing sound Model - a thing used as an example to follow or imitate Prototype - a mini version or model of the final design Communicate - share information Annotated Diagram - a diagram that is surrounded by explanatory notes Alarm - a warning of danger, usually a loud noise or flashing light Rectify Fault - to correct something or make something right Connection - the act of joining or being joined to something else Push-to-break - a switch that does the opposite (when the button is pressed, the circuit is broken) Push-to-make - a switch that allows electricity to flow between its two contacts

hold up

when held in

	Slider – a rigid bar which moves backwards and forwards along a straight line. Unlike a lever, a slider does not have a pivot point.	Compartment - a separate section or part of a structure or container	Reed Switch - an electrical switch operated by an applied magnetic field  Tilt Switch - a switch that transfers a change-of-state to another device  Rocker Switch - a switch that can be pressed on either end like a seesaw to connect or disconnect an electrical circuit  Slide Switch - a mechanical switch that slides from the open (off) position to the closed (on) position  Micro Switch - a very sensitive electric switch that can be operated rapidly by a small movement  Control - to order, limit, or rule something  Sensor - a device that is used to record that something is present or that there are changes in something  Input - what goes into a system.  Output - what comes out of a system.
Year 5	Tier 2 Investigate – To carry out research Texture – the feel, appearance, or consistency of a surface Outcome- The way things turn out. Plan – a detailed idea for doing or achieving something. Structure – an object constructed of several parts. Adhesives – a substance used for sticking objects or materials together Pitch- how high or low the musical note is. Sound – vibrations that travel through the air or another medium and can be heard when they reach a person's ear. Duration – the time during which something continues. Note – represents the pitch or duration of a musical sound. Strengthen – To make or become stronger. Reinforce - strengthen or support with additional material	Tier 2  Axle – a rod connecting a pair of wheels  Model - a thing used as an example to follow or imitate  Fixing - to fasten something in position so that it cannot move  Pivot – a point about which a lever turns  Control - to order, limit, or rule something  Movement – an act of moving  Tier 3  Sequence - arrange in a particular order  Annotated Diagram - a diagram that is surrounded by explanatory notes  Prototype - a mini version or model of the final design  Communicate - share information  Shape - the particular physical form or appearance of something  Assemble – to make something by joining separate parts  Saw – to cut wood or other similar material with a saw	Tier 2  Texture - the way something feels when you touch or taste it  Ingredients - a food that is used with other foods in the preparation of a particular dish  Mixing - to (cause different substances to) combine, so that the result cannot easily be separated into its parts  Hygienic - clean and free from illness  Tier 3  Shaping - changing the particular physical form or appearance of something  Topping - a layer of food poured or spread over a base of a different type of food to add flavour  Kneading - to press something, especially a mixture for making bread, firmly and repeatedly with the hands and fingers  Proving - to show a particular result after a period of time  Baking - to cook inside an oven, without using added liquid or fat



Mark Out – to show the shape or position of something by drawing a line around it Cam - a slider or roller attached to a rotating shaft to give a particular type of motion Mechanism - is a piece of equipment which has lots of little parts that do a certain job Linear Motion - is the motion that is natural to an object: moving in a straight line Rotary Motion - the act of rotating as if on an axis

Off-centre - not quite in the centre of something

Force - strength or energy as an attribute of physical action or movement

**Framework -** is a structure that forms a support or frame for something

Follower - one in the service of another

Guide - show or indicate the way

**Offset -** the amount or distance by which something is out of line

**Shaft -** a long, narrow part or section forming the handle of a tool or club, the body of a spear or arrow **Grilling -** the surface in a cooker that can be heated to very high temperatures and under which you put food to be cooked

**Boiling -** (of a liquid) heated to the point when it starts to turn into a gas

Frying - to cook food in hot oil or fat

**Glazing** - to make a surface shiny by putting a liquid substance onto it and leaving it or heating it until it dries

Yeast - a type of fungus that is used in making alcoholic drinks such as beer and wine, and for making bread swell and become light

**Wheat -** a plant whose yellowish-brown grain is used for making flour, or the grain itself

**Grain -** a seed or seeds from a plant, especially a plant like a grass such as rice or wheat

**Flour -** powder made from grain, especially wheat, used for making bread, cakes, pasta, pastry, etc.

**Dough** - flour mixed with water and often yeast, fat, or sugar, so that it is ready for baking

Crust - the outside layer of a loaf of bread

**Rise -** to move upwards

**Doughy -** soft, thick, and sticky

**Crisp -** used to describe cooked foods, such as pastry and biscuits, that are well cooked so that they are just dry and hard enough

**Chewy -** (of food) needing to be crushed a lot with the teeth before it is swallowed

Stretchy - capable of being stretched; elastic

**Bacteria -** very small organisms that are found everywhere and are the cause of many diseases

**Mould -** a soft, green or grey growth that develops on old food

**Food Poisoning -** an illness usually caused by eating food that contains harmful bacteria



# Year 6

### Tier 2

Strengthen – To make or become stronger. Reinforce – To strengthen or support with additional material

**Diagonal** – A straight line joining two opposite corners of a square, rectangle, or other straight-sided shape.

**Stable** – not likely to give way or overturn. **Framework** – an essential supporting structure of a building.

Material – A material is a substance or mixture of substances that constitutes an object.

Rigid – unable to bend or be forced out of shape.

**Water resistance -** something that will not be destroyed by exposure to liquid but that will instead repel the liquid. E.g. a water-resistant watch.

**Beam** – a long, sturdy piece of squared timber or metal used to support a building. **Tension** – a pulling force (something stretched tight).

**Compression** – the action or state of being squished down or made smaller or more pressed together.

**Bending –** To shape or force something straight into a curve or angle.

**Evaluate** – to judge or calculate the quality, importance, amount or value or something

## Tier 2

**Mechanism** - is a piece of equipment which has lots of little parts that do a certain job **Switch** - a small control used to turn an

electrical device on and off

Control - to order, limit, or rule somethina

Movement - an act of moving

**Finishing** - the last covering of varnish, polish, or paint, that is put onto something

Components - parts that something is made of

Electricity - a form of energy Tier 3

**Sequence -** arrange in a particular order **Annotated Diagram -** a diagram that is surrounded by explanatory notes

**Circuit** – a complete route which an electrical current can flow around

**Exploded Diagrams -** a drawing or photograph of a complicated mechanism that shows the individual parts

**Improvements -** a thing that makes something better or is better than something else

**Modify** - make partial or minor changes to (something)

Viewpoint - a position giving a good view Cladding - a covering or coating on a structure or material

**Series** - a number of similar or related events or things, one following another

Parallel - side by side and having the same distance continuously between them

**Motor** - a machine, especially one powered by electricity or internal combustion, that supplies motive power for a vehicle or for another device with moving parts

**Connection -** the act of joining or being joined to something else, or the part or process that makes this possible

### Tier 2

**Finishing** - the last covering of varnish, polish, or paint, that is put onto something

Embellish - to enhance

**Applique -** ornamental needlework in which pieces of fabric are sewn or stuck on to a larger piece to form a picture or pattern

Stitch - Stitch - short pieces of thread that have been sewn in a piece of cloth

Pattern - a repeated design

**Seam -** a line where two things join, especially a line of sewing joining two pieces of cloth

**Cut -** to break the surface of something, or to divide or make something smaller, using a sharp tool

**Pocket -** a small bag for carrying things in, made of cloth and sewn into the inside or onto the outside of a piece of clothing **Graphics -** images and designs used in books, magazines, etc.

### Tier 3

**Warmth -** a high temperature that is comfortable but not hot

**Appearance -** what something looks like **Practicality** - quality of being suitable for a particular occasion or use

**Function** - the natural purpose (of something) **Stenciling** - a picture made by drawing or painting through the holes in such a piece of card, etc. onto a surface

**Specification -** a detailed description of the design and materials used to make something

Flow Chart - a drawing that shows the stages of a process or activity from the beginning to the end using different shapes connected by lines

**Mood Board** - a board covered with pictures from magazines, pieces of material, etc. that shows the colours and styles to be used



		P = 0 feet look large
	Spindle - a part of a machine around which something turns, or a rod onto which thread is twisted when it is spun (= made by twisting)  Fan - an electric device with blades that turn quickly, used to move the air around  Charge - an electric current flows when electric charges move through a wire	Mock Up - a model of a structure User - someone who uses a product Swatches - a small piece of cloth used as an example of the colour and type of the cloth Tacking - long, loose stitches that are used to hold two pieces of cloth together temporarily before they are sewn together in a neater and permanent way
		Hem - the edge of a piece of cloth, such as the bottom edge of a skirt or dress, that is folded over and sewn Logo - a design or symbol used by a company to advertise its products Motif - a pattern or design Lettering - writing in a particular colour, style, etc Tassels - a group of short threads or ropes
		held together at one end, used as a hanging decoration  Sleeves - the part of a piece of clothing that covers some or all of the arm  Vest - a shirt without sleeves, usually made out of cotton, that is worn in the summer or for sport