

Knowledge Progression: DT

Year group	Autumn A	Spring A	Summer A	Autumn B	Spring B	Summer B
Year 1	<p>Topic: All About Me Stables</p> <ul style="list-style-type: none"> A net is made of 2D shapes. A structure is anything made up of parts held together. A stable is a building where horses, cattle etc., are kept and fed. 	<p>Topic: Plants and Animals Levers and Mechs</p> <ul style="list-style-type: none"> A lever is a simple machine which helps us to lift objects. A pivot is a central point. Sliders and levers are mechanisms. 	<p>Topic: Hot Air Balloons</p> <ul style="list-style-type: none"> A hot air balloon is a lighter-than-air aircraft. Balsa wood is the lightest kind of wood. Materials can be joined by stitching or glueing. 	<p>Topic: Beyond Living Memory -Puppets</p> <ul style="list-style-type: none"> A pattern is a template. The straight or running stitch is the basic stitch in hand sewing. Cotton is a type of fabric. 	<p>Topic: Amazon Rainforest - Smoothies</p> <ul style="list-style-type: none"> A fruit is an edible part of a plant. A smoothie is a beverage made by pureeing. A healthy diet includes eating fruit and vegetables. 	<p>Topic: Tudors - Mechanism, wheels and axles.</p> <ul style="list-style-type: none"> A chassis means frame. An axle is a bar that goes through the wheels, keeping them in place and allowing them to turn
Year 2	<p>Topic: Great Fire of London - Burning Structures</p> <ul style="list-style-type: none"> A freestanding structure is a structure that stands on its own foundation or base. A net is what a 3D shape will look like unfolded. A triangle is the most stable and ridged shape used in construction. 	<p>Topic: Kernow our Country - Diorama</p> <ul style="list-style-type: none"> Lever a rigid bar which moves around a pivot. The input movement is where the users pushes or pulls a card strip. A diorama is a model representing a scene with three-dimensional figures. 	<p>Topic: Flight - Kites</p> <ul style="list-style-type: none"> Construction consists of 3 parts for kite making. The paper type for kites is light weight but fibrous. This reduces weight and ensures strength. Kites fly because of the lifting force of the wind. 	<p>Topic: Beyond Living Memory -Puppets</p> <ul style="list-style-type: none"> A pattern is a template from which parts of a garment are traced onto fabric before being cut out. The straight or running stitch is the basic stitch in hand sewing and embroidery. Cotton fabric is one of the most commonly used types of fabric in the world. 	<p>Topic: Amazon Rainforest - Smoothies</p> <ul style="list-style-type: none"> A fruit is an edible part of a plant that develops from a flower. A smoothie is a beverage made by pureeing ingredients in a blender. The Eatwell Guide is a visual representation of how different foods and drinks can contribute towards a healthy balanced diet. 	<p>Topic: Tudors - Mechanism, wheels and axles.</p> <ul style="list-style-type: none"> A chassis consists consist of a framework. The wheels on a vehicle move at the same time and speed because each pair of wheels is attached to a pole which is called an axle.

	Year 3	<p>Topic: The Invaders are Coming!</p> <ul style="list-style-type: none"> • Anglo Saxon buildings were made from wood with wattle and daub. • Junk modelling is an additive process of sculpture. • Cross saws cut across the grain of wood. - Rib saws cut with the grain of wood. 	<p>Topic: Super Shang Dynasty - Cushion</p> <ul style="list-style-type: none"> • Embroidery thread or floss is used for stitching. • Fastenings are the things used to fasten garments. • Blanket stitch is a versatile and decorative sewing technique used to combine two edges of the fabric. 	<p>Topic: Ancient Egyptians - Alarmed Museum</p> <ul style="list-style-type: none"> • An electrical network is an interconnection of electrical components. • An input device produces a suitable electrical signal for processing in an electronic circuit. • An output device turns electrical signals back into 'real world' signals, such as light or sound 	<p>Topic: Roman Empire - Catapults</p> <ul style="list-style-type: none"> • Torsion is the twisting of an object that is a result of an applied torque. • A ballista is a weapon that uses tension to launch a projectile. • Pneumatics is the use of pressurized air for mechanical motion. 	<p>Topic: It's Not Easy Being Green</p> <ul style="list-style-type: none"> • Sculptures should use texture to convey feelings, expression or movements. • Living sculpture is created with items from nature. • Unity is a connection between elements that create a sense of organisation. 	<p>Topic: Magnificent Mayans - Tortilla Wrap</p> <ul style="list-style-type: none"> • A tortilla is a thin circular unleavened flatbread. • Different foods originate from different places around the world. • Different people have different nutritional needs.
	Year 4	<p>Topic: The Invaders are Coming!</p> <ul style="list-style-type: none"> • Anglo Saxon buildings were made from wood with wattle and daub. They had straw roofs. • Junk modelling is an additive process of sculpture. - Cross saws cut across the grain of wood. - Rib saws cut with the grain of wood. - Combination saws do both. 	<p>Topic: Super Shang Dynasty - Cushion</p> <ul style="list-style-type: none"> • Embroidery thread or floss is used for stitching. Floss is made of six strands. • Fastenings are the things used to fasten garments so they stay closed. • Blanket stitch is a versatile and decorative sewing technique used to combine two edges of the fabric to create a hem along the edges. 	<p>Topic: Ancient Egyptians - Alarmed Museum</p> <ul style="list-style-type: none"> • An electrical network is an interconnection of electrical components. • An input device produces a suitable electrical signal for processing in an electronic circuit. • An output device turns electrical signals back into 'real world' signals, such as light or sound 	<p>Topic: Roman Empire - Catapults</p> <ul style="list-style-type: none"> • Torsion is the twisting of an object that is a result of an applied torque. • A ballista is a weapon that uses tension to launch a projectile. • Pneumatics is the use of pressurized air for mechanical motion. It uses the energy in the pressurised air to create movement. 	<p>Topic: It's Not Easy Being Green</p> <ul style="list-style-type: none"> • Sculpture should use texture to convey feelings, expression or movements. Creating a visual texture. • Living sculpture is created with living, growing grasses, vines, plants or trees. • Unity is a connection between elements that create a sense of organization or harmony in the work of art. 	<p>Topic: Magnificent Mayans - Tortilla Wrap</p> <ul style="list-style-type: none"> • A tortilla is a thin circular unleavened flatbread from Mexico and Central America originally. • There are five main food groups. • Different foods originate from different places around the world. • Different people have different nutritional needs.

	Year 5	<p>Topic: 1066, Battle of Hastings - Mechanism Pop up Books</p> <ul style="list-style-type: none"> • A Parallel fold the most common and classic technique that creates layers • "Pop up" is a verb - the action of a sudden or immediate appearance. • A paper mechanism, may be a slide, a rotation, or a flap of paper. A pop-up book may have examples of both! 	<p>Topic: Benin & Our Planet - Textiles Waistcoats</p> <ul style="list-style-type: none"> • A template helps to accurately mark out a design on fabric. • 'Joining technique' means connecting two pieces of material together. • Back stitch creates strong, permanent seams. 	<p>Topic: Ancient Greece - Food</p> <ul style="list-style-type: none"> • The bridge hold and claw grip are methods used for chopping food. • Moussaka is an eggplant-and/or potato-based casserole dish. • Seasonal foods are fruit and vegetables that are ripe and ready in a particular season. 	<p>Topic: Cornwall - Structures Bridges</p> <ul style="list-style-type: none"> • Beam bridges are the simplest structural forms for bridges. • Arch bridges work by transferring the weight of the bridge and its loads partially into a horizontal thrust restrained by the abutments at either side. • A beam is a structural component on a bridge that resists loads applied to its axis. 	<p>Topic: Space - Electric System (steady hand games)</p> <ul style="list-style-type: none"> • A prototype is an initial creation of a product that demonstrates its usefulness. • Electrical conductivity is the measure of a material's ability to allow the transport of an electric charge. • An electric motor is an energy conversion device. 	<p>Topic: New Zealand / Australia</p> <ul style="list-style-type: none"> •
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	Year 6	<p>Topic: 1066, Battle of Hastings - Mechanism Pop up Books</p> <ul style="list-style-type: none"> • A pop book uses the energy drawn from pulling two pages apart. • A paper mechanism, may be a slide, a rotation, or a flap of paper. • A V-fold is a symmetrical 45 degree angle fold. 	<p>Topic: Benin & Our Planet - Textiles Waistcoats</p> <ul style="list-style-type: none"> • A template (or clothing pattern) helps to accurately mark out a design on fabric. • 'Joining technique' means connecting two pieces of material together. • Back Stitch, popular in embroidery, the back stitch creates strong, permanent seams. 	<p>Topic: Ancient Greece - Food</p> <ul style="list-style-type: none"> • The bridge hold and claw grip are methods used for chopping food. The rock away technique involves rocking the knife's blade from one point to another point. • Moussaka is an eggplant-and/or potato-based casserole dish, that traditionally also includes ground meat, that is popular in the cuisine of the Levant, Middle East, and Balkans • Increased demand for foods can have high environmental costs in the country of production, such as water stress and land use change with loss of biodiversity. 	<p>Topic: Cornwall - Structures Bridges</p> <ul style="list-style-type: none"> • Beam bridges are the simplest structural forms for bridges. An arch bridge is a bridge with abutments at each end shaped as a curved arch. • Arch bridges work by transferring the weight of the bridge and its loads partially into a horizontal thrust restrained by the abutments at either side. • A beam is a structural component on a bridge that resists loads applied to its axis. Beam bridges are least strong and flexible over longer distances. 	<p>Topic: Space - Electric System (steady hand games)</p> <ul style="list-style-type: none"> • A prototype is a test, or original, model of a product or a technology from which improvements, upgrades or fundamental changes can be made. • Electrical conductivity is the measure of a material's ability to allow the transport of an electric charge. • An electric motor is an energy conversion device that converts electrical energy into physical movement. 	<p>Topic: New Zealand / Australia</p> <ul style="list-style-type: none"> •
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