



Progression Map: DT

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
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Year 1	<p>Mechanisms</p> <p>How can you make a picture move?</p> <p>Specific knowledge: Common uses of sliders Different methods to create card sliders How sliders can create simple mechanisms</p> <p>Specific Skills: Design and make a slider product Evaluate the success of their outcomes and recommend improvements</p>	<p>Structures</p> <p>How can you stop a tower from toppling over?</p> <p>Specific knowledge: A freestanding structure is a structure that stands on its own foundation or base without attachment to anything else</p> <p>Specific Skills: Build structures that are freestanding using a range of different materials</p>	<p>Food and Nutrition</p> <p>How does food affect your senses?</p> <p>Specific knowledge: Why colourful food can be healthier How different foods can affect their senses</p> <p>Specific Skills: Peel, chop and grate a selection of vegetables Modify food to suit their food senses</p>	<p>Understanding Materials</p> <p>Can you build with bread?</p> <p>Specific knowledge: Building materials have different properties which enable them to be used for different purposes</p> <p>Specific Skills: Identify, sort and select materials that can be used in construction Combine materials</p>	<p>Textiles</p> <p>How can two squares of fabric keep you warm?</p> <p>Specific knowledge: Fabric can be joined together using a running stitch The types and names of tools needed for sewing</p> <p>Specific Skills: Create a running stitch Select tools for sewing Thread a needle</p>	<p>Food and Nutrition</p> <p>Why are vegetables the best?</p> <p>Specific knowledge: The importance of including a range of vegetables in a diet</p> <p>Specific Skills: Peel, grate, season and breadcrumb a range of vegetables</p>
Year 2	<p>Textiles</p> <p>How can you repurpose an item of clothing?</p>	<p>Food and Nutrition</p> <p>What does healthy mean?</p>	<p>Mechanisms</p> <p>Are bigger wheels always better?</p>	<p>Understanding Materials</p> <p>How can you waterproof a hat?</p>	<p>Food and Nutrition</p> <p>How healthy is your food?</p>	<p>Structures</p> <p>How strong is a piece of paper?</p>



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	<p>Specific knowledge: How to cut out shapes which have been created by using a template How to use a range of basic sewing skills</p> <p>Specific Skills: Use a template to transfer a pattern Cut out and join fabric shapes using a template</p>	<p>Specific knowledge: Why vegetables are so important to our health What processed foods are</p> <p>Specific Skills: Prepare a range of salad vegetables Shape and season a bread snack</p>	<p>Specific knowledge: How wheels and axles work together The size and position of wheels affects how they move</p> <p>Specific Skills: Create a simple wheel mechanism Use wheel mechanisms to propel a simple vehicle</p>	<p>Specific knowledge: Materials can be modified to become waterproof Origami comes from the Japanese words: ori – folding and kami – paper</p> <p>Specific Skills: Make paper waterproof Transform flat paper by folding and creasing to form a hat</p>	<p>Specific knowledge: The difference between fresh food and ultraprocessed foods</p> <p>Specific Skills: Shape and form ingredients to make delicious food Use a range of culinary techniques</p>	<p>Specific knowledge: Paper becomes stronger when it is folded A load is the amount of weight a structure must carry</p> <p>Specific Skills: Fold paper to increase strength and stability Test and record how much weight paper can hold</p>
Year 3	<p>Textiles</p> <p>How can you make a box out of cloth?</p> <p>Specific knowledge: Fabric can be stiffened Stiffened fabric can hold a form</p> <p>Specific Skills:</p>	<p>Food and Nutrition</p> <p>What do we mean by a balanced diet?</p> <p>Specific knowledge: What is meant by the term balanced Why fresh foods are better</p> <p>Specific Skills: Make a fruit and yoghurt dessert Make homemade</p>	<p>Mechanisms</p> <p>How can you do a lot of work with little effort?</p> <p>Specific knowledge: Types of levers and linkages Key terminology relating to levers and linkages</p>	<p>Food and Nutrition</p> <p>How does food affect your body and mind?</p> <p>Specific knowledge: How food can help their body and mind How to prepare and cook a range of vegetables</p> <p>Specific Skills:</p>	<p>Electrical Systems</p> <p>How are things powered?</p> <p>Specific knowledge: Different types of energy Why designers need to carefully consider energy sources</p>	<p>Structures</p> <p>What makes a bridge strong?</p> <p>Specific knowledge: Bridges are structures that allow people and vehicles to cross over an open space</p>



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	<p>Select and apply solutions to stiffen fabric Make a box using stiffened fabric</p>	<p>chips Flavour foods to increase their sensory qualities</p>	<p>How levers and linkages can change the direction of movement Specific Skills: Design and make simplistic lever and linkage products Evaluate the success of their outcomes and recommend improvements</p>	<p>Peel and grate a range of vegetables Add flavour and texture to foods</p>	<p>Specific Skills: Identify how things are powered Suggest appropriate energy sources for design problems</p>	<p>Towers, piers and arches provide strength to a bridge Specific Skills: Design and build a beam bridge that can hold the weight of 100 pennies Identify and name parts of a bridge</p>
Year 4	<p>Food and Nutrition</p> <p>What's really in your food?</p> <p>Specific knowledge: Processed foods have many added ingredients</p> <p>Specific Skills: Make, roll and shape bread dough Make a soup</p>	<p>Mechanisms</p> <p>How many ways are there to open a door?</p> <p>Specific knowledge: Types of hinges and the related terminology Common uses for hinges</p> <p>Specific Skills: Make a variety of model hinges Make and evaluate hinged</p>	<p>Textiles</p> <p>How do you keep a tea towel from slipping off a hook?</p> <p>Specific knowledge: Fastenings have different functions A shank provides a small amount of space between the button and fabric</p> <p>Specific Skills:</p>	<p>Structures</p> <p>Which shapes will give a structure stability?</p> <p>Specific knowledge: Triangles provide stability in a structure Structural engineers work with architects to ensure structures withstand forces</p> <p>Specific Skills: Make triangles to form and join trusses</p>	<p>Electrical Systems</p> <p>How useful are switches?</p> <p>Specific knowledge: A switch is an interruption in a circuit Switches are widely used in a range of products</p> <p>Specific Skills: Incorporate different types of switches into circuits to perform a function</p>	<p>Food and Nutrition</p> <p>Is cheap food always worse for you?</p> <p>Specific knowledge: That cheap processed food often contains additives, salt and sugar, which makes it less healthy than unprocessed food</p> <p>Specific Skills: Peel, grate and chop vegetables to make</p>



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		products using modelling materials	Select appropriate fastenings and attach them to fabric Make a shank for a button	Identify the forces that affect structures		economical, tasty and healthy food
Year 5	<p>Food and Nutrition</p> <p>Why are our diets so different?</p> <p>Specific knowledge: Some foods and key ingredients from other cultures How other cultures' food can be nutritious</p> <p>Specific Skills: Make, roll and cook a flatbread Prepare a range of vegetables Present foods to a high standard</p>	<p>Electrical Systems</p> <p>How can we keep ourselves safe on the road?</p> <p>Specific knowledge: Technology can be used to program and control a product</p> <p>Specific Skills: Combine elements of their design knowledge to fulfil a brief</p>	<p>Textiles</p> <p>Which fabric is ideal for creating a functional and hardwearing lunch bag?</p> <p>Specific knowledge: How to waterproof cotton fabric Which fabrics are both functional and hardwearing</p> <p>Specific Skills: Use beeswax to waterproof cotton fabric Repurpose a pair of jeans</p>	<p>Food and Nutrition</p> <p>What can you learn from different cultures' diets?</p> <p>Specific knowledge: How foods can be used as medicines How eating food from different countries can help us be healthy</p> <p>Specific Skills: Roll and shape ingredients Slice and ribbon a range of vegetables Stir-fry vegetables</p>	<p>Structures</p> <p>How are frames strengthened, reinforced and made rigid?</p> <p>Specific knowledge: Engineers use a range of methods to strengthen and reinforce structures</p> <p>Specific Skills: Identify and describe ways that frames are strengthened and reinforced</p>	<p>Mechanisms</p> <p>How can you lift a car onto a roof?</p> <p>Specific knowledge: Types of gears and terminology relating to gears Common uses of pulleys and gears How pulleys and gears can change the direction of movement</p> <p>Specific Skills: Design and make products that use pulleys and gears to lift loads Evaluate the success of their outcomes</p>



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						and recommend improvements
Year 6	<p>Food and Nutrition</p> <p>Can street foods save us?</p> <p>Specific knowledge: What street foods are How snacks can be good foods to eat</p> <p>Specific Skills: Make a burrito Make and roll bread dough Make a savoury pastry</p>	<p>Mechanisms</p> <p>How do pulleys and gears let you see the world?</p> <p>Specific knowledge: Types of pulley systems and gears Common uses of pulleys and gears How pulleys and gears can create simple mechanisms and change direction of movement</p> <p>Specific Skills: Design and make a model Ferris wheel powered by gears Evaluate the success of their outcomes and recommend improvements</p>	<p>Food and Nutrition</p> <p>Does food affect the way you feel?</p> <p>Specific knowledge: The difference between slow release and quick release carbohydrates How food can improve their mood and energy levels</p> <p>Specific Skills: Dice, slice, peel, grate and cook a range of vegetables Make a sauce and a stock Use height and colour to improve the visual app</p>	<p>Structures</p> <p>How strong is a piece of spaghetti?</p> <p>Specific knowledge: Structures can be supported with guy lines and flying buttresses The shorter the piece of spaghetti, the stronger it will be</p> <p>Specific Skills: Construct a flying buttress to support a tower Use appropriate lengths of spaghetti to increase strength and stability</p>	<p>Electrical Systems</p> <p>Can switches perform more than one function?</p> <p>Specific knowledge: More than one switch can be used to change the functionality of a product</p> <p>Specific Skills: Use switches to adapt a product in response to a design brief</p>	<p>Textiles</p> <p>How can we reduce, recycle and repurpose?</p> <p>Specific knowledge: Plastic waste can be recycled and repurposed into practical, useful items</p> <p>Specific Skills: Make a crochet hook out of a chopstick Use plastic bags and snack packets to create practical items</p>