

St Philip's KS1 D and T Skills Progression Map



Structures	Year 1	Year 2
Design: Constructing a Windmill (Y1) Baby Bear's Chair (Y2)	<ul style="list-style-type: none"> • Learning the importance of a clear design criteria. • Including individual preferences and requirements in a design. 	<ul style="list-style-type: none"> • Generating and communicating ideas using sketching and modelling. • Learning about different types of structures, found in the natural world and in everyday objects.
Make: Constructing a Windmill (Y1) Baby Bear's Chair (Y2)	<ul style="list-style-type: none"> • Making stable structures from card, tape and glue. • Learning how to turn 2D nets into 3D structures. • Following instructions to cut and assemble the supporting structure of a windmill. • Making functioning turbines and axles which are assembled into a main supporting structure. 	<ul style="list-style-type: none"> • Making a structure according to design criteria. • Creating joints and structures from paper/card and tape. • Building a strong and stiff structure by folding paper.
Evaluate: Constructing a Windmill (Y1) Baby Bear's Chair (Y2)	<ul style="list-style-type: none"> • Evaluating a windmill according to the design criteria, testing whether the structure is strong and stable and altering it if it isn't. 	<ul style="list-style-type: none"> • Suggest points for improvements. • Exploring the features of structures. • Comparing the stability of different shapes. • Testing the strength of own structures. • Identifying the weakest part of a structure. • Evaluating the strength, stiffness and stability of own structure.

Mechanisms/Mechanical Systems	Year 1	Year 2
Design: Making a moving Story Book (Y1) Fairground Wheel (Y2)	<ul style="list-style-type: none"> • Explaining how to adapt mechanisms, using bridges or guides to control the movement. • Designing a moving story book for a given audience. 	<ul style="list-style-type: none"> • Selecting a suitable linkage system to produce the desired motion. • Designing a wheel.
Design: Wheels and Axles (Y1) Making a moving monster (Y2)	<ul style="list-style-type: none"> • Designing a vehicle that includes wheels, axles and axle holders, that when combined, will allow the wheels to move. • Creating clearly labelled drawings that illustrate movement. 	<ul style="list-style-type: none"> • Creating a class design criterion for a moving monster. • Designing a moving monster for a specific audience in accordance with a design criteria.
Make: Making a moving Story Book (Y1) Fairground Wheel (Y2)	<ul style="list-style-type: none"> • Following a design to create moving models that use levers and sliders. 	<ul style="list-style-type: none"> • Selecting materials according to their characteristics. • Following a design brief.
Make: Wheels and Axles (Y1) Making a moving monster (Y2)	<ul style="list-style-type: none"> • Adapting mechanisms, when: <ul style="list-style-type: none"> ○ they do not work as they should. ○ to fit their vehicle design. ○ to improve how they work after ○ testing their vehicle. 	<ul style="list-style-type: none"> • Making linkages using card for levers and split pins for pivots. • Experimenting with linkages adjusting the widths, lengths and thicknesses of card used. • Cutting and assembling components neatly.
Evaluate: Making a moving Story Book (Y1) Fairground Wheel (Y2)	<ul style="list-style-type: none"> • Testing a finished product, seeing whether it moves as planned and if not, explaining why and how it can be fixed. • Reviewing the success of a product by testing it with its intended audience. 	<ul style="list-style-type: none"> • Testing wheel and axle mechanisms, identifying what stops the wheels from turning, and recognising that a wheel needs an axle in order to move.
Evaluate: Wheels and Axles (Y1) Making a moving monster (Y2)	<ul style="list-style-type: none"> • Evaluating different designs. • Testing and adapting a design. 	<ul style="list-style-type: none"> • Evaluating own designs against design criteria. • Using peer feedback to modify a final design.

Cooking and Nutrition	Year 1	Year 2
Design: Fruit and Vegetables (Y1) A Balanced Diet (Y2)	<ul style="list-style-type: none"> • Designing smoothie carton packaging by-hand or on ICT software. 	<ul style="list-style-type: none"> • Designing a healthy wrap based on a food combination which works well together.
Make: Fruit and Vegetables (Y1) A Balanced Diet (Y2)	<ul style="list-style-type: none"> • Chopping fruit and vegetables safely to make a smoothie. • Identifying if a food is a fruit or a vegetable. • Learning where and how fruits and vegetables grow. 	<ul style="list-style-type: none"> • Slicing food safely using the bridge or claw grip. • Constructing a wrap that meets a design brief.
Evaluate: Fruit and Vegetables (Y1) A Balanced Diet (Y2)	<ul style="list-style-type: none"> • Tasting and evaluating different food combinations. • Describing appearance, smell and taste. • Suggesting information to be included on packaging. 	<ul style="list-style-type: none"> • Describing the taste, texture and smell of fruit and vegetables. • Taste testing food combinations and final products. • Describing the information that should be included on a label. • Evaluating which grip was most effective.

Textiles	Year 1	Year 2
Design: Puppets (Y1) Pouches (Y2)	<ul style="list-style-type: none"> Using a template to create a design for a puppet. 	<ul style="list-style-type: none"> Designing a pouch.
Make: Puppets (Y1) Pouches (Y2)	<ul style="list-style-type: none"> Cutting fabric neatly with scissors. Using joining methods to decorate a puppet. Sequencing the steps taken during construction. 	<ul style="list-style-type: none"> Selecting and cutting fabrics for sewing. Decorating a pouch using fabric glue or running stitch. Threading a needle. Sewing running stitch, with evenly spaced, neat, even stitches to join fabric. Neatly pinning and cutting fabric using a template.
Evaluate: Puppets (Y1) Pouches (Y2)	<ul style="list-style-type: none"> Reflecting on a finished product, explaining likes and dislikes. 	<ul style="list-style-type: none"> Troubleshooting scenarios posed by the teacher. Evaluating the quality of the stitching on others' work. Discussing as a class the success of their stitching against the success criteria. Identifying aspects of their peers' work that they particularly like and explaining why.