

Milestones

Design Technology (DT)

Cycle B

It is our aim that children in Year 1 will be achieving at the Basic level as they begin their journey of experiencing these areas of the Design Technology curriculum. Year 2 children will achieve the 'Basic' or 'Expected' levels and Year 3 children will be achieving at the 'Expected' and 'Deep' level.

Mechanisms (Wheels & Axels)	Basic:	Expected:	Deep:
Prior Learning/ Experiences			
Assembled vehicles with moving wheels using construction kits.			
Explored moving vehicles through play.			
Gained some experience of designing, making and evaluating products for a specified user and purpose.			
Developed some cutting, joining and finishing skills with card.			
Designing			
Generate initial ideas and simple design criteria through talking and using own experiences.			
Develop and communicate ideas through drawings and mock-ups.			
Making			
Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing.			
Select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics.			
Evaluating			
Explore and evaluate a range of products with wheels and axles.			
Evaluate their ideas throughout and their products against original criteria.			
Technical knowledge and understanding			
Explore and use wheels, axles and axle holders.			
Distinguish between fixed and freely moving axles.			
Know and use technical vocabulary relevant to the project.			
Textiles (Templates & Joining Techniques)			
Prior Learning/ Experiences			
Explored and used different fabrics.			

Cut and joined fabrics with simple techniques.			
Thought about the user and purpose of products.			
Designing			
Design a functional and appealing product for a chosen user and purpose based on simple design criteria.			
Generate, develop, model and communicate their ideas as appropriate through talking, drawing, templates, mock-ups and information and communication technology.			
Making			
Select from and use a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing.			
Select from and use textiles according to their characteristics.			
Evaluating			
Explore and evaluate a range of existing textile products relevant to the project being undertaken.			
Evaluate their ideas throughout and their final products against original design criteria.			
Technical knowledge and understanding			
Understand how simple 3-D textile products are made, using a template to create two identical shapes.			
Understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling.			
Explore different finishing techniques e.g. using painting, fabric crayons, stitching, sequins, buttons and ribbons.			
Know and use technical vocabulary relevant to the project.			
Structures (Shell Structures including Packaging)	Basic:	Expected:	Deep:
Prior Learning/ Experiences			
Experience of using different joining, cutting and finishing techniques with paper and card.			
A basic understanding of 2-D and 3-D shapes in mathematics and the physical properties and everyday uses of materials in science.			
Designing			
Generate realistic ideas and design criteria collaboratively through discussion, focusing on the needs of the user and purpose of the product.			
Develop ideas through the analysis of existing products and use annotated sketches and prototypes to model and communicate ideas.			

Making			
Order the main stages of making.			
Select and use appropriate tools to measure, mark out, cut, score, shape and assemble with some accuracy.			
Explain their choice of materials according to functional properties and aesthetic qualities.			
Use finishing techniques suitable for the product they are creating.			
Evaluating			
Investigate and evaluate a range of existing shell structures including the materials, components and techniques that have been used.			
Test and evaluate their own products against design criteria and the intended user and purpose.			
Technical knowledge and understanding			
Develop and use knowledge of how to construct strong, stiff shell structures.			
Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes.			
Know and use technical vocabulary relevant to the project.			