

## Design Technology Curriculum

### Early Design Technology Skills

The three characteristics of effective teaching and learning are playing and exploring, active learning and creating and thinking critically and they guide all of our practice and provision. We create daily opportunities for children to develop their early Design Technology skills throughout the curriculum in Early Years Foundation Stage.

imagining

designing

drawing

selecting

modelling

joining

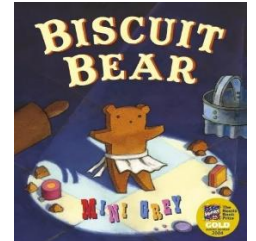
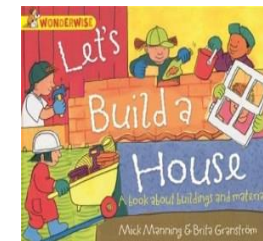
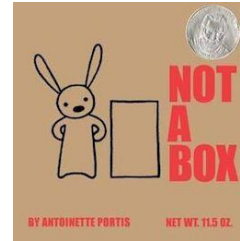
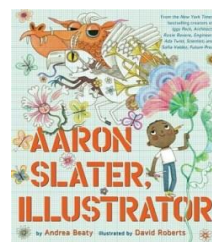
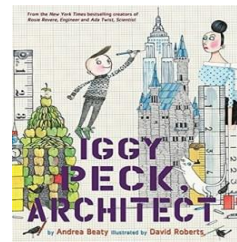
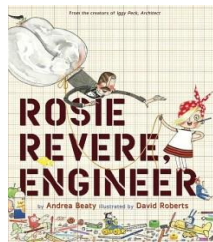
manipulating

evaluating

### EYFS Provision

Children are offered inspiring, enabling environments both indoors and outdoors which promote independent practice of fine motor skills and encourage risk-taking play. They have daily opportunities to explore different materials freely, to build structures and models and to use one-handed tools and equipment safely and competently, with and without adult support.

### EYFS Vehicle texts



### EYFS Vocabulary

**Teach:** cut, snip, scissors, fold, bend, build, make, cook, chop, slice, colour, tools, cutlery, model

**Expose to:** two-dimensional (2D), three-dimensional (3D), plan, design, template

### EYFS Early Learning Goals – Expressive Arts and Design – Creating with Materials

Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function  
Share their creations, explaining the process they have used

### EYFS Early Learning Goals – Physical Development – Fine Motor Skills

Hold a pencil effectively in preparation for fluent writing – using the tripod grip in almost all cases  
Use a range of small tools, including scissors, paintbrushes and cutlery  
Begin to show accuracy and care when drawing

## National Curriculum Statutory Requirements for KS1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts - for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment. They should:

### Design

design purposeful, functional, appealing products for themselves and other users based on design criteria  
generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

### Make

select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]

select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

### Evaluate

explore and evaluate a range of existing products  
evaluate their ideas and products against design criteria

### Technical knowledge

build structures, exploring how they can be made stronger, stiffer and more stable  
explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products

### Developing oracy across the curriculum – talking like a designer

The purpose of my product is...

I like/I dislike this because...



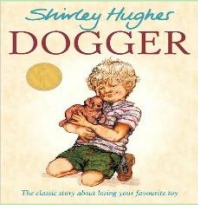
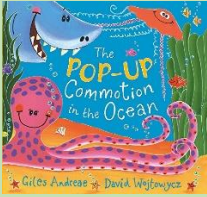
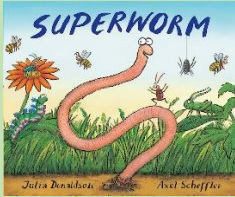
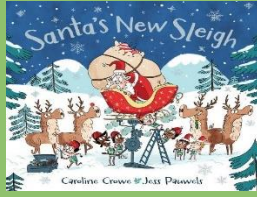
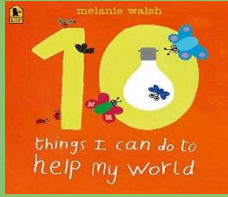
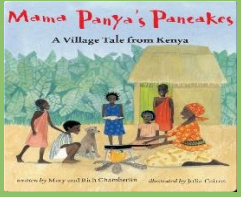
The most challenging part of the process was...

I could improve my product by...

## PROGRESSION IN DESIGN TECHNOLOGY – KEY STAGE ONE

EXPLORERS YEAR ONE AUTUMN	PLANET PROTECTORS YEAR ONE SPRING	HEROES YEAR ONE SUMMER	EXPLORERS YEAR TWO AUTUMN	PLANET PROTECTORS YEAR TWO SPRING	HEROES YEAR TWO SUMMER
<i>Puppets</i>	<i>Moving story book</i>	<i>Dens</i>	<i>Vehicle for Santa</i>	<i>Eco Flag</i>	<i>Food</i>
<p>I can design a functional and appealing puppet based on those I have explored and evaluated.</p> <p>I can communicate my ideas by making a template on paper.</p> <p>I can mark out and cut card in the correct shape to make my puppet.</p> <p>I can consider ways of joining parts of my puppet together.</p> <p>I can join the two parts of my puppet together.</p> <p>I can evaluate my product to say how it can be improved.</p> <p>I can communicate my ideas through ICT (Chatterkids).</p>	<p>I can explore and use sliders and levers in story books and practically.</p> <p>I can work with my class to design a purposeful moving story book for a younger child.</p> <p>I can generate ideas by making a paper mock-up of my story page.</p> <p>I can investigate a range of mechanisms (sliders and levers) before choosing the most appropriate for my design.</p> <p>I can evaluate our class product against similar products.</p> <p>I can say whether our product was fit for purpose.</p>	<p>I can design a structure for a superhero to use, following criteria we have decided as a class.</p> <p>I can use information and communication technology to research appropriate materials for construction.</p> <p>I can work in a different context (forest) to explore characteristics of natural and human-made materials.</p> <p>I can experiment with different ways of joining materials together.</p> <p>I can evaluate my finished structure and consider ways to make it stiffer, stronger and more stable.</p> <p style="text-align: center;"><b>Cross-curricular writing</b></p> <p>I can write a recount of den day, including what I used and why.</p>	<p>I can explore and evaluate a range of vehicles to investigate how wheels and axles work.</p> <p>I can generate a design by talking and drawing with my peers.</p> <p>I can use a range of practical equipment to create my vehicle, including a saw and vice.</p> <p>I can add a wheel and axle mechanism to my vehicle.</p> <p>I can evaluate my wheeled vehicle against the design criteria.</p> <p>I can demonstrate how successfully my vehicle moves and share on Seesaw how it is fit for purpose.</p> <p style="text-align: center;"><b>Cross-curricular writing</b></p> <p>I can write a letter to Santa detailing the vehicle I have created for him.</p>	<p>I can investigate the different ways that fabrics are joined together.</p> <p>I can design an appealing product for the community following a design criteria.</p> <p>I can use ICT to design an appealing, functional product.</p> <p>I can create a mock-up of my flag by using a range of joining techniques (gluing, stapling, sewing, taping, pinning).</p> <p>I can finish my product by attaching different materials using the same techniques.</p> <p>I can evaluate my product against design criteria.</p> <p>I can share my product with the local community.</p> <p style="text-align: center;"><b>Cross-curricular writing</b></p> <p>I can write an email to a large supermarket chain asking them to display our flags.</p>	<p>I can explore a range of pancakes by tasting and evaluating them.</p> <p>I can generate ideas through talking and exploring story books.</p> <p>I can select ingredients and utensils to make a class pancake.</p> <p>I can design my own pancake based on successful ones I have tested.</p> <p>I can select and use ingredients and utensils to use when making my pancake.</p> <p>I can share my product with an adult and ask them to evaluate it against the design criteria.</p> <p style="text-align: center;"><b>Cross-curricular writing</b></p> <p>I can write instructions for making a pancake for Mama Panya.</p>

**KEY VEHICLE TEXTS AND VOCABULARY**

EXPLORERS	PLANET PROTECTORS	HEROES	EXPLORERS	PLANET PROTECTORS	HEROES
					
<i>Puppets</i>	<i>Moving story book</i>	<i>Dens</i>	<i>Vehicle for Santa</i>	<i>Eco Flag</i>	<i>Food</i>
plan design make product user template measure fold two-dimensional three – dimensional	explore evaluate purpose lever slider mock-up criteria pivot	investigate natural man-made textiles stronger stable scale	Revise Y1 vocabulary mechanism machinery wheels axles axle holder chassis body dowel fixed free sawing	Revise Y1 vocabulary stiff malleable structure construction	Revise Y1 vocabulary chop slice dice ingredients food hygiene sampling utensils origin food safety

## Design Technology throughout the Curriculum

We revise our Design Technology learning across the curriculum, especially in English where we place great emphasis on teaching fine motor skills in preparation for good handwriting. Classrooms have daily access to workshop and construction materials. Block play is used to enhance learning in KS1 Humanities and Maths. Daily 'morning challenges' encourage children to practise their fine motor skills such as cutting and joining.

