

### Nursery

**ELG – Expressive Art and Design: Creating with Materials** Physical Development: Fine motor skills, Gross Motor Skills

Child initiated exploration of a range of construction and design opportunities through continuous provision construction area and separate block play area.

Explore different materials freely, in order to develop their ideas about how to use them and what to make.

Develop their own ideas and then decide which materials to use to express them.

Beginning to develop control with single-handed utensils or writing implements and growing control of simple constructions.

### Reception

**ELG – Expressive Art and Design: Creating with Materials** Physical Development: Fine motor skills, Gross Motor Skills

A construction area in each classroom throughout the year and a separate block area for construction buildings.

Free choice junk modelling with a range of connecting including tape, glue, string

Make a plan for a project and communicate that plan to others.

Explore different materials freely, in order to develop their ideas about how to use them and what to make.

Develop their own ideas and then decide which materials to use to express them.

Three Little Pigs Ogden Trust experiment. Building bridges using simple materials (Iollipop stick and pinch pegs)

Refine ideas and develop their ability to represent them.

Create collaboratively, sharing ideas, resources and skills.

#### Year 2

Project: Design, make and evaluate a hand puppet (Textiles)					
Designing	Making	Evaluating	Technical Knowledge		
<ul> <li>Learn how to create simple design criteria</li> <li>Learn about creating models and mark ups of a design</li> <li>Learn how to create a functional product for a purpose</li> <li>Develop ideas by making prototypes</li> </ul>	<ul> <li>Plan step by step instructions</li> <li>Know what tools and equipment are suitable</li> <li>Select from and use a range of textiles according to their characteristics.</li> <li>How to use simple finishing techniques for your product</li> </ul>	<ul> <li>Explore a range of existing textile products and compare your own</li> <li>Learn how to consider the effectiveness of your product in relation to its purpose</li> <li>To assess whether your product meets the design criteria</li> </ul>	<ul> <li>Understand how simple 3-D textile products are made, using a template to create two identical shapes.</li> <li>Understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling.</li> <li>Explore different finishing techniques e.g. using painting, fabric crayons, stitching, sequins, buttons and ribbons.</li> <li>Know and use technical vocabulary relevant to the project.</li> </ul>		



Key Vocabulary: Template Pattern pieces Mark out Join Decorate Tools Components Function Purpose Product Equipment: Felt, reclaimed fabric thread, pins, needles, fabric glue, scissors, items for finishing eg buttons, wool, fabric paints, sequins

Designing	Making	Evaluating	Technical Knowledge
Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s.  • Produce annotated sketches, prototypes, final product sketches and pattern pieces.  • make design decisions that take account of the availability of resources	Plan the main stages of making.  • Select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing.  • Select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern.  • Explain their choice of tools and equipment in relation to the skills and techniques they will be using	<ul> <li>Investigate a range of 3-D textile products relevant to the project.</li> <li>Test their product against the original design criteria and with the intended user.</li> <li>Take into account others' views.</li> <li>Understand how a key event/individual has influenced the development of the chosen product fabric.</li> <li>use design criteria to evaluate their completed products</li> <li>Investigate and analyse where products were designed and made, when products were designed and made, whether products can be recycled or reused.</li> </ul>	Know how to strengthen, stiffen and reinforce existing fabrics.      Understand how to securely join two pieces of fabric together.      Understand the need for patterns and seam allowances.      Know and use technical vocabulary relevant to the project.      that a single fabric shape can be used to make a 3D textiles product.



Key Vocabulary: fabric, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance Equipment: selection of fabrics and fastenings, scissors, needles, thread, tape, fabric glue, pins, measuring tape

## Year 6

Project: To design, make and evaluate a mobile phone carrier using CAD (textiles)					
Designing	Making	Evaluating	Technical Knowledge		
<ul> <li>Generate innovative ideas through research including surveys, interviews and questionnaires.</li> <li>Identify the needs, wants, preferences and values of particular individuals and groups</li> <li>Develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes including using computer-aided design.</li> <li>Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.</li> <li>make design decisions, taking account of constraints such as time, resources and cost</li> </ul>	<ul> <li>Produce detailed lists of equipment and fabrics relevant to their tasks.</li> <li>Formulate step-by-step plans and, if appropriate, allocate tasks within a team.</li> <li>Select from and use a range of tools and equipment, including CAD, to make products that are accurately assembled and well finished. Work within the constraints of time, resources and cost.</li> <li>Demonstrate resourcefulness when tackling practical problems</li> <li>Accurately assemble, join and combine materials and components</li> </ul>	<ul> <li>Investigate and analyse textile products linked to their final product.</li> <li>Compare the final product to the original design specification.</li> <li>Test products with intended user, where safe and practical, and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.</li> <li>Consider the views of others to improve their work.</li> <li>Investigate and analyse: how much products cost to make, how innovative products are, how sustainable the materials in products are and what impact products have beyond their intended purpose.</li> </ul>	<ul> <li>A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics.</li> <li>Fabrics can be strengthened, stiffened and reinforced where appropriate.</li> <li>Using CAD to design a product with accuracy.</li> </ul>		



## **Key Vocabulary:**

computer aided design (CAD), computer aided manufacture (CAM), graphics, scale, modify, seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces

Equipment: pins, needles, thread, measuring tape, fabric scissors, pinking shears, sewing machine range of fastenings, materials for insulating or strengthening e.g. bubble wrap, wadding