



Design and Technology Skills Progression in Westfield

	Foundation Stage	By the end of Year 2	By the end of Year 4	By the end of Year 6
Developing, planning and communicating ideas	<p><u>Early Learning Goals:</u> <u>Self-Confidence and Self-Awareness</u></p> <ol style="list-style-type: none"> Children are confident to try new activities. They can say why they like some activities more than others. They are confident to speak in a familiar group. They will talk about their ideas. They will choose the resources they need for their chosen activities. They say when they do or dont need help. <p><u>Understanding the World</u></p> <ol style="list-style-type: none"> Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. <p><u>Expressive Arts and Design</u></p> <ol style="list-style-type: none"> Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. 	<ol style="list-style-type: none"> Generate ideas by drawing on their own and other peoples experiences. Suggest ideas and explain what they are going to do. Identify a purpose and target audience for what they intend to design and make. Identify simple design criteria. Develop their design ideas by applying findings from earlier research, discussion, observation, drawing and modelling. Model their ideas in card and paper, and make simple drawings and label parts. 	<ol style="list-style-type: none"> Identify a purpose and establish the criteria for a successful product. Evaluate products and identify criteria that can be used for their own designs. Use the results of investigations and information sources, including computing, when developing design ideas. Generate ideas for an item, considering the purpose and user(s) for which they are designing. Explore, develop and communicate design proposal by modelling ideas and making labelled drawings from different views showing specific features. Plan a clear idea of the order of their work and what has to be done before starting. Plan how to use materials, equipment and processes, and suggest alternative methods of making if the first attempt fails. 	<ol style="list-style-type: none"> Generate ideas through brainstorming and identify a purpose for their product which is innovative, functional and appealing to the target audience. Develop a specification for their product. Use computing to develop design ideas. Explore, develop and communicate ideas and aspects of their design proposals through detailed, labelled drawings and modelling in a variety of ways. Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempt fails. Plan the order of their work, choosing their own materials and techniques.
Working with tools, equipment, materials and components to make quality products (inc. food)	<ol style="list-style-type: none"> They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role-play and stories. <p><u>Key Aspects of Learning:</u></p> <ol style="list-style-type: none"> Can talk about work/activity as they do it. Can say if they like what theyve made or not. 	<ol style="list-style-type: none"> Make their design using appropriate techniques. With help, measure, cut and score with some accuracy. Begin to select and use tools, e.g. scissors, hole punch, and materials safely; use vocabulary to name and describe them. Assemble, join and combine materials including temporary methods, e.g. glues, masking tape, in order to make a product. Select and use appropriate fruit and vegetables, processes and tools. 	<ol style="list-style-type: none"> Select more appropriate tools, materials and techniques to make their products. Measure, mark out, cut and shape a range of materials with increasing accuracy and some guidance. Measure, tape, pin, cut and join fabric with some accuracy. Sew using a range of different stitches, weave and knit. Demonstrate hygienic food preparation and storage. 	<ol style="list-style-type: none"> Select appropriate tools, components, materials and techniques to make their product. Accurately and independently measure, mark out and discuss safety measures, appropriate tools, equipment and techniques. Use a range of tools safely and accurately. Join and combine materials and components accurately in temporary and permanent ways. Assemble components within a working model.

	<ol style="list-style-type: none"> 3. Can sometimes talk about what helped them to do something. 4. Can say what they think about what other people have done. 	<ol style="list-style-type: none"> 6. Follow safe procedures for food handling and safety, hygienic practices and personal hygiene. 7. Choose and use appropriate finishing techniques to improve the appearance of their product. 		<ol style="list-style-type: none"> 6. Make a useable fabric product using stitching. 7. Weigh and measure accurately (including time, dry and wet ingredients). 8. Apply the rules of basic food hygiene and be aware of hazards relating to the use of ovens.
Evaluating processes and products		<ol style="list-style-type: none"> 1. Evaluate their product against their design criteria by discussing how well it works in relation to the purpose. 2. Evaluate their products as they are developed, identifying strengths and possible changes they might make. 3. Evaluate their product by asking questions about what they have made and how they have gone about it. 4. Talk about their ideas, saying what they like and dislike about them. 	<ol style="list-style-type: none"> 1. Evaluate using skills from previous years. 2. Evaluate their product against original design criteria. 3. Evaluate their product and work, through tests, both during and at the end of the assignment. 	<ol style="list-style-type: none"> 1. Evaluate their product, both individually and in pairs, against the original specification through testing, identifying strengths and areas for development. 2. Record their evaluations using drawings with labels.
Vocabulary		<p>Design, model, product, research, evaluate.</p> <ul style="list-style-type: none"> • Cut, stick, slice, measure. • Observe • Purpose • Vocabulary naming tools and materials. • Hygiene 	<ul style="list-style-type: none"> • Purpose, evaluate • Label, measure, mark out, cut, pin, join • Safety, tools, hygiene, product, components, accuracy • Ingredients • Preparation • Storage • Stich, weave, knit 	<ul style="list-style-type: none"> • Purpose, evaluate • Label, measure, mark out, cut, pin, join • Safety, tools, hygiene, product, components, accuracy • Hazard • Weigh, measure • Specification • Assemble, disassemble • Modifications • Modelling
Suggested designers	<ul style="list-style-type: none"> • James Atkinson (Yorkshire) – invented the mouse trap. • Percy Shaw (Yorkshire) – invented cats eyes. • James Martin (Yorkshire) – chef. • York Chocolate Story. • Rowntrees, Nestle, Terry's • Robert Thompson – famous sculpture with 'mouse' feature 	<ul style="list-style-type: none"> ○ James Dyson – vacuum cleaners ○ The Wright Brothers - airplanes ○ Joy Mangano – self-wringing mop ○ Nancy Johnson – ice-cream maker ○ Grace Hopper – computer ○ Elizabeth Magie – Monopoly 		

- *Other famous inventors/product designers/products:*