



## Falcon Junior School – DT Curriculum



<p><b>Year 3</b></p> <p>Knowledge</p>	<p>To know about structures (e.g. shell structures including computer aided design).</p> <p>To know about mechanical systems (e.g. leavers and linkages) and how they create movement.</p> <p>To know about textiles (e.g. 2D shape to 3D product).</p> <p>To know about electrical systems (e.g. simple circuits and switches including programming and control).</p> <p>To know about a healthy and varied diet including nutritional requirements.</p>
<p>Skills and objectives</p>	<p><b>Design Skills—Understanding contexts, users and purposes / Generating, developing, modelling and communicating ideas.</b></p> <p>I can begin to gather information about user needs.</p> <p>I can begin to develop my own design criteria.</p> <p>I can begin to describe the user, purpose and design features of my product.</p> <p>I can begin to explain how my product will work.</p> <p>I can begin to generate realistic ideas based on user needs.</p> <p>I can begin to use a range of drawing skills, discussion, prototypes, pattern pieces and computer aided design.</p> <p><b>Making Skills—Planning / Practical skills and techniques.</b></p> <p>I can begin to order the main stages of making.</p> <p>I can begin to select suitable tools, equipment, materials and components and explain my choices.</p> <p>I can begin to follow procedures for safety and hygiene.</p> <p>I can begin to use a wider range of materials and components.</p> <p>I can begin to measure, mark out, cut, shape, assemble, join, combine and finish with some accuracy.</p> <p><b>Evaluating skills—Own ideas and products / Existing products / Key events and individuals.</b></p> <p>I can begin to evaluate my ideas and products against my design criteria.</p> <p>I can begin to investigate how well products have been designed and made, whether they are fit for purpose and meet user needs, why materials have been chosen, the methods of construction and how well they work.</p> <p>I can begin to know about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products.</p> <p><b>Technical knowledge—Making products work.</b></p> <p>I can begin to know that materials have functional and aesthetic qualities, that systems have an input, process and output, how to program a computer to control my products, how to make strong, stiff shell structures.</p> <p>I can begin to use the correct vocabulary.</p> <p><b>Cooking and nutrition—Where food comes from / Food preparation, cooking and nutrition</b></p> <p>I can begin to know that food is grown, reared and caught in the UK and the wider world.</p> <p>I can begin to know to prepare a variety of dishes safely and hygienically, that a healthy diet is made from a variety and balance of different food and drink and that food and drink are needed to provide energy for the body.</p>
<p>Vocabulary</p>	<p>Design, structure, mechanical systems, leavers, linkages, textiles, electrical systems, circuits, nutritional requirements, processed food, design criteria, product, accuracy, assemble, strengthen structures, aesthetic, running stitch, over sewing, back stitch, seam allowance, evaluate, sensory, analyse, texture, balanced diet, hygienically.</p>



## Falcon Junior School – DT Curriculum



<p><b>Year 4</b></p> <p>Knowledge</p>	<p>To know about structures (e.g. shell structures including computer aided design).</p> <p>To know about mechanical systems (e.g. leavers and linkages) and how they create movement.</p> <p>To know about textiles (e.g. 2D shape to 3D product).</p> <p>To know about electrical systems (e.g. simple circuits and switches including programming and control).</p> <p>To know about a healthy and varied diet including nutritional requirements.</p>
<p>Skills and objectives</p>	<p><b>Design Skills—Understanding contexts, users and purposes / Generating, developing, modelling and communicating ideas.</b></p> <p>I can gather information about user needs.</p> <p>I can develop my own design criteria.</p> <p>I can describe the user, purpose and design features of my product.</p> <p>I can explain how my product will work.</p> <p>I can generate realistic ideas based on user needs.</p> <p>I can use a range of drawing skills, discussion, prototypes, pattern pieces and computer aided design.</p> <p><b>Making Skills—Planning / Practical skills and techniques.</b></p> <p>I can order the main stages of making.</p> <p>I can select suitable tools, equipment, materials and components and explain my choices.</p> <p>I can follow procedures for safety and hygiene.</p> <p>I can use a wider range of materials and components.</p> <p>I can measure, mark out, cut, shape, assemble, join, combine and finish with some accuracy.</p> <p><b>Evaluating skills—Own ideas and products / Existing products / Key events and individuals</b></p> <p>I can evaluate my ideas and products against my design criteria.</p> <p>I can investigate how well products have been designed and made, whether they are fit for purpose and meet user needs, why materials have been chosen, the methods of construction used and how well they work.</p> <p>I can begin to know about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products.</p> <p><b>Technical knowledge—Making products work.</b></p> <p>I can know that materials have functional and aesthetic qualities, that systems have an input, process and output, how to program a computer to control my product, how to make strong, stiff, shell structures.</p> <p>I can begin to use the correct vocabulary.</p> <p><b>Cooking and nutrition—Where food comes from / Food preparation, cooking and nutrition</b></p> <p>I can know that food is grown, reared and caught in the UK and the wider world.</p> <p>I can know how to prepare a variety of dishes safely and hygienically, that a healthy diet is made from a variety and balance of different food and drink and that food and drink are needed to provide energy for the body.</p>
<p>Vocabulary</p>	<p>Design, structure, mechanical systems, leavers, linkages, textiles, electrical systems, circuits, nutritional requirements, processed food, design criteria, product, accuracy, assemble, strengthen structures, aesthetic, running stitch, over sewing, back stitch, seam allowance, evaluate, sensory, analyse, texture, balanced diet, hygienically.</p>



## Falcon Junior School – DT Curriculum



<p><b>Year 5</b></p> <p>Knowledge</p>	<p>To know about structures (e.g. frame structures – reinforcing a 3D framework).          To know about electrical systems (e.g. more complex switches and circuits).          To know about textiles (e.g. combining different fabric shapes including computer aided design).          To know about mechanical systems (e.g. pulleys/gears and movement).          To know about celebrating culture and seasonality in food, including cooking and nutritional requirements.</p>
<p>Skills and objectives</p>	<p><b>Design Skills—Understanding contexts, users and purposes / Generating, developing, modelling and communicating ideas</b></p> <p>I can begin to carry out research, develop a simple design specification, describe the user, purpose and design features of my product and explain how it will work.          I can begin to generate innovative ideas drawing on research.          I can begin to use a range of drawing skills, discussion, prototypes, pattern pieces and computer aided design.</p> <p><b>Making skills—Planning / Practical skills and techniques</b></p> <p>I can begin to formulate lists of resources and step-by-step plans.          I can begin to select suitable tools, equipment, materials and components and explain my choices.          I can begin to follow procedures for safety and hygiene.          I can begin to use a wider range of materials and components.          I can begin to measure, mark out, cut, shape assemble, join, combine and finish with accuracy.</p> <p><b>Evaluating skills—Own ideas and products / Existing products / Key events and individuals</b></p> <p>I can begin to identify strengths and areas to develop in my ideas and products against my own design specification.          I can begin to consider the views of others to make improvements.          I can begin to investigate how well products have been designed and made, whether they are fit for purpose and meet user needs, why materials have been chosen, the methods of construction used, how well they work and how innovative and sustainable they are.          I can know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.</p> <p><b>Technical knowledge—Making products work</b></p> <p>I can begin to know that materials have functional and aesthetic qualities, that systems have an input, process and output, how to program a computer and control and monitor my product and how to reinforce and strengthen a framework.          I can use the correct technical vocabulary.</p> <p><b>Cooking and nutrition—Where food comes from / Food preparation, cooking and nutrition</b></p> <p>I can begin to know that food is grown, reared and caught in the UK, Europe and the wider world.          I can begin to know that seasons may affect the food available.          I can begin to know how food is processed into ingredients.          I can begin to know how to prepare and cook a variety of dishes safely and hygienically using, where appropriate, a heat source.          I can begin to know that food and drink contain nutrients, water and fibre that are needed for health.</p>
<p>Vocabulary</p>	<p>Reinforcing, framework, pulleys, gears, computer aided design, culture, seasonality, nutrition requirements, sustainability, impact, consumer preferences, design specification, innovative ideas, assemble, finishing techniques, resourcefulness, blanket stitch, machine stitching, pin and tac, dowel, critically evaluate, fit for purpose, adapt, substitute.</p>



## Falcon Junior School – DT Curriculum



<p><b>Year 6</b></p> <p>Knowledge</p>	<p>To know about structures (e.g. frame structures – reinforcing a 3D framework).</p> <p>To know about electrical systems (e.g. more complex switches and circuits).</p> <p>To know about textiles (e.g. combining different fabric shapes including computer aided design).</p> <p>To know about mechanical systems (e.g. pulleys/gears and movement).</p> <p>To know about celebrating culture and seasonality in food, including cooking and nutritional requirements.</p>
<p>Skills and objectives</p>	<p><b>Design Skills—Understanding contexts, users and purposes / Generating, developing, modelling and communicating ideas</b></p> <p>I can carry out research, develop a simple design specification, describe the user, purpose and design features of my product and explain how it will work.</p> <p>I can generate innovative ideas drawing on research.</p> <p>I can use a range of drawing skills, discussion, prototypes, pattern pieces and computer aided design.</p> <p><b>Making skills—Planning / Practical skills and techniques</b></p> <p>I can formulate lists of resources and step-by-step plans.</p> <p>I can select suitable tools, equipment, materials and components and explain my choices.</p> <p>I can follow procedures for safety and hygiene.</p> <p>I can use a wider range of materials and components.</p> <p>I can measure, mark out, cut, shape assemble, join, combine and finish with accuracy.</p> <p><b>Evaluating skills—Own ideas and products / Existing products / Key events and individuals</b></p> <p>I can identify strengths and areas to develop in my ideas and products against my own design specification.</p> <p>I can consider the views of others to make improvements.</p> <p>I can investigate how well products have been designed and made, whether they are fit for purpose and meet user needs, why materials have been chosen, the methods of construction used, how well they work and how innovative and sustainable they are.</p> <p>I can know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.</p> <p><b>Technical knowledge—Making products work</b></p> <p>I can know that materials have functional and aesthetic qualities, that systems have an input, process and output, how to program a computer and control and monitor my product and how to reinforce and strengthen a framework.</p> <p>I can use the correct technical vocabulary.</p> <p><b>Cooking and nutrition—Where food comes from / Food preparation, cooking and nutrition</b></p> <p>I can know that food is grown, reared and caught in the UK, Europe and the wider world.</p> <p>I can know that seasons may affect the food available.</p> <p>I can know how food is processed into ingredients.</p> <p>I can know how to prepare and cook a variety of dishes safely and hygienically using, where appropriate, a heat source.</p> <p>I can know that food and drink contain nutrients, water and fibre that are needed for health.</p>
<p>Vocabulary</p>	<p>Reinforcing, framework, pulleys, gears, computer aided design, culture, seasonality, nutrition requirements, sustainability, impact, consumer preferences, design specification, innovative ideas, assemble, finishing techniques, resourcefulness, blanket stitch, machine stitching, pin and tac, dowel, critically evaluate, fit for purpose, adapt, substitute.</p>