Jeavons Wood
Primary School

Design and Technology – Skills to be met

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Background Research – Lesson 1 **<u>Exploring context and existing products</u>**	Understand what a product is and who it is for. Understand how a product works and how it is used. Identify where you might find this product.	Understand what a product is and who it is for. Understand how a product works and how it is used. Identify where you might find this product. Identify the materials used to make the product. Express an opinion about the product	Identify who made the product, when it was made and what its purpose is. Identify what the product has been made from. Evaluate the product on design and use Brain Builders: Research facts about famous inventors/ chefs / designers etc linked to product	Identify who made the product, when it was made and what its purpose is. Identify what the product has been made from. Evaluate the product on design and use Brain Builders: Research facts about famous inventors/ chefs / designers etc linked to product	Identify who made the product, when it was made and what its purpose is. Identify what the product has been made from and how environmentally friendly the materials are. Evaluate the product on design, appearance and use. Identify the cost to make the product. Brain Builders: Research facts about famous inventors/ chefs / designers etc linked to product	Identify who made the product, when it was made and what its purpose is. Identify what the product has been made from and how environmentally friendly the materials are. Evaluate the product on design, appearance and use. Identify the cost to make the product and whether it has any other purposes eg. Leading innovation of the time, trend setting. Brain Builders: Research facts about famous inventors/ chefs / designers etc linked to product

Design Criteria – Lesson 2 **<u>Understanding their intended users and their own product</u>**	Explain what product they will be designing and making. Explain who their product will be used by. Describe what their product will be used for.	Use own experiences and existing products to develop ideas. Explain what product they will be designing and making. Explain who their product will be used by. Describe what their product will be used for and how it will work. Explain why their product is suitable for the intended User.	Brain Builders: Understand and gather information about what a particular group or people want from a product. Describe the purpose of their product and how it will work Identify design features that will appeal to intended users. Explain how parts of their product works. Generate realistic ideas that meet needs of user.	Brain Builders: Understand and gather information about what a particular group or people want from a product. Describe the purpose of their product. Identify design features that will appeal to intended users. Explain how parts of their product works. Develop their own design criteria and use for planning ideas. Generate realistic ideas that meet needs of user and take into account availability of resources.	Brain Builders: Understand and gather information about what a particular group or people want from a product, using questionnaires, surveys etc. Describe the purpose of their product. Identify design features that will appeal to intended users. Explain how parts of their product will work. Develop their own design criteria and use for planning ideas. Generate innovative ideas that meet needs of user and take into account availability of resources.	Brain Builders: Understand and gather information about what a particular group or people want from a product, using questionnaires, surveys etc. Describe the purpose of their product. Identify design features that will appeal to intended users. Explain how parts of their product will work. Create a design description for their product. Highlight the impact of time, resources and cost within their design ideas. Generate innovative ideas that meet needs of user.

Planning – Lesson 3 **<u>Communicating ideas and creating prototypes for product</u>**	Discuss what their steps for making could be. Represent ideas through talking and drawing.	Discuss what their steps for making could be. Represent ideas through talking, drawing and computing – (where appropriate). Choose materials to use based on suitability of their properties. Create templates/pattern pieces and explore materials whilst developing ideas.	Share and discuss ideas with others. Order the main stages of making. Choose materials to use based on suitability of their properties. Represent ideas in diagrams, annotated sketches and computer based programmes (where appropriate). Create pattern pieces and prototypes.	Share and discuss ideas with others. Order the main stages of making. Choose materials to use based on suitability of their properties. Represent ideas in diagrams, annotated sketches and computer based programmes (where appropriate). Create pattern pieces and prototypes.	Share and discuss ideas with others. Record a step by step plan for making Produce lists for the tools, equipment and materials they will be using. Choose materials to use based on suitability of their properties and aesthetic qualities. Represent ideas in diagrams, annotated sketches and computer based programmes (where appropriate). Create pattern pieces and Prototypes.	Share and discuss ideas with others. Record a step by step plan for making Produce lists for the tools, equipment and materials they will be using. Choose materials to use based on suitability of their properties and aesthetic qualities. Represent ideas in diagrams, annotated sketches and computer based programmes (where appropriate). Create pattern pieces and Prototypes

Making – Lesson 4-5 **<u>Selecting the tools and applying the practical skills and techniques</u>**	*<u>Across KS1:</u> Use materials – construction materials and kits, textiles, food and mechanical components* Choose suitable tools for making. Follow safety and food hygiene procedures. Measure, mark, cut and shape materials and components. Join, assemble and combine materials and components.	*<u>Across KS1:</u> Use materials – construction materials and kits, textiles, food and mechanical components* Choose suitable tools for making whilst explaining why they should be used. Follow safety and food hygiene procedures. Measure, mark, cut and shape materials and components. Join, assemble and combine materials and components. Use finishing techniques, including skills learnt in Art	*<u>Across KS2:</u> Use materials - construction materials and kits, textiles, food, mechanical and electrical components* Choose suitable tools for making whilst explaining why they should be used. Use design criteria whilst making. Follow safety and food hygiene procedures. Measure, mark, cut and shape materials and components with some accuracy. Join, assemble and combine materials and components with some accuracy. Use finishing techniques, including skills learnt in Art with some accuracy.	*<u>Across KS2:</u> Use materials - construction materials and kits, textiles, food, mechanical and electrical components* Choose suitable tools for making whilst explaining why they should be used. Use design criteria whilst making. Follow safety and food hygiene procedures. Measure, mark, cut and shape materials and components with most accuracy. Join, assemble and combine materials and components with some accuracy. Use finishing techniques, including skills learnt in Art with some accuracy.	*<u>Across KS2:</u> Use materials - construction materials and kits, textiles, food, mechanical and electrical components* Choose suitable tools for making whilst explaining why they should be used. Use design criteria whilst making. Follow safety and food hygiene procedures. Measure, mark, cut and shape materials and components accurately. Join, assemble and combine materials and components accurately. Demonstrate problem solving skills when encountering a mistake or practical problem. Use finishing techniques, including skills learnt in Art accurately.	*<u>Across KS2:</u> Use materials - construction materials and kits, textiles, food, mechanical and electrical components* Choose suitable tools for making whilst explaining why they should be used. Use design criteria whilst making. Follow safety and food hygiene procedures. Measure, mark, cut and shape materials and components accurately. Join, assemble and combine materials and components accurately. Demonstrate problem solving skills when encountering a mistake or practical problem. Use finishing techniques that involve a number of steps, including skills learnt in Art accurately.

Evaluation – Lesson 6 **<u>Referring to planning and initial ideas in evaluating their product</u>**	Talk about their design ideas and what they have made. Make simple judgements of how the product met their design ideas.	Talk about their design ideas and what they have made. Make simple judgements of how the product met their design ideas. Suggest how their product could be improved.	Use design criteria to evaluate product – identifying both strengths and areas for development. Consider the views of others, including intended user, whilst evaluating product.	Use design criteria to evaluate product – identifying both strengths and areas for development. Consider the views of others, including intended user, whilst evaluating product.	Use design criteria to evaluate product – identifying both strengths and areas for development. Consider the views of others, including intended user, whilst evaluating product.	Use design criteria to evaluate product – looking at quality of end product and design and whether it is fit for its intended purpose. Consider the views of others, including intended user, whilst evaluating product.
Teaching cooking and nutrition- **<u>Understanding food and food preparation</u>**	Begin to understand that all food comes from plants or animals. Explore the understanding that food has to be farmed, grown elsewhere (e.g. home) or caught.	Understand that all food comes from plants or animals. Know that food has to be farmed, grown elsewhere (e.g. home) or caught.	Understand which foods are reared, caught, or grown and that this happens in the UK and across the globe. Begin to understand that recipes can be changed by adding or taking away ingredients. Understand that the seasons can affect food produce	Understand which foods are reared, caught, or grown and that this happens in the UK and across the globe. Understand that recipes can be changed by adding or taking away ingredients. Understand that the seasons can affect food produce	Understand that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world. Begin to understand that seasons may affect the food available. Understand how food is processed into ingredients that can be eaten or used in cooking. Begin to understand that recipes can be adapted to change the appearance, taste and aroma of a dish.	Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world. Understand that seasons may affect the food available. Understand how food is processed into ingredients that can be eaten or used in cooking. Understand that recipes can be adapted to change the appearance, taste and aroma of a dish.

Teaching cooking and nutrition- **<u>Food preparation, cooking and nutrition</u>**	Start to understand how to name and sort foods into the five groups in 'The Eat well plate'. Begin to understand that everyone should eat at least five portions of fruit and vegetables every day. Know how to prepare simple dishes safely and hygienically, without using a heat source. Know how to use techniques such as cutting, peeling and grating.	Understand how to name and sort foods into the five groups in 'The Eat well plate'. Know that everyone should eat at least five portions of fruit and vegetables every day. Demonstrate how to prepare simple dishes safely and hygienically, without using a heat source. Demonstrate how to use techniques such as cutting, peeling and grating.	Begin to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Start to understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate'. Begin to know that to be active and healthy, food and drink are needed to provide energy for the body.	Know how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate'. Know that to be active and healthy, food and drink are needed to provide energy for the body.	Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. Know how to use most techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Begin to understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.	Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. Confidently use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Know different food and drink contain different substances – nutrients, water and fibre – that are needed for health.