Subject: Design Technology Year 6

Design

• carry out research, using surveys, interviews, questionnaires and web-based resources
• identify the needs, wants, preferences and values of particular individuals and groups
generate innovative ideas, drawing on research

Making

• explain their choice of tools and equipment in relation to the skills and techniques they will be using
• accurately explain their choice of materials and components according to functional properties and aesthetic qualities
• accurately measure, mark out, cut and shape materials and components
• accurately assemble, join and combine materials and components
• accurately apply a range of finishing techniques, including those from art and design
• use techniques that involve a number of steps
• demonstrate resourcefulness when tackling practical problems

Evaluating

• critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make
about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products

Food and Nutritian

that recipes can be adapted to change the appearance, taste, texture and aroma
• that different food and drink contain different substances – nutrients, water and fibre – that are needed for health

Term:	Topic:	Knowledge	Skills:	Key Questions
Autumn	Textiles different fabric shapes (including computer-aided design) Ever changing Auckland Phone cover	Produce a 3-D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics. Understand how fabrics can be strengthened, stiffened and reinforced where appropriate. Know and use technical vocabulary relevant to the project.	Be able to carry out research effectively To identify the needs of an audience Use a combination of fabric pieces, fabric shapes and different fabrics Assemble and join fabric accurately use technical vocabulary relevant to the project. Critically evaluate a finished product	What materials will you need? Can you plan what your product will look like? How will the fabrics be strengthened ? Can you reinforce your materials ? How ?
	Key Vocabulary	seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings,		
		Cultural Capital:		
Spring	Cooking and nutrition – Where food comes from Ancient Greece (Greek salad)	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 That seasons may affect the food available How food is processed into ingredients that can be eaten or used in cooking Cooking	To create a Greek inspired dish To discuss how seasons effect the food available To prepare food safely To cook food safely Use different techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking	Where do we get certain foods from? Can you tell me the food that will be reared? Caught? Can you make your own recipe? What techniques will you use to make the salad look that way?

		and nutrition – Food preparation, cooking and nutrition How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking That recipes can be adapted to change the appearance, taste, texture and aroma That different food and drink contain different substances – nutrients, water and fibre – that are needed for health	To explain how different food and drink contain different substances – nutrients, water and fibre – that are needed for health	
	Key Vocabulary	ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble		
		Cultural Capital: Fairtrade fortnight		
Summer	**Electrical Systems** More complex switches and circuits (including programming, monitoring and control) Rivers Programming - probots	Apply understanding of computing to programm products Understand what probots are and how they can be programmed To know how to generate, develop, model and communicate ideas To know the components of a map Use appropriate materials based on research To know how to monitor a floor robot	Demonstrate understanding of computing by accurately programming a probot Generate, develop and communicate ideas through discussion, annotated sketches, cross-sectional and exploded diagram prototypes Research a range of materials explore how floor robots move on different materials. I can discuss the best use of different materials as obstacles. To create an adventure map. To evaluate my adventure map based on a design criteria. TO use a range of materials to make an adventure map. To use appropriate joining methods To monitor a floor robot. To evaluate a finished product.	How will you programme the probot? What products will you need? Can you test? What happened and why?

	Key Vocabulary	Input, output, adventure map, floor robot, materials, obstacles, pause, clear, turn right, turn left, plan, forward, backward, go program, glue, stapler, product, evaluate		
		Cultural Capital:		