Year 6 Design and Technology Knowledge, Skills and Vocabulary Progression

Food – Celebrating culture and seasonality (Autumn 2) Knowledge	Mechanical Systems – Pulleys or Gears (Spring 2) Knowledge	Textiles – Combining different fabric shapes (Summer 2) Knowledge
I know how to use utensils and equipment including heat sources to prepare and cook food. I understand about seasonality in relation to food products and the source of different food products. I know and can use relevant technical and sensory vocabulary.	I understand that mechanical and electrical systems have an input, process and an output. I understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. I know and can use technical vocabulary relevant to the project.	I know a 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. I know fabrics can be strengthened, stiffened and reinforced where appropriate.
Food – Celebrating culture and seasonality (Autumn 2) Skills	**Mechanical Systems – Pulleys or Gears (Spring 2) Skills**	**Textiles – Combining different fabric shapes (Summer 2) Skills**
Designing I can generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification. I can explore a range of initial ideas and make design decisions to develop a final product linked to user and purpose. I can use words, annotated sketches and information and communication technology as appropriate to develop and communicate ideas. **Making** I can write a step-by-step recipe, including a list of ingredients, equipment and utensils I can select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients. I can make, decorate and present the food product appropriately for the intended user and purpose. **Evaluating** I can carry out sensory evaluations of a range of relevant products and ingredients. Record the evaluations using e.g. tables/graphs/charts such as star diagrams. I can evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when identifying improvements. I can understand how key chefs have influenced eating habits to promote varied and healthy diets.	**Designing** I can generate innovative ideas by carrying out research using surveys, interviews, questionnaires and web-based resources. I can develop a simple design specification to guide their thinking. I can develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views. **Making** I can produce detailed lists of tools, equipment and materials. Formulate step-by-step plans and, if appropriate, allocate tasks within a team. I can select from and use a range of tools and equipment to make products that that are accurately assembled and well finished. Work within the constraints of time, resources and cost. **Evaluating** I can compare the final product to the original design specification. I can test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. I can consider the views of others to improve their work. I can investigate famous manufacturing and engineering companies relevant to the project.	**Designing** I can generate innovative ideas by carrying out research including surveys, interviews and questionnaires. I can develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes and, where appropriate, computer-aided design. I can design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification. **Making** I can produce detailed lists of equipment and fabrics relevant to their tasks. I can formulate step-by-step plans and, if appropriate, allocate tasks within a team. I can select from and use a range of tools and equipment to make products that are accurately assembled and well finished. Work within the constraints of time, resources and cost. **Evaluating** I can investigate and analyse textile products linked to their final product. I can compare the final product to the original design specification. I can test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. I can consider the views of others to improve their work.

Food – Celebrating culture and seasonality (Autumn 2) Vocabulary	**Mechanical Systems – Pulleys or Gears (Spring 2) Vocabulary**	**Textiles – Combining different fabric shapes (Summer 2) 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, design specification, innovative, research, evaluate, design brief	pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor, circuit, switch, circuit diagram, annotated drawings, exploded diagrams, mechanical system, electrical system, input, process, output, design decisions, functionality, innovation, authentic, user, purpose, design specification, design brief	seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings, iron transfer paper, design criteria, annotate, design decisions, functionality, innovation, authentic, user, purpose, evaluate, mock-up, prototype