

Petersgate Progression of skills for Design & Technology KS1

	Autumn	Spring	Summer
Year 1	Structures – Freestanding <ul style="list-style-type: none"> • Know how to make freestanding structures stronger, stiffer and more stable. • Know and use technical vocabulary - Structure, wall, tower, framework, base, side, edge, surface, cut, fold, join, fix. • Generate ideas based on simple design criteria and their own experiences, explaining what they could make. • Develop, model and communicate their ideas through talking, mock-ups and drawings. • Plan by suggesting what to do next. • Select and use tools, skills and techniques, explaining their choices. – Scissors, hole punch, stapler, glue, string, pipe cleaners, PVA. • Select new and reclaimed materials and construction kits to build their structures. • Use simple finishing techniques suitable for the structure they are creating. • Explore a range of existing freestanding structures in the school and local environment e.g. everyday products and buildings. • Evaluate their product by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria. 	Mechanisms – Sliders & Levers <ul style="list-style-type: none"> • Explore and use sliders and levers. • Understand that different mechanisms produce different types of movement. • Know and use technical vocabulary – slider, lever, pivot, slot, bridge/guide, Use paper fasteners, masking tape, paper binders, • Generate ideas based on simple design criteria and their own experiences, explaining what they could make. • Develop, model and communicate their ideas through drawings and mock-ups with card and paper. • Plan by suggesting what to do next. • Select and use tools, explaining their choices, to cut, shape and join paper and card.- • Use simple finishing techniques suitable for the product they are creating. • Explore a range of existing books and everyday products that use simple sliders and levers. • Evaluate their product by discussing how well it works in relation to the purpose and the user and whether it meets design criteria 	Food* – Preparing fruit & Vegetables <ul style="list-style-type: none"> • Understand where a range of fruit and vegetables come from e.g. farmed or grown at home. • Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of <i>The eatwell plate</i>. • Know and use technical (equipment & utensils) and sensory vocabulary – Soft, juicy, crunchy, sweet, sour, sticky, smooth, sharp, crisp, hard. • Design appealing products for a particular user based on simple design criteria. – Fruit product. • Generate initial ideas and design criteria through investigating a variety of fruit and vegetables. • Communicate these ideas through talk and drawings. • Use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely. • Select from a range of fruit and vegetables according to their characteristics e.g. colour, texture and taste to create a chosen product. • Taste and evaluate a range of fruit and vegetables to determine the intended user's preferences. • Evaluate ideas and finished products against design criteria, including intended user and purpose.
Year 2	Mechanisms – Wheels and Axles <ul style="list-style-type: none"> • Explore and use wheels, axles and axle holders. • Distinguish between fixed and freely moving axles. • Know and use technical vocabulary - wheel, axle, axle holder, chassis, body, cab, parallel, mechanism, dowel, • Generate initial ideas and simple design criteria through talking and using own experiences. • Develop and communicate ideas through drawings and mock-ups. • Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing. Use junior hacksaw and bench hooks. • Select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics. • Explore and evaluate a range of products with wheels and axles. • Evaluate their ideas throughout and their products against original criteria. 	Food* – Healthy & Varied Diet <ul style="list-style-type: none"> • Understand, name and sort foods into the 5 groups in The Eatwell Plate. *Understand that everyone should eat at least 5 portions of fruit and veg every day. • Know and use technical (equipment & utensils) and sensory vocabulary - texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury. (KS2) • Design appealing products for a particular user based on simple design criteria. – savoury product? • Generate initial ideas and design criteria through investigating a variety of fruit and vegetables. • Communicate these ideas through talk and drawings. • Use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate, chop, mix, spread and bake safely. (KS2) • Prepare and cook a variety of dishes safely and hygienically including the use of a heat source.(KS2) • Taste and evaluate a range of fruit and vegetables to determine the intended user's preferences. • Evaluate ideas and finished products against design criteria, including intended user and purpose. 	Textiles – Templates & Joining Techniques <ul style="list-style-type: none"> • Understand how simple 3-D textile products are made, using a template to create two identical shapes. • Understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling. • Explore different finishing techniques e.g. using painting, fabric crayons, stitching, sequins, buttons and ribbons. • Know and use technical vocabulary - template, pattern pieces, mark out, join, decorate, finish, stitches, thread, needle. • Design a functional and appealing product for a chosen user and purpose based on simple design criteria. • Generate, develop, model and communicate their ideas as appropriate through talking, drawing, templates, mock-ups and information and communication technology. • Select from and use a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing. • Select from and use textiles according to their characteristics. • Explore and evaluate a range of existing textile products relevant to the project being undertaken. • Evaluate their ideas throughout and their final products against original design criteria.