

DT Skills and Knowledge



Knowledge Progression

Year 1/2 Cycle 1	Do I understand how simple 3-D textile products are made? Can I use technical vocabulary relevant to textiles?	Do I know where a range of fruit and vegetables come from e.g. farmed or grown at home? Do I understand and use basic principles of a healthy and varied diet to prepare dishes? Do I know how to ensure good hygiene when working with food? Can I use technical and sensory vocabulary relevant to food and nutrition?	Can I distinguish between fixed and freely moving axles? Can I use technical vocabulary relevant to mechanisms? Can I select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics?
Year 1/2 Cycle 2	Do I understand where a range of fruit and vegetables come from e.g. farmed or grown at home? Do I understand and use basic principles of a healthy and varied diet to prepare dishes? Do I know how to ensure good hygiene when working with food? Do I know and can I use technical and sensory vocabulary relevant to food and nutrition?	Do I understand that different mechanisms produce different types of movement? Do I know and can use technical vocabulary relevant to the project?	Do I know how to make freestanding structures stronger, stiffer and more stable? Do I know and can use technical vocabulary relevant to the project?
Year 3/4 Cycle 1	Can I distinguish between fixed and loose pivots? Can I use technical vocabulary relevant to the project? Can I generate realistic ideas and develop my own design criteria?	Do I know about a range of fresh and processed ingredients appropriate for my product and whether they are grown, reared or caught? Can I use relevant technical and sensory vocabulary appropriately?	Do I know how to strengthen, stiffen and reinforce existing fabrics? Do I understand the need for patterns and seam allowances? Can I use technical vocabulary relevant to textiles?
Year 3/4 Cycle 2	Do I understand how pneumatic mechanisms work? Can I use technical vocabulary relevant to mechanical systems?	Do I understand the electrical systems in my products, such as series circuits incorporating switches, bulbs and buzzers? Can I apply my understanding of computing to program and control my product? Can I use technical vocabulary relevant to electrical systems?	Do I know how to construct strong, stiff shell structures? Can I use technical vocabulary relevant to shell structures?
Year 5/6 Cycle 1	Can I explain ways in which a 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics? Can I explain ways that fabrics can be strengthened, stiffened and reinforced where appropriate?	Do I understand that mechanical systems have an input, process and an output, and can I give some examples? Do I understand how cams can be used to produce different types of movement and change the direction of movement? Do I know and can I use technical vocabulary relevant to cam toys?	Do I understand about seasonality in relation to food products and the source of different food products? Do I know and can I use relevant technical and sensory vocabulary?
Year 5/6 Cycle 2	Do I understand how to strengthen, stiffen and reinforce 3-D frameworks? Can I use technical vocabulary relevant to frame structures?	Do I understand how the electrical systems in my products work? Can I apply my understanding of computing to program, monitor and control my products? Can I use technical vocabulary relevant to pulleys and gears?	Can I plan the order of the main stages of making a shell structure? Can I select and use appropriate tools and software to measure, mark out, cut, score, shape and assemble with some accuracy? Can I explain my choice of materials according to functional properties and aesthetic qualities? Can I use computer-generated finishing techniques suitable for the product I am creating?

DT Skills and Progression



Skills Progression			
Year 1/2 Cycle 1	Can I use a template to create two identical shapes? Can I join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling? Can I use a range of finishing techniques e.g. using painting, fabric crayons, stitching, sequins, buttons and ribbons?	Do I know where a range of fruit and vegetables come from e.g. farmed or grown at home? Do I understand and use basic principles of a healthy and varied diet to prepare dishes? Do I know how to ensure good hygiene when working with food? Can I use technical and sensory vocabulary relevant to food and nutrition?	Can I develop and communicate ideas through drawings and mock-ups? Can I use wheels, axles and axle holders? Can I select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing?
Year 1/2 Cycle 2	Can I use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely?	Can I plan by suggesting what to do next? Can I select and use tools suitable for the task, explaining my choices, to cut, shape and join paper and card? Can I use simple finishing techniques suitable for the product they are creating? Can I use sliders and levers?	Can I plan by suggesting what to do next, selecting and using tools, skills and techniques suitable for the task, explaining my choices? Can I select new and reclaimed materials and construction kits to build my structures? Can I use simple finishing techniques suitable for the structure I am creating?
Year 3/4 Cycle 1	Can I understand and use lever and linkage mechanisms? Can I select from and use appropriate tools with some accuracy to cut, shape and join paper and card? Can I select from and use finishing techniques suitable for the product I am creating?	Can I plan the main stages of a recipe, listing ingredients, utensils and equipment? Can I select and use appropriate utensils and equipment to prepare and combine ingredients? Can I select from a range of ingredients to make appropriate food products, thinking about sensory characteristics?	Can I plan the main stages of making my textile product? Can I select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing? Can I select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern?
Year 3/4 Cycle 2	Can I order the main stages of making a mechanical system? Can I select from and use appropriate tools with some accuracy to cut and join materials and components such as tubing, syringes and balloons? Can I select from and use finishing techniques suitable for the product I am creating?	Can I order the main stages of making an electrical system? Can I select from and use tools and equipment to cut, shape, join and finish with some accuracy? Can I select from and use materials and components, including construction materials and electrical components according to their functional properties and aesthetic qualities?	Can I plan the order of the main stages of making a shell structure? Can I select and use appropriate tools and software to measure, mark out, cut, score, shape and assemble with some accuracy? Can I explain my choice of materials according to functional properties and aesthetic qualities? Can I use computer-generated finishing techniques suitable for the product I am creating?
Year 5/6 Cycle 1	Can I produce detailed lists of equipment and fabrics relevant to the tasks I am given? Can I formulate step-by-step plans and, if appropriate, allocate tasks within a team? Can I select from and use a range of tools and equipment to make a product that is accurately assembled and well finished, working within the constraints of time, resources and cost?	Can I produce detailed lists of tools, equipment and materials, formulate step-by-step plans and, if appropriate, allocate tasks within a team? Can I select from and use a range of tools and equipment to make a cam toy that is accurately assembled and well finished, working within the constraints of time, resources and cost?	Do I know how to use utensils and equipment including heat sources to prepare and cook food? Can I produce detailed lists of tools, equipment and materials, formulate step-by-step plans and, if appropriate, allocate tasks within a team? Can I select from and use a range of tools and equipment to make a food item that works within the constraints of time, resources and cost?
Year 5/6 Cycle 2	Can I formulate a clear plan, including a step-by-step list of what needs to be done and lists of resources to be used? Can I competently select from and use appropriate tools to accurately measure, mark out, cut, shape and join construction materials to make frameworks? Can I use finishing and decorative techniques suitable for the product I am designing and making?	Can I formulate a step-by-step plan to guide making, listing tools, equipment, materials and components? Can I competently select and accurately assemble materials, and securely connect electrical components to produce a reliable, functional product? Can I create and modify a computer control program to enable an electrical product to work automatically in response to changes in the environment?	Can I produce detailed lists of tools, equipment and materials, formulate step-by-step plans and, if appropriate, allocate tasks within a team? Can I select from and use a range of tools and equipment to make products that are accurately assembled and well finished, working within the constraints of time, resources and cost?