

## **Assessment End Points – Design Technology**

### **Year 1**

<b>Generic Design Technology Skills - Evident in all units</b>
<b>Draws a plan of a model/ structure</b>
<b>Discusses ideas and explains design against design criteria</b>
<b>Selects from, and uses, a range of tools and equipment, materials and components</b>
<b>Evaluates model against design criteria</b>

<b>Autumn Term End Point Assessment</b>
Selects materials and packaging of appropriate size and shape to create a design
Joins materials using tape and glue
Folds, tears and cuts paper and card, cutting along straight and curved lines and punching holes
Explores and uses mechanisms (levers and sliders), adding them to designs
<b>Design, make and evaluate a junk model monster</b>
<b>Design, make and evaluate a figure with moving joints</b>

<b>Spring Term End Point Assessment</b>
Marks out materials using a template, cutting along markings with increasing accuracy
Cuts along straight and curved lines
Decorates fabrics using paint, pens, buttons, beads and ribbons
Joins fabric using staples and glue
Knows why hands must be washed when handling food
Describes food using senses
Uses the right tools to cut and chop selected foods
<b>Design, make and evaluate a finger puppet</b>
<b>Make and evaluate a fruit kebab</b>

<b>Summer Term End Point Assessment</b>
Joins materials using tape and glue
Cuts wood dowelling (with support) using a hacksaw and bench hook
Cuts along straight and curved lines
Uses tape and glue to create temporary joints and fixed joints.
Builds structures, exploring how they can be made stronger, stiffer and more stable
Knows why hands must be washed when handling food, and where food comes from
Uses the right tools to cut and chop foods
<b>Design, make and evaluate a wooden photograph frame</b>
<b>Make and evaluate a healthy salad (Knowledge Study – <i>Influential British chefs</i>)</b>

## Assessment End Points – Design Technology

### Year 2

Generic Design Technology Skills - Evident in all units
Designs purposeful, functional, appealing products based on design criteria
Explains design through talking, drawing, templates and mock ups
Selects from, and uses, a range of tools and equipment
Explores and evaluates a range of existing products
Evaluates ideas and products against design criteria
Suggests improvements to designs/ models

Autumn Term End Point Assessment
Attaches wheels to a chassis using an axle, joining materials using tape and glue
Marks out materials using a template
Explores and uses mechanisms (wheels and axles), using mechanisms in designs
Knows why hands must be washed when cooking
Reads a scale to measure and weigh out ingredients
<b>Design, make and evaluate a junk model wheeled vehicle (Knowledge Study: <i>Influential car manufacturers over time</i>)</b>
<b>Make and evaluate gingerbread men</b>

Spring Term End Point Assessment
Uses a template to cut out shapes
Joins fabric using a running stitch
Investigates and evaluates a range of products, dissecting and discussing materials and purpose
Suggests alternative packaging options
Designs own packaging, suggesting reasons for design features and selected materials
<b>Design, make and evaluate a sewn hand puppet</b>
<b>Explore and evaluate a range of existing products, identifying alternatives to plastic</b>

Summer Term End Point Assessment
Cuts along straight and curved lines, using tape and glue to make temporary joins, fixed joins and moving joins
Builds structures, exploring how they can be made stronger, stiffer and more stable
Knows why hands must be washed when cooking
Uses the right tools to cut, peel, grate and chop
Finds out where food comes from, and the basic principles of a healthy and varied diet
<b>Design, make and evaluate a structure to hold a weight</b>
<b>Make and evaluate a picnic snack</b>

## Assessment End Points – Design Technology

### Year 3

<b>Generic Design Technology Skills - Evident in all units</b>
Researches and develops design criteria
Designs an innovative, functional and appealing product, fit for purpose and audience
Generates and discusses ideas through discussion, sketches and diagrams
Selects and uses a wider range of materials and components, for function and aesthetics
Investigates a range of existing products
Evaluates own ideas against design criteria, suggesting improvements

<b>Autumn Term End Point Assessment</b>
Cuts slots and internal shapes accurately and safely to marked lines
Applies understanding of how to strengthen/ reinforce complex structures
Prepares and cooks a range of ingredients
Works safely and hygienically
Weighs and measures using scales
Cuts and shapes ingredients using tools and equipment
<b>Design, make and evaluate a range of packaging to hold different weights/ objects</b>
<b>Make, bake and evaluate bread rolls, creating healthy sandwiches as a product (Knowledge Study: <i>Mary Berry/ Paul Hollywood – bakers/ pop culture reference</i>)</b>

<b>Spring Term End Point Assessment</b>
Cuts slots and internal shapes accurately and safely to marked lines
Uses lolly sticks and card to make levers and linkages
Understands and uses mechanical systems in products (levers and linkages)
Joins fabrics using a running stitch and over stitch.
Creates a prototype
Creates simple patterns when stitching
<b>Design, make and evaluate a sewn bag</b>
<b>Design, make and evaluate a pop-up card with levers and linkages</b>

<b>Summer Term End Point Assessment</b>
Creates a shell or frame structure, strengthening with diagonal struts
Uses a glue gun under close supervision
Cuts slots and internal shapes accurately and safely to marked lines
Applies understanding of how to strengthen and reinforce more complex structures
Prepares and cooks a range of materials, working safely and hygienically
Weighs and measures using scales, cutting and shaping using tools/ equipment
Applies the principals of a healthy and varied diet, understanding where and when food is grown, caught or reared.
<b>Design, make and evaluate a mini landmark structure</b>
<b>Design, make and evaluate a chocolate box with chocolates</b>

## **Assessment End Points – Design Technology**

### **Year 4**

<b>Generic Design Technology Skills - Evident in all units</b>
Researches and develops design criteria to inform design
Designs an innovative, functional and appealing product fit for purpose and aimed at audience
Generates and develops ideas through discussion, sketches, cross sectional and exploded diagrams/ prototypes.
Selects a wider range of materials/ components, based on function and aesthetic quality, explaining choices
Investigates a range of existing products
Evaluates idea/ product against design criteria
Begins to understand how key DT events and individuals have shaped the world

<b>Autumn Term End Point Assessment</b>
Creates a shell or frame structure, using a glue gun (supervised)
Cuts slots, internal shapes, and accurately/ safely to a marked line
Applies understanding of how to strengthen/ reinforce more complex structures
Prepares and cooks a range of ingredients to produce predominantly savoury dishes
Works safely and hygienically, cutting and shaping ingredients using tools and equipment
Understands and applies the principles of a healthy and varied diet
Weighs and measures using scales
Analyse taste, texture, smell and appearance of a range of foods
Joins and combines food ingredients by beating, kneading and rubbing in.
<b>Investigate and deconstruct food packaging, designing, making and evaluating pizza packaging</b>
<b>Make and evaluate a pizza</b>

<b>Spring Term End Point Assessment</b>
Can cut slots/ cut accurately and safely to a marked line
Understands and uses electrical systems in a product (switches/ bulbs/ buzzers/ motors)
Works safely and hygienically, cutting and shaping ingredients using tools and equipment
Understands and applies the principles of a healthy and varied diet
Weighs and measures using scales
Analyse taste, texture, smell and appearance of a range of foods
Joins and combines food ingredients by beating, kneading and rubbing in.
<b>Design, make and evaluate a torch, including electrical systems (Knowledge Study: Thomas Edison)</b>
<b>Make and bake buns and cakes for younger children</b>

<b>Summer Term End Point Assessment</b>
Creates a shell or frame structure, strengthening with diagonal struts
Uses a glue gun (with supervision)
Measures and marks a square section and dowelling to the nearest cm/ uses a bradawl to mark holes
Can cut slots and internal shapes/ cut accurately and safely to a marked line
Applies understanding of how to strengthen and reinforce more complex structures
Uses a running stitch, over stitch, cross stitch and back stitch.
<b>Design, make and evaluate a suspension bridge</b>
<b>Refine sewing skills, focusing on a range of stitch variations</b>
<b>Knowledge Study: Isambard Kingdom Brunel</b>

## Assessment End Points – Design Technology

### Year 5

Generic Design Technology Skills - Evident in all units
Researches and develops design criteria to inform design
Designs an innovative, functional and appealing product fit for purpose and aimed at audience
Generates and develops ideas through discussion, sketches, cross sectional and exploded diagrams/ prototypes.
Selects a wider range of materials/ components, based on function and aesthetic quality, explaining choices
Investigates and analyses a range of existing products
Evaluates idea/ product against design criteria, considering the views of others
Begins to understand how key DT events and individuals have shaped the world

Autumn Term End Point Assessment
Uses a glue gun with close supervision
Cuts internal shapes, accurately and safely to a marked line
Uses a craft knife, cutting mat and safety ruler under 1:1 supervision
Joins fabrics using a running stitch, over stitch and back stitch, explaining seam allowance
Uses printing to decorate, creating a simple pattern
Works safely and hygienically, cutting and shaping ingredients using tools/ equipment
Analyses taste, texture, smell and appearance of foods, combining a ingredients
<b>Investigate and deconstruct t-shirts, designing, sewing and evaluating a mini printed t-shirt</b>
<b>Make and evaluate biscuits</b>

Spring Term End Point Assessment
Makes levers and linkages
Applies understanding of how to strengthen, stiffen and reinforce more complex structures
Understands and uses mechanical systems in products
Uses gears, pulleys, cams and levers
<b>Design, make and evaluate a machine with moving parts (including gears, pulleys, cams and levers)</b>
<b>Knowledge Study: James Watt</b>

Summer Term End Point Assessment
Uses a glue gun under close supervision
Cuts accurately to 1mm using strip wood, dowelling and square section
Can build frameworks using a range of materials
Cuts internal shapes, cutting to a marked line using a craft knife
Applies understanding of how to strengthen, stiffen and reinforce more complex structures
Understands and applies the principles of a healthy and varied diet
Understands seasonality and knows where and how foods/ ingredients are grown, reared, caught and processed
Works safely and hygienically, cutting and shaping ingredients using tools/ equipment
Analyses taste, texture, smell and appearance of foods, combining a ingredients
<b>Design, makes and evaluate homes for wildlife made from wood and natural materials</b>
<b>Prepare, cook and evaluate a healthy savoury meal, linking to Great British dishes</b>

## Assessment End Points – Design Technology

### Year 6

Generic Design Technology Skills - Evident in all units
Researches and develops design criteria to inform design
Designs an innovative, functional and appealing product fit for purpose and aimed at audience
Generates and develops ideas through discussion, sketches, cross sectional exploded diagrams/ prototypes and computer aided design.
Selects a wider range of materials/ components, based on function and aesthetic quality, explaining choices
Investigates and analyses a range of existing products
Evaluates idea/ product against design criteria, considering the views of others
Begins to understand how key DT events and individuals have shaped the world

Autumn Term End Point Assessment
Cuts internal shapes, and accurately and safely to marked lines
Joins fabrics using a running stitch, over stitch, back stitch and cross stitch
Explains and uses a seam allowance
Creates a prototype and simple pattern
Uses applique to decorate by gluing/ stitching
<b>Deconstruct cushion covers, designing, sewing and evaluating a cushion cover with applique decoration</b>
<b>Knowledge Study: <i>Lucienne Day</i></b>

Spring Term End Point Assessment
Cuts accurately and safely, and uses a glue gun under close supervision
Builds frameworks using a range of materials
Understands and uses electrical systems in products, including series circuits
Applies understanding of computing to program, monitor and control a product
Understands and applies the principles of a healthy and varied diet
Understands seasonality and knows where and how foods/ ingredients are grown, reared, caught and processed, including locally sourced foods
Works safely and hygienically, cutting and shaping ingredients using tools/ equipment
Analyses taste, texture, smell and appearance of foods, combining a ingredients
<b>Design, make and evaluate an electrical burglar alarm, incorporating a series circuit</b>
<b>Learn about seasonality and sustainability in food production, cooking a savoury dish with low carbon footprint</b>

Summer Term End Point Assessment
Plans and creates structures, following detailed plans and diagrams
Applies understanding of computing to program, monitor and control products
Debugs and problem solves as necessary, identifying ways to improve the functionality of a robot
<b>Design, make and evaluate a robot/ machine (Knowledge Study: <i>Ada Lovelace/Alan Turing</i>)</b>
<b>Program, monitor and control the machine using an app</b>