Saint Mary's Catholic Primary Academy

Design and Technology Curriculum 2025-26

What do we want for our pupils?

Intent

At St Mary's, we want our pupils to be exposed to inspiring, rigorous and practical DT projects, whilst acquiring skills and knowledge to create products suitable for a purpose and audience. We encourage our pupils to use their creativity and imagination to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. We want our pupils to see where possible that DT links with other curriculum disciplines including mathematics, science, computing and art.

Implementation

Our DT curriculum is designed to build skills incrementally with careful mapping across key stages and between year groups. The curriculum promotes creativity, independence and collaboration, resilience and self-reflection. We want our pupils to love, appreciate and be able to evaluate the products that they have designed and made. Throughout our DT curriculum we give pupils the opportunity to market the products they design and make whilst being mindful of their target audience, packaging etc. We want our pupils to have acquired skills and knowledge whilst making their designs that inspire innovative thinking and an awareness of the role that designers and manufacturers have in the wider world. For some children their experiences will form the first steps of their future career.

What is our goal?

Impact

By the time the children leave Saint Mary's, they will:

- have acquired the knowledge, concepts and skills outlined in the National Curriculum alongside a positive attitude and enjoyment towards the subject.
- have a wealth of experience that has been gained through the designing and making of a wide range of purposeful products.
- have confidence to be innovative, resilient risk-takers.
- have learnt how to design and make a variety of products across a range of disciplines including: textiles; mechanisms; cooking and nutrition; structures; control and monitor; electrical systems and joining techniques.

Assessment in Design and Technology

Children's attainment in DT is assessed through each stage of the design and make process. Children are encouraged to reflect on the success of their products against their design criteria and consider how future designs could be improved.

Year Group	Advent 1	Advent 2	Lent 1	Lent 2	Pentecost 1	Pentecost 2
FS1		**Structure** Joining to build a structure		**Cooking and nutrition** Food vocabulary linked to senses. Stirring, kneading, shaping, spreading.		**Mechanism** Wheels on moving toy.
FS2		**Structure** Joining and folding to build a structure		**Cooking and nutrition** Food vocabulary linked to senses. Stirring, kneading, shaping, spreading.		**Mechanism** Linkage on moving toy.
1		**Structure** Design and construct a shelter		**Mechanism** Design and construct a moving vehicle		**Cooking and Nutrition** Design and produce a fruit ice lolly
2		**Cooking and nutrition** Design and produce Asian meal		**Structure and mechanism** Design and construct a moving model of Corporation Bridge		**Textiles** Design and create African fabric sample
3		**Cooking and Nutrition** Design and produce food from around the world (Ratatouille and tacos)		**Mechanisms** Design and construct an automaton		**Structures** Design and construct a mini green house
4		**Cooking and Nutrition** Design and produce packaging for a healthy snack		**Textiles** Design fabrics, block printing, hemming and embroidery		**Structure and mechanism** Design and make structures using levers, pulleys and inclines.
5		**Mechanisms** Design and construct pneumatic systems		**Cooking and Nutrition** Design a recipe and produce a seasonal soup.		**Structure** Compare, design and build with specific features
6		**Cooking and Nutrition** Design, produce and compare healthy vs processed food		**Structure and Mechanisms** Design and construct a functioning bridge		**Textiles** Design and create item of clothing using recycled clothing.

NATIONAL CURRICULUM

In KS1 pupils are taught to:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- explore and evaluate a range of existing products evaluate their ideas and products against design criteria

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

In KS2 pupils are taught to:

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

YEAR ONE

STRUCTURE: SHELTER	MECHANISM: MOVING VEHICLES	COOKING AND NUTRITION: FRUIT LOLLIES
Knowledge and Understanding: • To know that materials have properties which make them fit for different purposes. • To know that a shelter is a structure that provides protection. • To know that design criteria are explicit goals that a product must achieve. • To know that the properties of materials impact their effectiveness in different practices. • To know that previous design criteria can be used for other projects. • To know that a product can be improved by using others' ideas.	Knowledge and Understanding: • To know that wheels, axles and chassis have functions. • To know that two products can be compared. • To know that criteria is used when comparing two products. • To know that different mechanisms can be chosen to work best in a design. • To know that wheels and axles must work when making a working model. • To know that the criteria of a design must be met to be successful.	Knowledge and Understanding: • To know that food comes from animals or plants. (Recap FS2) • To know that specific tools are used for specific purposes when preparing food. • To know that an appealing fruit ice lolly needs to taste good and look good. • To know that the design needs to meet specific criteria for a usable product. • To know that design ideas need to be followed and amended whilst making a product. • To know that a product can be improved by using others ideas.

Designing Skills:

- Design products that have a purpose and are aimed at an intended user
- Begin to explain how their products will look and work through talking and drawings

Making Skills:

- With support, follow a simple plan or recipe
- Begin to select hand tools and equipment
- Select materials, textiles and components according to their characteristics
- Learn to use some hand tools and kitchen equipment safely
- With adult support, beginto follow basic hygiene procedures
- Use some materials and components, including textiles and food ingredients
- With guided adult support, measure and mark out
- Cut and shape materials with help
- With adult support, assemble, join and combine materials, components or ingredients
- Cut and grate ingredients, including measuring and weighing ingredients using measuring cups
- Begin to use simple finishing techniques to improve the appearance of their product

Evaluating Skills:

- Explore what products are and who or what they are for

• Explore what they like and dislike about products • Make simple judgements about their products and ideas against design criteria • Suggest how their products could be improved		
Vocabulary: wood, plastic, glass, metal, water, rock, brick, paper, fabric, materials, properties, permanent, temporary, shelter, strong, sturdy, differences, waterproof, strong, sturdy, fit for purpose, suitable, purpose, measurements, design criteria, analyse, join, fix, collaborate, evaluate, improve, positives, negatives, strengths, weaknesses	**Vocabulary:** wheel, chassis, rod, connect, vehicle, centre, product, machine, freely moving, attached, criteria, axle, design, criteria, vehicle, spindle, join, mechanism, compare, assess, analyse, strength, weakness, outcome, improve, successes	**Vocabulary:** dairy, meat, fish, fruit, plants, vegetables, grains, beans, nuts, animal products, knives, grater, peeler, germs, hygiene, purpose, products, healthy, flavour, improve, texture, freeze, design, tools, chop, dice, slice, grate, peel, hygiene, safety, strengths, weaknesses, products, improve, healthy

YEAR TWO

COOKING AND NUTRITION: ASIAN MEALS	STRUCTURE AND MECHANISM: MOVING BRIDGE	TEXTILES: AFRICAN FABRIC
Knowledge and Understanding: • To know that food comes from either plants or animals. • To know that different tools have characteristics that make them suitable for specific purposes. • To know that cooking food can change the flavor, texture and appearance of foods. • To know that design criteria are the goals the product must achieve to be successful. • To know that when following a recipe, measurements need to be correct. • To know that finished products can be compared with design criteria to see how closely they match.	Knowledge and Understanding: • To know that mechanisms are in everyday products and machines. • To know that a slider mechanism directs movement. • To know that a lever mechanism moves around a fixed point. • To know that linkage mechanisms combine levers and sliders. • To know that a working model needs to have the correct mechanism. • To know products can be evaluated for success.	Knowledge and Understanding: • To know that a running stitch is a basic stitch that is used to join fabric. • To know that fabric products are made up of different parts and joins. • To know that a sewing pattern is a template of the parts needed to make a product. • To know that a design needs to meet specific criteria for a usable product • To know that design ideas need to be followed and amended when making a product. • To know that finished products can be compared with design criteria and can be improved.

Design Skills:

- Work in a range of relevant contexts, for example imaginary, story-based, home, school and the wider environment.
- Understand and follow simple design criteria
- Use their knowledge of existing products and their own experiences to help generate their ideas
- Begin to explain how their products will look and work through talking and simple annotated drawings
- Where appropriate, design models using simple computing software
- Plan and test ideas using templates and mock-ups

Making Skills:

- With support, follow a simple plan or recipe
- Begin to select hand tools and equipment, such as scissors, graters, zesters, safe knives, juicer
- Select materials, textiles and components according to their characteristics
- Learn to use some hand tools and kitchen equipment safely and appropriately.
- With adult support, consistently follow basic hygiene procedures
- To select and use some materials and components, including textiles and food ingredients
- Assemble, join and combine materials, components or ingredients
- Independently demonstrate how to cut, shape and join fabric to make a simple product
- Manipulate fabrics to create the desired effect
- Use a basic running stitch

- Cut, peel and grate ingredients, including measuring and weighing ingredients using measuring cups
- Use simple finishing techniques to improve the appearance of their product, such as adding simple decorations

<u>Evaluating Skills:</u>

- Explore what products are and who or what they are for
- Explore how products work and how or where they might be used.
- Explore what materials products are made from
- Explore what they like and dislike about products
- Talk about their design ideas and what they are making
- Make simple judgements about their products and ideas against design criteria
- Suggest how their products could be improved

Vocabulary:	**Vocabulary:**	**Vocabulary:**
poultry, beef, pork, fish, milk, fruit, vegetables, ingredients, preparations, tools, chopping, dicing, mashing, grating, taste, texture, soften, bacteria, melt, recipe, measurements, Eton Mess, equipment, safety, diagrams, modelling, design criteria, taste, evaluate, amendments, appeal.	mechanism, device, motion, force, sliders, levers, linkages, gears, pulleys, cams, components, bridge, direct movement, pivot, arc, base, joint, free moving, dock, lift, mechanism, design, compare, assess, analyse, strength, weakness, outcome, improve, success	textiles, fabric, cloth, running stitch, needle, thread, join, weave, joined, fastened, stitch, parts, product, improve, sewing pattern, paper model, template, instructions, design, details, appearance, embroider, fix, high standard, strength, weakness

YEAR THREE

COOKING AND NUTRITION: FOOD FROM AROUND THE WORLD	MECHANISM: AUTOMATONS	STRUCTURE: GREENHOUSE
Knowledge and Understanding: • To know that a healthy diet is eating a balanced mix from the five food groups. • To know that there are different ways to prepare and cook potatoes. • To know that when preparing savoury dishes there are different techniques. • To know that a product must meet the design criteria to be successful. • To know that following the design criteria and recipe are different. • To know that asking questions can help others to evaluate their products.	Knowledge and Understanding: • To know that different mechanisms work in different ways. • To know that cams create and up and down motion. • To know that different shaped cams create a different movement pattern. • To know that design criteria are the exact goals a project must achieve to be successful • To know that a material has different properties and suitability. • To know that reflection is a key part of the design process.	Knowledge and Understanding: • To know that adding diagonal struts adds strength and stability to butt joints • To know that two similar greenhouse products use different materials to achieve the same result. • To know that materials such as plastic and glass are suitable for making a greenhouse. • To know that a design needs to meet specific criteria for a usable product. • To know that design ideas need to be followed and amended when making a product. • To know that finished products can be compared with design criteria and can be improved.

Designing Skills:

- Develop and follow simple design criteria
- Design innovative and appealing products that have a clear purpose and are aimed at a specific user
- Explain how particular parts of their products work
- When designing, explore different initial ideas before coming up with a final design
- Test ideas out through using prototypes

Making Skills:

- Place the main stages of making in a systematic order
- With growing confidence, select from a range of tools and equipment, explaining their choices
- Select from a range of materials and components according to their functional properties and aesthetic qualities
- Learn to use a range of tools and equipment safely and appropriately.
- To be able to name hygiene procedures.
- Use a range of materials and components, including construction materials and kits, textiles and mechanical and electrical components
- With growing independence, measure and mark out to the nearest cm
- With help, cut, shape and score materials with some degree of accuracy.
- With adult support, assemble, join and combine material and components with some degree of accuracy
- Begin to select and use different and appropriate finishing techniques to improve the appearance of a product

Evaluating Skills:

- Investigate and analyse how well products have been designed and made
- Investigate and analyse why materials have been chosen and begin to suggest reasons for this
- Investigate and analyse the methods of construction used and begin to suggest reasons for this
- Investigate and analyse how well products work to achieve their purposes
- Identify the strengths and areas for development in their ideas and products
- Consider the views of others, including intended users, to improve their work
- Refer to their design criteria as they design and make
- Use their design criteria to evaluate their completed products
- Know about the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world.

Vocabulary:	**Vocabulary:**	**Vocabulary:**
Eat Well, balanced diet, nutrition, proteins, carbohydrates, fats, sugars, dairy products, fruit, vegetables, electrical appliances, peeling, chopping, deseeding, slicing, dicing, grating, mixing and skinning, ratatouille, vegetarian, prepare, slow cooker, onions, aubergines, courgettes, peppers, tomatoes, taco, design criteria, tortillas, appearance, cost, target audience, hygiene, toppings, healthy, preparation, design criteria, evaluate, evidence, purpose, models, peers	cam, axle, slider, lever, fulcrum, shafts, convert, rotate, follower, off-centre, circular, heart, snail, pear, stationary, follower, turn, movement, design, criteria, automaton, mechanism, develop, automata, diagram, evaluate, improvements, joining, reflect	joined, strengthen, structures, struts, diagonal, 3-D, rigid, components, supported, stable, biomes, comparisons, similarities, differences, structures, transparent, translucent, opaque, materials, investigate, justify, collect, data, design, discuss, ideas, secure, joints, build, joint, build, test, positive, negative, observe, record, evaluate

YEAR FOUR

COOKING AND NUTRITION: HEALTHY SNACKS	TEXTILES: FABRIC DESIGN	STRUCTURE AND MECHANISM: LEVERS AND PULLEYS
Knowledge and Understanding: • To know that decay can be prevented or delayed by preservation methods. • To know that food packaging is made to keep food fresh for longer but needs to be environmentally friendly. • To know that most cardboard packaging is produced from a net. • To know that a product must be fit for purpose. • To know that you can modify a design after discussing with others. • To know that testing a product can help evaluate the successes and identify the improvements.	Knowledge and Understanding: • To know that different fabrics have different properties. • To know that design features are the aspects of a product's design that the designer would like to emphasise • To know that there are traditional block printing techniques. • To know that a running stitch is used in hemming. • To know what there are different embroidery stitches. • To know that a final product can be improved by following suggestions from others.	Knowledge and Understanding: • To know that a pulley is a mechanism that lifts a heavy object. • To know that a simple machine uses a mechanism to perform a function. • (Recap Y2/3) • To know that simple machines can be combined to make complex, compound machines. • To know that a design needs to meet specific criteria for a usable product. • To know that design ideas need to be followed and amended when making a product • To know that finished products can be compared with design criteria and can be improved.

Designing Skills:

- Work in a wide range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment.
- Begin to identify the design features of their products that will appeal to intended customers
- Use their knowledge of a range of existing products to help generate their ideas
- Use annotated sketches and cross-sectional drawings to develop and communicate their ideas
- When planning, start to explain their choice of materials and components including function and aesthetics
- Where appropriate, use computer-aided design to develop and communicate their ideas

Making Skills:

- Place the main stages of making in a systematic order
- With growing confidence, select from a range of tools and equipment, explaining their choices
- Select from a range of materials and components according to their functional properties and aesthetic qualities
- Learn to use a range of tools and equipment safely, appropriately and accurately.
- To be able to name and explain the importance of following hygiene procedures.
- To select and use a range of materials and components, including construction materials and kits, textiles and mechanical and electrical components
- With growing independence, measure and mark out to the nearest millimetre.
- Independently cut, shape and score materials with some degree of accuracy
- Assemble, join and combine material and components with some degree of accuracy

- Independently demonstrate how to measure, cut, shape and join fabric with some accuracy to make a simple product
- Join textiles with an appropriate sewing technique
- Select and use different and appropriate finishing techniques to improve the appearance of a product

<u>Evaluating Skills:</u>

- Investigate and analyse how well products have been designed and made
- Investigate and analyse why materials have been chosen and begin to suggest reasons for this
- Investigate and analyse the methods of construction used and begin to suggest reasons for this
- Investigate and analyse how well products work to achieve their purposes
- Identify the strengths and areas for development in their ideas and products
- Consider the views of others, including intended users, to improve their work
- Refer to their design criteria as they design and make
- Use their design criteria to evaluate their completed products
- Know about the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world.

Vocabulary:	**Vocabulary:**	**Vocabulary:**
Decay, deteriorates, pasteurisation, micro-organism, design features, preserve, investigate, packaging, annotated sketches, exploded diagrams, nets, shell frame, healthy, taste, practicality, materials, components, best before, use by, evaluation, design criteria, evidence, supervision	material, aesthetic, properties, purpose, components, design, criteria, natural, synthetic, lycra, polyester, nylon, function, appearance, quality, size, colour, pattern, embellishment, durability, usability, features, block printing, mono-printing, print making, engraving, etching , screen printing, lithography, hem, stitch, needle, thread, overlapping, finish, running stitch, raw edge, cross stitch, blanket stitch, embroidery, embellish, scatter stitch, satin stitch, back stitch, appearance, improve, attractive, results, justification, modify, alter	pulley, mechanisms, strength, function, smoothness, sliders, levers, linkages, axles, pulleys, complex, compound, machines, diagram, wheels, machine, complex, compound, measure, sketch, criteria, prototype, evaluate, positive, negative, analyse, improve, compare, test

YEAR FIVE

MECHANISM: PNEUMATIC SYSTEMS	COOKING AND NUTRITION: SEASONAL SOUP	STRUCTURE: FUNCTIONAL BUILDINGS
Knowledge and Understanding: • To know that a pneumatic system uses air to exert a force. • To know that pneumatic systems use stored energy • To know that different mechanisms can work together to perform a function. • To know that a prototype design needs to meet specific criteria to meet a desired function. • To know that an iterative process allows for testing and changing a design. • To know that a focus group can be used to evaluate your product.	Knowledge and Understanding: • To know that seasonality is the time of year when the harvest or flavour of a type of food is at its best. • To know that a healthy diet provides all the nutritions needed. (Recap from Y3) • To know that there are different food preparation techniques. • To know that different ingredients are needed for a healthy seasonal soup. • To know that measuring and accuracy is important when preparing a meal. • To know that evaluating their peers' products can improve their own design criteria.	Knowledge and Understanding: • To know that triangular shapes are used to create strong frameworks. (Y3 recap) • To know that columns support frameworks. • To know that architecture has developed over time. • To know that overlapping brickworks creates greater stability. • To know that a computer-generated design needs to meet specific criteria for a usable product. • To know that design ideas need to be followed and amended when making a product. • To know that finished products can be compared with design criteria and can be improved.

Designing Skills:

- Use research to inform and develop detailed design criteria
- Identify the design features of their products that will appeal to the intended user
- Use their knowledge of a broad range of existing products to help generate their ideas
- Use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate their ideas
- Generate a range of design ideas and clearly communicate final designs

Making Skills:

- Independently plan by suggesting what to do next
- Create step-by-step plans as a guide to making
- Confidently and carefully select from a wide range of tools and equipment, explaining their choices
- Select from a wide range of materials and components according to their functional properties and aesthetic qualities
- Learn to use a wider range of tools and equipment safely and appropriately
- To follow hygiene procedures independently
- Independently take exact measurements and mark out, to within 1 millimetre
- With adult support, use a full range of materials and components, including construction materials and kits, textiles, and mechanical components
- With adult support, cut a range of materials with precision and accuracy

- Shape and score materials with accuracy.
- Assemble, join and combine materials and components.
- With guidance, refine the finish using techniques to improve the appearance of their product, such as sanding or a more precise scissor cut after roughly cutting out a shape

<u>Evaluating Skills:</u>

- Investigate and analyse how well products have been designed and made
- Investigate and analyse why materials have been chosen and give reasons for this
- Investigate and analyse the methods of construction used and give reasons for this
- Investigate and analyse how well products meet user needs and wants
- Investigate and analyse how innovative products are
- Identify the strengths and areas for development in their ideas and products
- Consider the views of others, including intended users, to improve their work
- Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make
- Evaluate their ideas and products against their original design specification
- Know about and evaluate key events, including technological developments, and designs of individuals in design and technology that have helped shape the world.

Vocabulary:	**Vocabulary:**	**Vocabulary:**
pneumatic, exert force, compressed air, low maintenance, design criteria, system, compressed, mechanism, frameworks, strong, stable, cross braces, guy ropes, diagonal struts, safety features, annotated, diagrams, prototype, materials, iterative process, initial plan, focus group, survey, evaluate	seasonal, vegetables, ingredients, varieties, raw, calories, nutritional, proportion, balanced diet, hygiene, micro-organisms, dicing, peeling, grating, boiling, steaming, sautéing, techniques, nutrients, spices, flavour, cooking, savoury, sweet, spicy, measure, accurate, salty, delicious, reflection, evaluate.	strengthen, stability, diagonal struts, frameworks, cross braces, triangular struts, culture, architecture, influences, designs, inventions, society, stable, culturally, layered, overlapped, pattern, interlinked, modern, structural, computer aided design (CAD), pattern, software, structure, build, criteria, edit, evaluate, modify, functionality, appearance, accurate, measured, positives, negatives, improvement

YEAR SIX

COOKING AND NUTRITION: HEALTHY VS PROCESSED FOOD	STRUCTURE AND MECHANISM: FUNCTIONING BRIDGES	TEXTILES: RECYCLED CLOTHING
Knowledge and Understanding: • To know that processed foods are unhealthy. • To know that two products can be compared to identify pros and cons for each product. • To know that organic food is healthier. • To know that a healthy diet consists or a balanced proportion of foods. • To know that preparation of equipment and ingredients is essential for following the design criteria. • To know that the design process in continuous and changes can be made throughout.	Knowledge and Understanding: • To know that bridge engineers have improved people's lives. • To know that there are different methods to strengthen bridges. • To know that a triangular framework adds strength. • To know that a design can be communicated in a variety of ways • To know that a functional bridge needs follow the design criteria. • To know that design is an iterative process.	Knowledge and Understanding: • To know that whip stitch is used to join two pieces together and blanket stitch is a finishing stitch. • To know that deconstructing garments identifies how they were made, the materials used and their properties. • To know that whip stitch and blanket stitch are used to repair fabric. • To know that a design needs to meet specific criteria for a usable product. • To know that design ideas need to be followed and amended when making a product. • To know that finished products can be compared with design criteria and can be improved.

Designing Skills:

- Work in a wider range of relevant contexts, for example conservation, the home, school, leisure, culture, enterprise, industry and the wider environment.
- Design innovative, functional and appealing products that are fit for purpose and aimed at a target market.
- Give detailed explanations of how particular parts of their products work
- Consider the availability and costings of resources when planning out designs
- Test ideas out through using prototypes

Making Skills:

- Independently plan by suggesting what to do next
- Create step-by-step plans as a guide to making
- Confidently and carefully select from a wide range of tools and equipment, explaining their choices
- Select from a wide range of materials and components according to their functional properties and aesthetic qualities
- Learn to use a wider range of tools and equipment safely, appropriately and accurately.
- To select and follow the correct hygiene procedures that are necessary for completing a task.
- Independently decide apparatus and take exact measurements and mark out, to within 1 millimetre
- Use a full range of materials and components, including construction materials and kits, textiles, and mechanical components
- Independently cut a range of materials with precision and accuracy

- Shape and score materials with precision and accuracy.
- Assemble, join and combine materials and components with accuracy.
- Refine the finish using techniques to improve the appearance of their product, such as sanding or a more precise scissor cut after roughly cutting out a shape

<u>Evaluating Skills:</u>

- Investigate and analyse how well products have been designed and made
- Investigate and analyse why materials have been chosen and give reasons for this
- Investigate and analyse the methods of construction used and give reasons for this
- Investigate and analyse how well products meet user needs and wants
- Investigate and analyse how innovative products are
- Identify the strengths and areas for development in their ideas and products
- Consider the views of others, including intended users, to improve their work
- Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make
- Evaluate their ideas and products against their original design specification
- Know about and evaluate key events, including technological developments, and designs of individuals in design and technology that have helped shape the world.

Vocabulary:	**Vocabulary:**	**Vocabulary:**
processed, pasteurised, freezing, appearance, value for money, taste, texture, kneed, prove, comparisons, leaving agents, yeast, homemade, nutritional, hygiene, whole foods, organic, additives, pesticides, balanced diet, justify, design criteria, Eat Well plate, proportion, healthy, nutrients, recipe, techniques, chopping, slicing, dicing, kneading and mashing, boiling, roasting, frying and baking, evaluate, compare, amendments, modifications, recipe	engineer, inventions, innovations, suspension, corrugated, vertically, horizontally, flexibility, texture, waterproofing, strengthened, frameworks, alternately, triangle, strength, distort, collapse, distribute, prototype, pattern, computer-aided, appearance, design, criteria, discussions, collaboratively, weaknesses, strengths, evaluate, successful, intention, improvements, alterations, manufacturing	recycle, re-purpose, re-use, design criteria, plan, embroidery, fastenings, blanket stitch, whip stitch, running stitch, flaws, errors, fastenings, embroider, texture, thickness, properties, evaluate, compare, positives, negatives, deconstruct, appealing, improvements, plan, errors