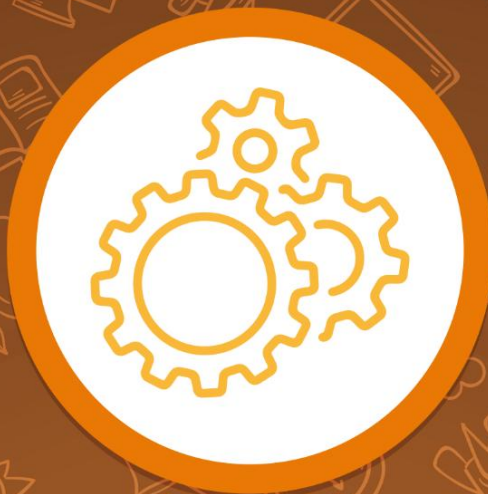




D&T

CURRICULUM: D&T



**St Joseph's
Catholic Primary School**

Love God, Love Learning, Love One Another.



CURRICULUM NARRATIVE

Welcome to secondary school!

Y5/6
Cycle b

Cooking and nutrition

Bolognese



Mechanical systems

A moving toy



Electrical systems

An alarm to protect a valuable artefact

Textiles

A tablet case



Structures

A small -scale bird hide



Cooking and nutrition

A yeast-based snack



Y5/6
Cycle a

Cooking and nutrition:

A puff pastry tart/pizza



Electrical systems

A night light for a sibling or friend



Mechanical systems

A greeting card

Y3/4
Cycle b

Textiles:

A stuffed toy



Structures

CAD-based packaging to protect and display a food product for sale



Cooking and nutrition

A bread-based product



Y3/4
Cycle a

Structures:

A strong chair for Baby Bear



Mechanisms

A moving storyboard



Cooking and nutrition

A smoothie



Year 2



Cooking and nutrition

A Rainbow Salad



Mechanisms

A small wheeled vehicle



Textiles

A puppet to retell a story

Year 1

Structures
Junk modelling

Construction

Textiles

Threading and weaving
Exploring materials



Mechanisms

Play and exploration with
with props and toys, e.g. vehicles

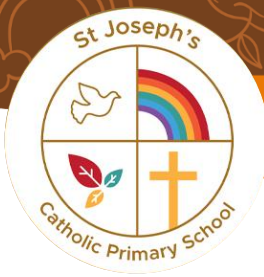


Cooking and nutrition
Exploring food, taste and texture
Hygiene
Play -Doh exploration

EYFS

Your D&T journey starts here!

Love God, Love Learning, Love One Another.



CURRICULUM NARRATIVE

Why do Designers Read?

To find out specific information about products (materials, processes etc...)

To gain inspiration.

To learn about past and present influential people.

To learn about the history of products.

To help develop their own creative skills.

To follow recipes and instructions.



Write like a Designer

Write for real purposes and audiences.

Create design plans, explaining thought processes.

Evaluate own products as well as pre-existing products, organising it under e.g. headings, subheadings.

Produce questionnaires to acquire customer views.

Collate research to present design ideas/products.

Correctly use design vocabulary and technological key terms

Use labels and annotations on diagrams.

Instructions on how to make a product and how to prepare food.

Write persuasively to promote their product.

Threshold Concepts



- Design



- Make



- Evaluate



- Technical Knowledge

Key Areas:



- Cooking and nutrition



- Mechanisms and Mechanical systems



- Structures



- Textiles

Key Stage 2 only:



- Electrical systems



- Application of the Digital world

Intent

Design and Technology plays an important role in the personal development of the whole child, providing opportunities for creative expression, critical thinking and practical problem solving. Through Design and Technology, pupils develop confidence, resilience and independence as they learn to plan, make, evaluate and improve their ideas.

Children are given regular opportunities to apply and strengthen skills from Mathematics, Science and other curriculum areas, helping them to make meaningful connections in their learning. Design and Technology reflects the world around us, and through studying it, pupils develop a deeper understanding of our culture, society and the rapidly changing technological world.

Our Design and Technology curriculum is progressive, exploratory and inclusive, building securely on prior learning and ensuring that all pupils are supported to succeed.



CURRICULUM NARRATIVE

Implementation

As a school within the Bishop Hogarth Catholic Education Trust, we deliver a carefully sequenced and progressive Design and Technology curriculum devised by subject specialists with industry knowledge in the field of Design and Technology.

This ensures that:

- Skills and knowledge are clearly mapped from Early Years to the end of Key Stage 3
- Learning builds cumulatively across each phase
- Clear end points for skill development are identified

Design and Technology is interwoven with other curriculum subjects, giving purpose and relevance to learning. In the Early Years, the essential building blocks of Design and Technology are established through practical, play based and exploratory activities across all areas of learning.

Our progression of skills fully covers:

- The Statutory Framework for the Early Years
- The National Curriculum for Key Stages 1, 2 and 3

Skills Progression Strands

The curriculum is structured around five key strands, incorporating design, making, evaluation and technical knowledge to ensure depth and progression:

- Design Process
- Resistant Materials
- Food and Nutrition
- Textiles
- Products and Designers

Each strand:

- Builds progressively on prior learning
- Includes example content and practical application
- Introduces and revisits Tier 2 and Tier 3 vocabulary, enabling pupils to articulate ideas confidently and accurately

Skills may be taught through:

- A skills based approach
- A topic based approach
- Or a blended approach, ensuring alignment with the wider curriculum while maintaining subject integrity

Designers and Career Links

The study of designers and products is embedded within every Design and Technology unit.

Pupils explore the work of local, British and global designers, past and present, and learn how Design and Technology has shaped the world around them.

Each unit also includes explicit teaching of career links, helping pupils to understand how Design and Technology skills are used in real world contexts. Pupils are introduced to careers such as:

- Product designers
- Engineers
- Architects
- Textile designers
- Chefs and food technologists
- Furniture and industrial designers



CURRICULUM NARRATIVE

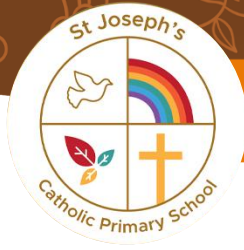
This approach builds cultural capital, raises aspirations and helps pupils see how their learning connects to future education, training and employment opportunities.

Impact

By the time pupils leave St. Joseph's, they will have:

- Developed a positive attitude to learning and independent working
- Learned to work collaboratively and productively with others
- Gained the ability to research, ask questions and identify users' needs
- Become responsible designers and makers, working safely, hygienically and ethically
- Built secure knowledge of tools, equipment and materials and how to use them effectively

Pupils leave with a strong foundation of Design and Technology knowledge and skills, confidence in their creative abilities, and the resilience needed to refine and improve their work. They are well prepared to build on this learning as they progress into Key Stage 3 and beyond.



CURRICULUM NARRATIVE

Threshold Concepts

To equip children with a breadth and depth of knowledge, the curriculum embeds these **threshold concepts** and **key areas** through the completion of three projects in each year group:

Design:

- Using research and exploration to identify and understand user needs.
- Identifying and solving design problems.
- Developing design specifications to inform the design of innovative, functional and appealing products in a variety of situations.
- Using a variety of approaches to generate creative ideas.
- Developing and communicating design ideas in a variety of formats.

Make:

- Selecting and using specialist tools, techniques, processes, equipment and machinery.
- Selecting and using a wide and complex range of materials, components and ingredients – considering their properties.
- Preparing and cooking a variety of dishes using a range of cooking techniques.

Evaluate:

- Analysing the work of past and present influencers.
- Investigating new and emerging technologies.
- Using a design specification and user feedback to test, evaluate and refine ideas.
- Exploring the impact of design and technology on society and the environment.

Technical Knowledge:

- Understanding and using materials based on their properties and structural performance.
- Understanding how mechanical systems are used in products to change movement and force.
- Understanding how electrical and electronic systems are used and can be powered within products.
- Applying computing and programmable computers to embed intelligence into products.
- Understanding the principles of a healthy and varied diet.
- Understanding seasonality and food sources.

Key Areas:

Cooking and nutrition



Where food comes from, balanced diet, preparation and cooking skills. Kitchen hygiene and safety. Following recipes

Mechanisms/Mechanical systems



Mimic natural movements using mechanisms such as cams, followers, levers and sliders.

Structures



Material functional and aesthetic properties, strength and stability, stiffen and reinforce structures.

Textiles



Fastening, sewing, decorative and functional fabric techniques including cross stitch, blanket stitch and applique.

Electrical systems (Key Stage 2 only)



Operational series circuits. Circuit components, circuit diagrams and symbols, combined to create various electrical products.

Digital world (Key Stage 2 only)



Program products to monitor and control, develop designs and virtual models using 2D and 3D CAD software.



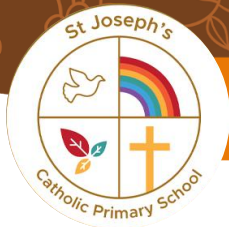
CURRICULUM NARRATIVE

"If you want to eat well, you have to cook yourself, there's no magic to it."

Jamie Oliver

Curriculum Coverage

Y5/6	Cycle b	 Cooking and nutrition: Bolognaise <i>Focus for learning:</i> Celebrating culture and seasonality	 Mechanical systems: A moving toy <i>Focus for learning:</i> Cams	  Electrical systems: An alarm to protect a valuable artefact <i>Focus for learning:</i> More complex circuits and switches (including programming, monitoring and control)
	Cycle a	 Cooking and nutrition: A yeast-based snack (pretzels) for parents and children participating in...(e.g. Mass, school sports day, Stay and Read) <i>Focus for learning:</i> Celebrating culture and seasonality	 Structures: A small-scale bird hide for children to use in the school wildlife area/pavilion for the local park <i>Focus for learning:</i> Frame structures	  Textiles: A tablet case <i>Focus for learning:</i> Fastenings (including computer-aided design)
Y3/4	Cycle b	 Cooking and nutrition: A puff pastry tart using seasonal vegetables and fruit/A pizza using seasonal vegetables and fruit <i>Focus for learning:</i> Healthy and varied diet and culture	  Electrical systems: A night light for a sibling or friend <i>Focus for learning:</i> Simple circuits and switches (including programming and control)	 Mechanical systems: A greeting card <i>Focus for learning:</i> Levers and linkages
	Cycle a	 Cooking and nutrition: A bread-based product (wrap, sandwich, roll, blini, toastie) <i>Focus for learning:</i> Healthy and varied diet	  Structures: CAD-based packaging to protect and display a food product for sale <i>Focus for learning:</i> Shell structures (including computer aided design)	 Textiles: A stuffed toy for a younger child <i>Focus for learning:</i> 2-D shape to 3-D product
KS1	Year 2	 Cooking and nutrition: A smoothie <i>Focus for learning:</i> Preparing fruit and vegetables	 Structures: A strong chair for Baby Bear <i>Focus for learning:</i> Free standing structure	 Mechanisms: A moving storyboard to retell a fairy tale to the class <i>Focus for learning:</i> Sliders and levers
	Year 1	 Cooking and nutrition: A Rainbow Salad <i>Focus for learning:</i> Preparing fruit and vegetables	 Mechanisms: A small wheeled vehicle. <i>Focus for learning:</i> Wheels and axles	 Textiles: A puppet to retell a story <i>Focus for learning:</i> Template and joining techniques



CURRICULUM NARRATIVE

Curriculum Coverage

In **EYFS**, pupils will be introduced to Cooking and nutrition by preparing and tasting a range of fruits and vegetables. They will explore and make food linked to their topic and learn about basic hygiene. They will develop their cooking skills and techniques by playing and experimenting with Play Doh. Structural design and make skills will be developed through junk modelling and construction, providing opportunities to use a range of motor skills. Children will explore a range of materials and apply a range of techniques, including cutting, joining, threading and weaving. Through free play, they will explore mechanisms through different vehicles and moving toys and books with simple sliders.

As they move into **Year 1 and 2**, pupils will further develop their design skills by making a 'moving storyboard' to retell a fairy tale to the class; simple sliders and levers will be introduced. Their structural knowledge will be enhanced by designing and making a free-standing structure, e.g. a strong chair for Baby Bear. A smoothie for themselves will be created, allowing them to prepare fruit and vegetables and investigate food sources and origins.

In **Year 1 and 2**, pupils will continue to investigate food sources and origins by making a Rainbow Salad; they will practise a greater range of food processing skills. A puppet to retell a story will be created, allowing them to develop textile skills, focusing on template and joining techniques. Their mechanical understanding will be developed further by using wheels and axels to make a wheeled trolley.

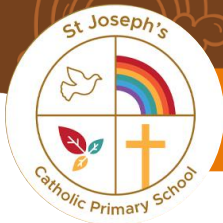
In **year 3 and 4**, the pupils will further develop their design skills by designing and making their own packaging to protect and display a food product for sale. They will be introduced to computer aided design to make their structure. A bread-based product will be made, allowing pupils to gain skills in food preparation and understand a healthy and varied diet. Pupils will continue with textiles and make a stuffed toy for a younger child.

Continuing in **year 3 and 4**, pupils will continue to focus on a healthy balanced diet and seasonality by cooking their own tart or pizza using seasonal vegetables and/or fruit. A night light for a sibling or friend will be designed focusing on simple circuits and switches, including programming and control. For mechanical systems, a greeting card will be made using levers and linkages.

In **year 5 and 6**, pupils will build upon their knowledge of structures to design and make a frame structure. This could be a bird hide for children to use in the school wildlife area, or a pavilion for their local park. Sewing skills will be honed during the textiles project to make a tablet case, focusing upon different types of fastenings, stitch and applique techniques, including computer-aided design. To celebrate culture and seasonality, a yeast-based snack, e.g. pretzels will be prepared and made.

Also, in **year 5 and 6** pupils will utilise the mechanical skills gained from prior learning by designing and making a moving toy with a cam mechanism. An alarm to protect a valuable artefact will allow them to gain further knowledge about electrical systems during their work with more complex circuits and switches, including programming, monitoring and control. While cooking a Bolognese, pupils will learn more about recipe adaptation and further develop their food hygiene and preparation skills.

Each project has been specially designed to provide children with the wide range of skills and technical knowledge needed to allow them to succeed and thrive in Design and Technology. Materials have been designed to ensure clarity and consistency of delivery to ensure an agreed standard. Core skills are sequenced to be revisited at least once within each key stage to ensure that knowledge is built upon and developed through retrieval and skill practice. Recall is a feature of theory sessions, developing student's ability to transfer skills between projects and different media.



CURRICULUM CONTINUITY – EYFS TO KS1

Threshold Concepts

How does the Early Years Framework fit within the four threshold concepts?

Planning, designing, making and developing skills and knowledge are all fundamental parts of our EYFS. Children will have plenty of opportunities through child-led learning to get to know each of these areas, as they explore different materials, processes and outcomes. Adults support and scaffold their learning, offering suggestions or listening to their ideas.

Design



Structures

- Making verbal plans and material choices
- Developing a junk model.
- Designing through construction materials, such as Lego, Duplo and various building blocks

Textiles

- Discussing what a good design needs.
- Designing a simple pattern with paper.
- Designing a specific product linked to the termly topic.
- Choosing from available materials.

Cooking and Nutrition

- Designing a recipe as a class.
- Designing packaging.

Mechanisms

- Design a character prop for a play/story with a simple moving part.
- Design a model with moving parts using a range of construction materials.

Make



Structures

- Improving fine motor/scissor skills with a variety of materials.
- Joining materials in a variety of ways (temporary and permanent).
- Joining different materials together.
- Describing their junk model, and how they intend to put it together.

Textiles

- Developing fine motor/cutting skills with scissors.
- Exploring fine motor/threading and weaving (under, over technique) with a variety of materials.
- Using a prepared needle and wool to practise threading.
- Exploring different materials, such as card, fabric, wool.

Cooking and Nutrition

- Chopping plasticine and Play-Doh safely.
- Chopping fruit and vegetables with support.
- Develop cutting, slicing, spreading, rolling, scooping, kneading etc through preparing simple dishes and experimenting with Play-Doh.

Mechanisms

- Make use of props and materials when role playing characters in narratives and stories.
- Construct models with moving parts, such as Lego vehicles.

Evaluate



Structures

- Giving a verbal evaluation of their own and others' junk models with adult support.
- Checking to see if their model matches their plan.
- Considering what they would do differently if they were to do it again.
- Describing their favourite and least favourite part of their model.

Textiles

- Reflecting on a finished product and comparing to their design.

Cooking and Nutrition

- Tasting different food and giving opinions.
- Describing some of the following when tasting food: look, feel, smell and taste.
- Choosing their favourite packaging design and explaining why.

Mechanisms

- Reflecting on a finished model or product and assessing if it works and moves.

Technical Knowledge



Structures

- To know there are a range to different materials that can be used to make a model and that they are all slightly different.
- Making simple suggestions to fix their junk model.

Textiles

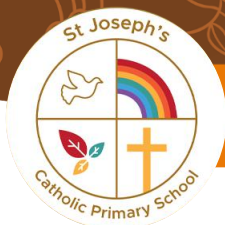
- To know that a design is a way of planning our idea before we start.
- To know that threading is putting one material through an object.

Cooking and Nutrition

- To know that food can be made of different ingredients
- To know that vegetables are grown.
- To recognise and name some common fruits and vegetables.
- To know that different food, fruits and vegetables taste different.
- To know that eating fruits and vegetables is good for us.
- To discuss why different packages might be used for different foods.

Mechanisms

- To know how to make objects move through wheels and simple sliders.



PROGRESSION OF SKILLS

Cooking and Nutrition		Year 1	Year 2	Year 3/ 4 Cycle a	Year 3/4 Cycle b	Year 5/ 6 Cycle a	Year 5/6 Cycle b
		A Rainbow Salad	A smoothie	A bread-based product (wrap, sandwich, roll, blini, toastie	A puff pastry tart using seasonal vegetables and fruit/A pizza using seasonal vegetables and fruit	A yeast-based snack for parents and children participating in... (e.g. school sports day)	Bolognese
		Preparing fruit and vegetables		Healthy and varied diet and culture		Celebrating culture and seasonality	
Prior Learning:		- Experience of common fruit and vegetables, undertaking sensory activities i.e. appearance taste and smell. - Experience of cutting soft fruit and vegetables using appropriate utensils.		- Know some ways to prepare ingredients safely and hygienically. - Have some basic knowledge and understanding about healthy eating and The Eatwell Guide. - Have used some equipment and utensils and prepared and combined ingredients to make a product.		- name of products, names of equipment, utensils, techniques and ingredients - texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury - hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet - planning, design criteria, purpose, user, annotated sketch, sensory evaluations	
Skills	Design	- Design appealing products for a particular user based on simple design criteria. - Generate initial ideas and design criteria through investigating a variety of fruit and vegetables. - Communicate these ideas through talk and drawings.		- Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture and aroma for an appealing product for a particular user and purpose. - Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas.		- Generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification. - Explore a range of initial ideas, and make design decisions to develop a final product linked to user and purpose. - Use words, annotated sketches and information and communication technology as appropriate to develop and communicate ideas.	
	Make	- 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.		- Plan the main stages of a recipe, listing ingredients, utensils and equipment. - Select and use appropriate utensils and equipment to prepare and combine ingredients. - Select from a range of ingredients to make appropriate food products, thinking about sensory characteristics.		- Write a step-by-step recipe, including a list of ingredients, equipment and utensils - Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients. - Make, decorate and present the food product appropriately for the intended user and purpose.	
	Evaluate	- 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.		- Carry out sensory evaluations of a variety of ingredients and products. Record the evaluations using e.g. tables and simple graphs. - Evaluate the ongoing work and the final product with reference to the design criteria and the views of others.		- 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. - Evaluate the final product with reference back to the design brief and design specification, considering the views of others when identifying improvements. - Understand how key chefs have influenced eating habits to promote varied and healthy diets.	
Knowledge	Technical Knowledge	- 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 The Eatwell Guide. - Know and use technical and sensory vocabulary relevant to the project.		- Know how to use appropriate equipment and utensils to prepare and combine food. - Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. - Know and use relevant technical and sensory vocabulary appropriately.		- Know how to use utensils and equipment including heat sources to prepare and cook food. - Understand about seasonality in relation to food products and the source of different food products. - Know and use relevant technical and sensory vocabulary.	
Key Vocabulary		- fruit and vegetable names, names of equipment and utensils - sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard - flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, planning, investigating tasting, arranging, popular, design, evaluate, criteria		- name of products, names of equipment, utensils, techniques and ingredients - texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury - hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet - planning, design criteria, purpose, user, annotated sketch, sensory evaluations		- 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	



PROGRESSION OF SKILLS

 Structures		Year 2 A strong chair for baby bear	Year 3/ 4 Cycle a CAD-based packaging to protect and display a food product for sale.	Year 5/ 6 Cycle a A small-scale bird hide for children to use in the school wildlife area/pavilion for the local park
		Freestanding structures	Shell structures using CAD	Frame structures
Prior Learning:		- Experience of using construction kits to build walls, towers and frameworks. - Experience of using of basic tools e.g. scissors or hole punches with construction materials e.g. plastic, card. - Experience of different methods of joining card and paper.	- Experience of using different joining, cutting and finishing techniques with paper and card. - A basic understanding of 2-D and 3-D shapes in mathematics and the physical properties and everyday uses of materials in science. - Familiarity with general purpose software that can be used to draw accurate shapes, such as Microsoft Word, or simple computer aided design (CAD)	- Experience of using measuring, marking out, cutting, joining, shaping and finishing techniques with construction materials. - Basic understanding of what structures are and how they can be made stronger, stiffer and more stable.
Skills	Design	- 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.	- Generate realistic ideas and design criteria collaboratively through discussion, focusing on the needs of the user and the functional and aesthetic purposes of the product. - Develop ideas through the analysis of existing shell structures and use computer-aided design to model and communicate ideas.	- Carry out research into user needs and existing products, using surveys, interviews, questionnaires and web-based resources. - Develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost. - Generate, develop and model innovative ideas, through discussion, prototypes and annotated sketches.
	Make	- Plan by suggesting what to do next. - Select and use tools, skills and techniques, explaining their choices. - Select new and reclaimed materials and construction kits to build their structures. - Use simple finishing techniques suitable for the structure they are creating.	- Plan the order of the main stages of making. - Select and use appropriate tools and software to measure, mark out, cut, score, shape and assemble with some accuracy. - Explain their choice of materials according to functional properties and aesthetic qualities. - Use computer-generated finishing techniques suitable for the product they are creating.	- Formulate a clear plan, including a step-by step list of what needs to be done and lists of resources to be used. - Competently select from and use appropriate tools to accurately measure, mark out, cut, shape and join construction materials to make frameworks. - Use finishing and decorative techniques suitable for the product they are designing and making.
	Evaluate	- 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.	- Investigate and evaluate a range of shell structures including the materials, components and techniques that have been used. - Test and evaluate their own products against design criteria and the intended user and purpose.	- Investigate and evaluate a range of existing frame structures. - Critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests. - Research key events and individuals relevant to frame structures.
Knowledge	Technical Knowledge	- Know how to make freestanding structures stronger, stiffer and more stable. - Know and use technical vocabulary relevant to the project.	- Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes. - Develop and use knowledge of how to construct strong, stiff shell structures. - Know and use technical vocabulary relevant to the project.	- Understand how to strengthen, stiffen and reinforce 3D frameworks. - Know and use technical vocabulary.
Key Vocabulary		- cut, fold, join, fix - structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved - metal, wood, plastic - circle, triangle, square, rectangle, cuboid, cube, cylinder - design, make, evaluate, user, purpose, ideas, design criteria, product, function	- shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, - vertex, edge, face, length, width, breadth, capacity - marking out, scoring, shaping, tabs, adhesives, - joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, - ribbing, laminating - font, lettering, text, graphics, decision, evaluating, design brief design criteria, innovative, prototype.	- frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent - design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional



PROGRESSION OF SKILLS

 Mechanisms/Mechanical Systems		Year 1 A small wheeled vehicle	Year 2 A moving storyboard to retell a fairy tale to the class	Year 3/ 4 Cycle b A greeting card	Year 5/6 Cycle b A toy vehicle
		Sliders and Levers	Wheels and axles	Levers and linkages	Pulleys and gears
Prior Learning:		- Early experiences of working with paper and card to make simple flaps and hinges. - Experience of simple cutting, shaping and joining skills using scissors, glue, paper fasteners and masking tape.	- Assembled vehicles with moving wheels using construction kits. - Explored moving vehicles through play. - Gained some experience of designing, making and evaluating products for a specified user and purpose. - Developed some cutting, joining and finishing skills with card.	- Explored and used mechanisms such as flaps, sliders and levers. - Gained experience of basic cutting, joining and finishing techniques with paper and card.	- Experience of axles, axle holders and wheels that are fixed or free moving. - Basic understanding of electrical circuits, simple switches and components. - Experience of cutting and joining techniques with a range of materials including card, plastic and wood. - An understanding of how to strengthen and stiffen structures.
Skills	Design	- 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.	- Generate initial ideas and simple design criteria through talking and using own experiences. - Develop and communicate ideas through drawings and mock-ups.	- Generate realistic ideas and their own design criteria through discussion, focusing on the needs of the user. - Use annotated sketches and prototypes to develop, model and communicate ideas.	- Generate innovative ideas by carrying out research using surveys, interviews, questionnaires and web-based resources. - Develop a simple design specification to guide their thinking. - Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views.
	Make	- 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.	- Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing. - Select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics.	- Order the main stages of making. - Select from and use appropriate tools with some accuracy to cut, shape and join paper and card. - Select from and use finishing techniques suitable for the product they are creating.	- Produce detailed lists of tools, equipment and materials. Formulate step-by-step plans and, if appropriate, allocate tasks within a team. - 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.
	Evaluate	- 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.	- Explore and evaluate a range of products with wheels and axles. - Evaluate their ideas throughout and their products against original criteria.	- Investigate and analyse books and, where available, other products with lever and linkage mechanisms. - Evaluate their own products and ideas against criteria and user needs, as they design and make.	- Compare the final product to the original design specification. - Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. - Consider the views of others to improve their work. - Investigate famous manufacturing and engineering companies relevant to the project.
Knowledge	Technical Knowledge	- Explore and use sliders and levers. - Understand that different mechanisms produce different types of movement. - Know and use technical vocabulary relevant to the project.	- Explore and use wheels, axles and axle holders. - Distinguish between fixed and freely moving axles. - Know and use technical vocabulary relevant to the project.	- Understand and use lever and linkage mechanisms. - Distinguish between fixed and loose pivots. - Know and use technical vocabulary relevant to the project.	- Understand that mechanical and electrical systems have an input, process and an output. - Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. - Know and use technical vocabulary relevant to the project.
Key Vocabulary		- slider, lever, pivot, slot, bridge/guide - card, masking tape, paper fastener, join - pull, push, up, down, straight, curve, forwards, backwards - design, make, evaluate, user, purpose, ideas,	- vehicle, wheel, axle, axle holder, chassis, body, cab - assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism - names of tools, equipment and materials used - design, make, evaluate, purpose, user, criteria, functional	- mechanism, lever, linkage, pivot, slot, bridge, guide - system, input, process, output - linear, rotary, oscillating, reciprocating - user, purpose, function - prototype, design criteria, innovative, appealing, 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



PROGRESSION OF SKILLS

 Textiles		Year 1	Year 3/4 Cycle a	Year 5/6 Cycle a
		A puppet to perform a play	A toy for a friend or relative	A tablet case
Prior Learning:		- Explored and used different fabrics. - Cut and joined fabrics with simple techniques. - Thought about the user and purpose of products.	- Have joined fabric in simple ways by gluing and stitching. - Have used simple patterns and templates for marking out. - Have evaluated a range of textile products.	- Experience of basic stitching, joining textiles and finishing techniques. - Experience of making and using simple pattern pieces.
Skills	Design	- 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.	- Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s. - Produce annotated sketches, prototypes, final product sketches and pattern pieces.	- Generate innovative ideas by carrying out research including surveys, interviews and questionnaires. - Develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes and, where appropriate, computer-aided design. - Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification. - Produce detailed lists of equipment and fabrics relevant to their tasks.
	Make	- 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.	- Plan the main stages of making. - Select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing. - Select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern.	- Formulate step-by-step plans and, if appropriate, allocate tasks within a team. - 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.
	Evaluate	- 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.	- Investigate a range of 3-D textile products relevant to the project. - Test their product against the original design criteria and with the intended user. - Take into account others' views. - Understand how a key event/individual has influenced the development of the chosen product and/or fabric.	- Investigate and analyse textile products linked to their final product. - Compare the final product to the original design specification. - Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. - Consider the views of others to improve their work.
Knowledge	Technical Knowledge	- 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 relevant to the project.	- Know how to strengthen, stiffen and reinforce existing fabrics. - Understand how to securely join two pieces of fabric together. - Understand the need for patterns and seam allowances. - Know and use technical vocabulary relevant to the project.	- A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. - Fabrics can be strengthened, stiffened and reinforced where appropriate.
Key Vocabulary		- names of existing products, joining and finishing techniques, tools, fabrics and components - template, pattern pieces, mark out, join, decorate, finish - features, suitable, quality mock-up, design brief, design criteria, make, evaluate, user, purpose, function	- fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance - user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, aesthetics, function, pattern pieces	- 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



PROGRESSION OF SKILLS

 Electrical Systems		Year 3/4 Cycle b A night light for a sibling or friend	Year 5/6 Cycle b An alarm to protect a valuable artefact
		More complex circuits and switches	Simple circuits and switches (including programming and control)
Prior Learning:		- Constructed a simple series electrical circuit in science, using bulbs, switches and buzzers. - Cut and joined a variety of construction materials, such as wood, card, plastic, reclaimed materials and glue.	- Understanding of the essential characteristics of a series circuit and experience of creating a battery-powered, functional, electrical product. - Initial experience of using computer control software and an interface box or a standalone box, e.g. writing and modifying a program to make a light flash on and off.
Skills	Design	- Gather information about needs and wants and develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups. - Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams.	- Use research to develop a design specification for a functional product that responds automatically to changes in the environment. Take account of constraints including time, resources and cost. - Generate and develop innovative ideas and share and clarify these through discussion. - Communicate ideas through annotated sketches, pictorial representations of electrical circuits or circuit diagrams.
	Make	- Order the main stages of making. - Select from and use tools and equipment to cut, shape, join and finish with some accuracy. - Select from and use materials and components, including construction materials and electrical components according to their functional properties and aesthetic qualities.	- Formulate a step-by-step plan to guide making, listing tools, equipment, materials and components. - Competently select and accurately assemble materials, and securely connect electrical components to produce a reliable, functional product. - Create and modify a computer control program to enable an electrical product to work automatically in response to changes in the environment.
	Evaluate	- Investigate and analyse a range of existing battery-powered products. - Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.	- Continually evaluate and modify the working features of the product to match the initial design specification. - Test the system to demonstrate its effectiveness for the intended user and purpose. - Investigate famous inventors who developed ground-breaking electrical systems and components.
Knowledge	Technical Knowledge	- Understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs and buzzers. - Apply their understanding of computing to program and control their products. - Know and use technical vocabulary relevant to the project.	- Understand and use electrical systems in their products. - Apply their understanding of computing to program, monitor and control their products. - Know and use technical vocabulary relevant to the project.
Key Vocabulary		- series circuit, fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip - control, program, system, input device, output device - user, purpose, function, prototype, design criteria, innovative, appealing, design brief	- series circuit, parallel circuit, names of switches and components, input device, output device, system, monitor, control, program, flowchart - function, innovative, design specification, design brief, user, purpose



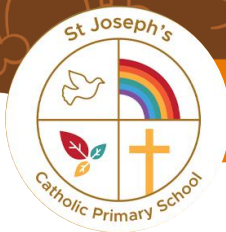
CURRICULUM END POINTS

	EFYS	Y1	Y2	Y3	Y4	Y5	Y6
Design	• Generate ideas through play, exploration and discussion • Begin to choose materials based on simple preferences (colour, texture, purpose). • Verbally describe what they intend to make	• Generate ideas based on personal experiences and simple design criteria. • Demonstrate ideas through drawings, talk and basic templates. • Begin to identify the user and purpose of a product.	• Develop ideas using drawings, mock-ups and simple design criteria. • Design products for a specific user and purpose. • Generate ideas through investigating existing products.	• Generate realistic ideas and design criteria for a specific user. • Use annotated sketches and simple CAD tools to show ideas. • Research existing products to inform design decisions.	• Develop design criteria as a class. • Use prototypes, pattern pieces and annotated sketches to model ideas. • Use ICT (including CAD) to support design decisions	• Use research to identify user needs and develop a design specification. Generate innovative ideas using annotated sketches, prototypes and CAD. • Consider constraints (time, resources, cost).	• Develop a detailed design spec informed by research. • Generate and refine ideas using exploded diagrams, CAD and prototypes. • Consider sustainability ethics and user needs.
Make	• Use simple tools safely (scissors, cutters, rollers). • Join materials in different ways (tape, glue, threading, weaving). • Manipulate materials to create simple structures, models or food items.	• Select from a limited range of tools and materials. • Use simple techniques to cut, shape, join and finish materials. • Prepare fruits/vegetables using basic skills (peeling, slicing, squeezing)	• Select tools and materials. • Use joining techniques (running stitch, glue, overstitch, stapling). • Prepare ingredients using a wider range of skills (grating, chopping, mixing)	• Select tools and materials with increasing accuracy. • Measure, cut, score and assemble materials with accuracy. • Prepare and cook a simple dish using safe techniques (mixing, kneading, shaping).	• Plan the sequence of making. • Use tools with accuracy to cut, shape, join and finish materials. • Prepare and cook dishes using seasonal ingredients.	• Formulate a clear step-by-step plan. • Use specialist tools accurately to create frame structures. • Sew with accuracy using a range of stitches and fastenings. • Prepare and cook food using a range of techniques (kneading, proving, shaping).	• Produce detailed plans and allocate tasks when working in teams. • Use a wide range of tools and materials with precision. • Create products incorporating more complex circuits and programming components • Adapt recipes and prepare dishes with accuracy.



CURRICULUM END POINTS

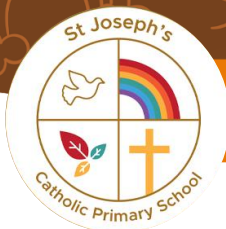
	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Evaluate	- Talk about what they have made and what they like/dislike. - Compare their finished model to their original idea. - Suggest simple changes.	- Explore and discuss existing products. - Evaluate their product against simple criteria (purpose, user, appearance). - Talk about what worked well and what they would change.	- Evaluate existing products and identify features that work well. - Evaluate their own product against design criteria and user needs. - Suggest improvements based on testing.	- Investigate and evaluate existing shell structures and products. - Test and evaluate their product against design criteria. - Use feedback from others to refine ideas	- Analyse existing products to identify functional and aesthetic features. - Evaluate their product against criteria and user needs. - Consider how key events/individuals influence product design.	- Investigate and evaluate frame structures and existing products. - Critically evaluate their product against the design specification. - Use user feedback to refine and improve their work	- Critically evaluate their product against the design specification and user feedback. - Test products rigorously for function, durability and fitness for purpose. - Understand how key engineers, designers and chefs have influenced modern design.
Technical Knowledge	- Know that different materials have different properties. - Understand that food comes from plants or animals. - Know that objects can move using wheels, sliders or simple mechanisms	- Know how sliders and levers create movement. - Understand the difference between fixed and moving axles. - Know that structures need to be strong and stable. - Use simple vocabulary (e.g. axle, slider, join, smooth, strong).	- Know how to make structures stronger, stiffer and more stable. - Understand wheels, axles and axle holders. - Know how simple textile products are made using templates. - Understand where fruit and vegetables come from and what makes a healthy diet.	- Understand how shell structures are formed and strengthened - Know how levers and linkages create movement. - Understand healthy and varied diets. - Use technical vocabulary accurately (net, linkage, pivot, structure).	- Understand how to construct strong, stiff shell structures. - Know how simple circuits and switches work. - Understand how fabrics can be strengthened, stiffened and reinforced. - Use technical vocabulary (circuit, switch, seam allowance, accuracy)	- Understand how to strengthen and reinforce 3D frameworks. - Know how cams and followers change movement. - Understand seasonality and cultural influences on food. - Use technical vocabulary (frame structure, cam, follower, appliqué)	- Understand input–process–output in mechanical and electrical systems. - Know how gears, pulleys and cams alter speed, direction and movement. - Understand how 3D textile products are constructed using pattern pieces - Use advanced technical vocabulary confidently (gear ratio, circuit diagram, prototype, specification)



CAREER LINKS AND INFLUENTIAL PEOPLE

DT							
Year 1		Autumn 1	Autumn 2 <i>A Small Wheeled Vehicle</i>	Spring 1	Spring 2 <i>Rainbow Salad</i>	Summer 1	Summer 2 <i>A Puppet to Retell a Story</i>
	Career		Fire Fighter 		Hygiene Operative 		Puppeteer 
	Influential Person		Henry Ford 		Mary Berry 		Jim Henson 

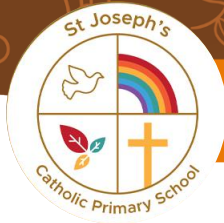
DT							
Year 2		Autumn 1	Autumn 2 <i>A Moving Storyboard</i>	Spring 1	Spring 2 <i>A Strong Chair for Baby Bear</i>	Summer 1	Summer 2 <i>Smoothies</i>
	Career		Animatics Editor 		Carpenter 		Juice Barista 
	Influential Person		Philip Henderson 		Bremner Brown Carpentry 		Sebastian Vestergaard 



CAREER LINKS AND INFLUENTIAL PEOPLE

DT							
Y3/4 (Cycle a)		Autumn 1	Autumn 2 <i>A Stuffed Toy</i>	Spring 1	Spring 2 <i>A Bread Based Product</i>	Summer 1	Summer 2 <i>CAD Based Packaging</i>
	Career		Prototyping Technician 		Trainee Baker 		CAD Technician 
	Influential Person		INEOS (Local Business) 		Paul Hollywood 		Ivan Sutherland 

DT							
Y5/6 (Cycle a)		Autumn 1	Autumn 2 <i>Textiles-A Case</i>	Spring 1 <i>A Yeast Based Snack</i>	Spring 2	Summer 1	Summer 2 <i>A Small Case Bird Hide</i>
	Career		Garment Technologist 	Artisan Baker 			Joinery 
	Influential Person		Charlie (Local Business) 	The Good Bake Company 			David Hockney 



CAREER LINKS AND INFLUENTIAL PEOPLE

DT							
Y3/4 (Cycle b)		Autumn 1	Autumn 2 <i>A Greetings Card</i>	Spring 1	Spring 2 <i>A Night Light for a Sibling/Friend</i>	Summer 1	Summer 2 <i>Puff Pastry Tart/ Pizza</i>
	Career		Illustrator 		Lighting Designer 		Chef 
	Influential Person		Sara Davies 		Jean Rosenthal 		Jamie Oliver 

DT							
Y5/6 (Cycle b)		Autumn 1	Autumn 2	Spring 1	Spring 2 <i>Bolognese</i>	Summer 1 <i>A Moving Toy</i>	Summer 2 <i>An Alarm to Protect A Valuable Object</i>
	Career				School Chef 	Automotive Engineer 	Security Alarm Engineer 
	Influential Person				Tom Kerridge 	Carlos Ghosn (NISSAN) 	Thomas Edison 



BRITISH VALUES, TRUST VIRTUES AND CATHOLIC SOCIAL TEACHINGS

DT							
Year 1		Autumn 1	Autumn 2 <i>A Small Wheeled Vehicle</i>	Spring 1	Spring 2 <i>Rainbow Salad</i>	Summer 1	Summer 2 <i>A Puppet to Retell a Story</i>
	British Values		Individual Liberty 		Individual Liberty 		Individual Liberty 
	Trust Virtues and Catholic Social Teachings		Resilience 		Participation 		Self- Belief 

DT							
Year 2		Autumn 1	Autumn 2 <i>A Moving Storyboard</i>	Spring 1	Spring 2 <i>A Strong Chair for Baby Bear</i>	Summer 1	Summer 2 <i>Smoothies</i>
	British Values		Individual Liberty 		Mutual Respect and Tolerance 		Mutual Respect and Tolerance 
	Trust Virtues and Catholic Social Teachings		Participation 		Self- Belief 		Confidence 



BRITISH VALUES, TRUST VIRTUES AND CATHOLIC SOCIAL TEACHINGS

DT							
Y3/4 (Cycle a)		Autumn 1	Autumn 2 <i>A Stuffed Toy</i>	Spring 1	Spring 2 <i>A Bread Based Product</i>	Summer 1	Summer 2 <i>CAD Based Packaging</i>
	British Values		Mutual Respect and Tolerance 		Mutual Respect and Tolerance 		Individual Liberty 
	Trust Virtues and Catholic Social Teachings		Resilience 		Participation 		Confidence 

DT							
Y5/6 (Cycle a)		Autumn 1	Autumn 2 <i>Textiles-A Case</i>	Spring 1 <i>A Yeast Based Snack</i>	Spring 2	Summer 1	Summer 2 <i>A Small Case Bird Hide</i>
	British Values		Mutual Respect and Tolerance 	Mutual Respect and Tolerance 			Individual Liberty 
	Trust Virtues and Catholic Social Teachings		Confidence 	Participation 			Self- Belief 



BRITISH VALUES, TRUST VIRTUES AND CATHOLIC SOCIAL TEACHINGS

DT							
Y3/4 (Cycle b)		Autumn 1	Autumn 2 <i>A Greetings Card</i>	Spring 1	Spring 2 <i>A Night Light for a Sibling/Friend</i>	Summer 1	Summer 2 <i>Puff Pastry Tart/ Pizza</i>
	British Values		Mutual Respect and Tolerance 		Mutual Respect and Tolerance 		Individual Liberty 
	Trust Virtues and Catholic Social Teachings		Peace 		Common Good 		Confidence 

DT							
Y5/6 (Cycle b)		Autumn 1	Autumn 2	Spring 1	Spring 2 <i>Bolognese</i>	Summer 1 <i>A Moving Toy</i>	Summer 2 <i>An Alarm to Protect A Valuable Object</i>
	British Values				Individual Liberty 	Individual Liberty 	Mutual Respect and Tolerance 
	Trust Virtues and Catholic Social Teachings				Confidence 	Participation 	Common Good 



SEND

The BHCET DT curriculum has been designed to be delivered to the whole class. However, the tasks are adapted by class teachers to meet the needs of individual children. To ensure pupils with SEND achieve well, they should be exposed to the same learning as their peers; however, the way they evidence their learning through the tasks can be adapted.

Through scaffolding, tasks can be adapted to ensure all learners can access and evidence the same threshold concepts and learning objectives as their non-SEND counterparts. Scaffolding strategies can include providing sentence starters, a writing frame, vocabulary banks, sorting and matching cards or visual prompts. Reactive or proactive adaptations can make the BHCET curriculum accessible and achievable for all.

Other strategies of adaptation are outlined through the EEF's Five-a-Day principles, which include explicit instruction, metacognitive strategies, flexible grouping and the use of technology:

Scaffolding

'Scaffolding' is a metaphor for temporary support that is removed when it is no longer required. Initially, a teacher would provide enough support so that pupils can successfully complete tasks that they could not do independently. This requires effective assessment to gain a precise understanding of the pupil's current capabilities.

Examples: Support could be visual, verbal, or written. Writing frames, partially completed examples, knowledge organisers, sentence starters can all be useful. Reminders of what equipment is needed for each lesson and classroom routines can be useful. Scaffolding discussion of texts: promoting prediction, questioning, clarification and summarising.

Explicit Instruction

Explicit instruction refers to a range of teacher-led approaches, focused on teacher demonstration followed by guided practice and independent practice. Explicit instruction is not just "teaching by telling" or "transmission teaching". One popular approach to explicit instruction is Rosenshine's 'Principles of Instruction'.

Examples: Worked examples with the teacher modelling self-regulation and thought processes is helpful. A teacher might teach a pupil a strategy for summarising a paragraph by initially 'thinking aloud' while identifying the topic of the paragraph to model this process to the pupil. They would then give the pupil the opportunity to practise this skill. Using visual aids and concrete examples promotes discussion and links in learning.

Cognitive and Metacognitive Strategies

Cognitive strategies are skills like memorisation techniques or subject specific strategies like methods to solve problems in maths. Metacognitive strategies help pupils plan, monitor and evaluate their learning

Examples: Chunking the task will support pupils with SEND – this may be through provision of checklists, instructions on a whiteboard or providing one question at a time. This helps reduce distractions to avoid overloading working memory.

Prompt sheets that help pupils to evaluate their progress, with ideas for further support.

Flexible Grouping

Flexible grouping describes when pupils are allocated to smaller groups based on the individual needs that they currently share with other pupils. Such groups can be formed for an explicit purpose and disbanded when that purpose is met

Examples: Allocating temporary groups can allow teachers to set up opportunities for collaborative learning, for example to read and analyse source texts, complete graphic organisers, independently carry out a skill, remember a fact, or understand a concept. Pre-teaching key vocabulary, is a useful technique.

Use of Technology

Technology can assist teacher modelling. Technology, as a method to provide feedback to pupils and/ or parents can be effective, especially when the pupil can act on this feedback.

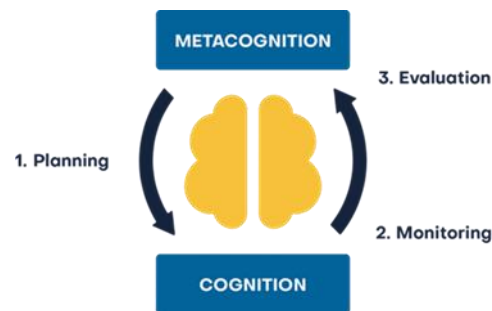
Examples: Use a visualizer to model worked examples. Technology applications, such as online quizzes can prove effective. Speech generating apps to enable note-taking and extended writing can be helpful.



Assessment

Assessment comprises two linked processes:

Formative Assessment: provides Assessment for Learning. Is a continuous process and an integral part of teaching and learning; informal observations, dialogue/effective use of questioning, consolidation activities, low stakes quizzing, routine marking; and pupil/peer assessment all contribute to the developing profile of progress. When pupils make changes and consider actions to their work, based on the activity, they are 'self-regulating' their work. Self-regulating activities can be termed Assessment as Learning. Self-regulated learners are aware of their strengths and weaknesses, and can motivate themselves to engage in, and improve, their learning. Pupils start by **planning** how to undertake a task, working on it while **monitoring** the strategy to check progress, then **evaluating** the overall success.



Metacognitive Regulation Cycle
(EEF Metacognition & Self regulation Guidance)

Summative Assessment: provides Assessment of Learning and is a judgement of attainment at key points throughout the year- using past knowledge to measure attainment and progress. Examples of this are standardised tests, tasks and end of term/annual assessments which include a sample of pupil's prior learning.

Assessment is a continuous process which is integral to teaching and learning and:

- Enables an informed judgement to be made about a pupil's understanding, skills, attitude to learning and successful acquisition of knowledge as they move through the curriculum.
- Incorporates a wide range of assessment techniques to be used in different contexts/purposes.
- Is accompanied by **clear assessment criteria** that enables effective marking and feedback, a reliable progress evaluation to be given and demonstrates clearly what a pupil must do to improve.
- Provides feedback recognising achievement, increasing pupil confidence/motivation.
- Supports learning by making clear to pupils: what they are trying to achieve; what they have achieved; what the learning gaps and misconceptions are and what the next steps in learning are.
- Allows regular subject specific extended writing and access to high quality text/ reading.
- Should be moderated and standardised to ensure **purposeful, meaningful, and timely feedback.**
- Includes feedback to pupils to help them understand what they need to improve, challenging them to achieve their target rather than a grade.
- Allows leaders and staff to make timely adaptations to the curriculum.

