



St. Joseph's
Catholic Primary School

DESIGN AND TECHNOLOGY CURRICULUM

socially mistakes morally potential
confidently
Grow Learn spiritually
Love St Jesus academically world
ourselves faith
others Joseph's

LOVE

LEARN

GROW

DT CURRICULUM OVERVIEW

YEAR	ADVENT 1	ADVENT 2	LENT 1	LENT 2	PENTECOST 1	PENTECOST 2
Reception	Junk Modelling	Masks	Jam Tarts	Pushing and Pulling Make a bus		
Year 1	Topic: Under the Sea Area of DT: Mechanisms Final Product: Under the Sea boxes	Topic: Winter Area of DT: Food Final Product: Winter Soup			Topic: Castles Area of DT: Textiles Final Product: Knights Tabards	
Year 2		Topic: The Three Little pigs Area of DT: Structures Final Product: Three Little Pigs House		Topic: Great Fire of London Area of DT: Mechanisms Final Product: Fire Engine		Topic: Rainforest Area of DT: Food Final Product: Designed Open Sandwich
Year 3	Topic: Stone Age Area of DT: Food Final Product: Stone age food		Topic: Ancient Egypt Area of DT: Frame Structures Final Product: Shaduf			Topic: Caribbean Area of DT: Textile Final Product: Batik
Year 4		Topic: WW2 Area of DT: Electrical systems Final Product: Buzzer Game		Topic: Romans Area of DT: Food Final Product: Roman Banquet	Topic: KrindleKrax Area of DT: Mechanical Systems Final Product: KrindleKrax Toy	
Year 5			Topic: Space Area of DT: Mechanisms Final Product: Solar Orrery	Topic: Rivers and Floods Area of DT: Structures Final Product: Bridges		Topic: Mountains Area of DT: Food Final Product: Food for the mountains
Year 6	Topic: Anglo Saxons Area of DT: Textiles Final Product: Anglo Saxon Crosstitch		Topic: Choices Area of DT: Food Final Product: A healthy lunch	Topic: What a wonderful world Area of DT: Textiles Final Product: Making tote bags		

DT – RECEPTION – Links to EYFS Curriculum

The Continuous Provision in EYFS means that DT is not taught in the same half termly project cycle as Years1-6.
Below are the links to the EYFS Framework that DT activities may support.

Area of EYFS Curriculum	PSE Self confidence	Communication and Language: Understanding	Communication and Language: Speaking	Physical Development: Moving and Handling	Expressive Arts and Design: Exploring and using media and materials	Expressive Arts and Design: Being imaginative
30-50 months	<ul style="list-style-type: none"> •Can select and use activities and resources with help. •Shows confidence in asking adults for help. 					
40-60 months	<p>Confident to speak to others about own needs, wants, interests and opinions.</p> <ul style="list-style-type: none"> • Can describe self in positive terms and talk about abilities. 	<ul style="list-style-type: none"> •Responds to instructions involving a two-part sequence. Understands humour, e.g. nonsense rhymes, jokes. •Able to follow a story without pictures or props. •Listens and responds to ideas expressed by others in 	<ul style="list-style-type: none"> •Extends vocabulary, especially by grouping and naming, exploring the meaning and sounds of new words. •Uses talk to organise, sequence and clarify thinking, ideas, feelings and events. 	<ul style="list-style-type: none"> •Uses simple tools to effect changes to materials. •Handles tools, objects, construction and malleable materials safely and with increasing control. •Shows a preference for a dominant hand. •Begins to use anticlockwise movement and retrace vertical lines. 	<ul style="list-style-type: none"> •Begins to build a repertoire of songs and dances. •Explores the different sounds of instruments. •Explores what happens when they mix colours. •Experiments to create different textures. •Understands that different media can 	<ul style="list-style-type: none"> •Create simple representations of events, people and objects. • Initiates new combinations of movement and gesture in order to express and respond to feelings, ideas and experiences. •Chooses particular colours to use for a purpose.

		<p>conversation or discussion.</p>		<ul style="list-style-type: none"> •Begins to form recognisable letters. •Uses a pencil and holds it effectively to form recognisable letters, most of which are correctly formed. 	<p>be combined to create new effects.</p> <ul style="list-style-type: none"> •Manipulates materials to achieve a planned effect. •Constructs with a purpose in mind, using a variety of resources. •Uses simple tools and techniques competently and appropriately. •Selects appropriate resources and adapts work where necessary. •Selects tools and techniques needed to shape, assemble and join materials they are using. 	<ul style="list-style-type: none"> • Introduces a storyline or narrative into their play. •Plays alongside other children who are engaged in the same theme. •Plays cooperatively as part of a group to develop and act out a narrative.
<p>Early Learning Goal</p>	<p>Children are confident to try new activities, and say why they like some activities more than others. They are confident to speak in a familiar group, will talk about their ideas, and will choose</p>	<p>Children follow instructions involving several ideas or actions. They answer ‘how’ and ‘why’ questions about their experiences and in response to stories or events.</p>		<p>Children show good control and co-ordination in large and small movements. They move confidently in a range of ways, safely negotiating space. They handle equipment and tools</p>	<p>Children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques,</p>	<p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and</p>

	the resources they need for their chosen activities. They say when they do or don't need help.			effectively, including pencils for writing	experimenting with colour, design, texture, form and function.	technology, art, music, dance, role play and stories.
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DT – YEAR 1 – TOPIC/SKILLS AND KNOWLEDGE

Topic / Term	KNOWLEDGE AND UNDERSTANDING	SKILLS
<p style="text-align: center;">(Advent 1) Topic: Under the Sea Area of DT: Mechanisms Final Product: Under the Sea boxes</p>	<ul style="list-style-type: none"> • Join appropriately for different materials and situations e.g. glue, tape. • Roll paper to create tubes. • Mark out materials to be cut using a template. • Fold, tear and cut paper and card. • Cut along lines, straight and curved. • Use a hole punch. • Insert paper fasteners for card. • Experiment with levers and sliders to find different ways of making things move in a 2D plane. 	<p>Design</p> <ul style="list-style-type: none"> • Use pictures and words to convey what they want to design/make. • Propose more than one idea for their product. • Use reclaimed materials to develop more than one idea. • Model ideas with reclaimed materials. • Select appropriate technique explaining: First... Next... Last.... • Explore ideas by rearranging materials. • Select pictures to help develop ideas. • Use drawings to record ideas as they are developed. • Add notes to drawings to help explanations. • Describe their models and drawings of ideas and intentions. <p>Make</p> <ul style="list-style-type: none"> • Discuss their work as it progresses. • Select materials from a limited range that will meet the design criteria. • Select and name the tools needed to work the materials. • Explain what they are making. • Explain which materials they are using and why. • Name the tools they are using. • Describe what they need to do next. <p>Evaluate</p> <ul style="list-style-type: none"> • Talk about their design as they develop and identify good and bad points. • Note changes made during the making process as annotation to plans/drawings.

		<ul style="list-style-type: none"> • Say what they like and do not like about items they have made and attempt to say why. • Discuss how closely their finished product meets their design criteria and how well it meets the needs of the user.
<p>(Advent 2) Topic: Winter Area of DT: Food Final Product: Winter Soup</p>	<ul style="list-style-type: none"> • Develop a food vocabulary using taste, smell, texture and feel. • Group familiar food products e.g. fruit and vegetables. • Explain where food comes from. • Cut, peel, grate, chop a range of ingredients • Work safely and hygienically. • Understand the need for a variety of foods in a diet. • Measure and weigh food items, non-statutory measures e.g. spoons, cups. 	<p>Design</p> <ul style="list-style-type: none"> • Use pictures and words to convey what they want to design/make. • Propose more than one idea for their product. • Select appropriate technique explaining: First... Next... Last.... • Explore ideas by rearranging materials. • Select pictures to help develop ideas. • Use drawings to record ideas as they are developed. • Add notes to drawings to help explanations. <p>Make</p> <ul style="list-style-type: none"> • Discuss their work as it progresses. • Select and name the tools needed to work the materials. • Explain what they are making. • Explain which foods they are using and why. • Name the tools they are using. • Describe what they need to do next. <p>Evaluate</p> <ul style="list-style-type: none"> • Explore existing products and investigate how they have been made. • Talk about their design as they develop and identify good and bad points. • Note changes made during the making process as annotation to plans/drawings. • Say what they like and do not like about items they have made and attempt to say why. • Discuss how closely their finished product meets their design criteria and how well it meets the needs of the user.

(Pentecost 1)
Topic: Castles
Area of DT: Textiles
Final Product:
Knights Tabbards

- Cut out shapes which have been created by drawing round a template onto the fabric.
- Join fabrics by using e.g. running stitch, glue, staples, over sewing, tape.
- Decorate fabrics with attached items e.g. buttons, beads, sequins, braids, ribbons.
- Colour fabrics using a range of techniques e.g. fabric paints, printing, painting.

Design

- Use pictures and words to convey what they want to design/make.
- Propose more than one idea for their product.
- Use reclaimed materials to develop more than one idea.
- Model ideas with reclaimed materials.
- Select appropriate technique explaining: First... Next... Last....
- Explore ideas by rearranging materials.
- Select pictures to help develop ideas.
- Use drawings to record ideas as they are developed.
- Add notes to drawings to help explanations.

Make

- Discuss their work as it progresses.
- Select materials from a limited range that will meet the design criteria.
- Select and name the tools needed to work the materials.
- Explain what they are making.
- Explain which materials they are using and why.
- Name the tools they are using.
- Describe what they need to do next.

Evaluate

- Explore existing products and investigate how they have been made.
- Decide how existing products do/do not achieve their purpose.
- Talk about their design as they develop and identify good and bad points.
- Note changes made during the making process as annotation to plans/drawings.
- Say what they like and do not like about items they have made and attempt to say why.
- Discuss how closely their finished product meets their design criteria and how well it meets the needs of the user.

DT – YEAR 2 – TOPIC/SKILLS AND KNOWLEDGE

Topic / Term	KNOWLEDGE AND UNDERSTANDING	SKILLS
<p>(Advent 2) Topic: The Three Little pigs Area of DT: Structures Final Product: Three Little Pigs House</p>	<ul style="list-style-type: none"> • Explore how to make structures stronger. • Investigate different techniques for stiffening a variety of materials. • Test different methods of enabling structures to remain stable. • Join appropriately for different materials and situations e.g. glue, tape. • Mark out materials to be cut using a template. • Use a glue gun with close supervision. 	<p>Design</p> <ul style="list-style-type: none"> • Use pictures and words to convey what they want to design/make. • Propose more than one idea for their product. • Use reclaimed materials to develop more than one idea. • Model ideas with reclaimed materials. • Select appropriate technique explaining: First... Next... Last.... • Explore ideas by rearranging materials. • Select pictures to help develop ideas. • Use drawings to record ideas as they are developed. • Add notes to drawings to help explanations. • Describe their models and drawings of ideas and intentions. <p>Make</p> <p>Discuss their work as it progresses. Select materials from a limited range that will meet the design criteria. Select and name the tools needed to work the materials. Explain what they are making. Explain which materials they are using and why. Name the tools they are using. Describe what they need to do next.</p> <p>Evaluate</p> <ul style="list-style-type: none"> • Explore existing products and investigate how they have been made. • Decide how existing products do/do not achieve their purpose. • Talk about their design as they develop and identify good and bad points. • Note changes made during the making process as annotation to plans/drawings. • Say what they like and do not like about items they have made and attempt to say why.

		<ul style="list-style-type: none"> • Discuss how closely their finished product meets their design criteria and how well it meets the needs of the user.
<p>(Lent 2) Topic: Great Fire of London Area of DT: Mechanisms Final Product: Fire Engine</p>	<ul style="list-style-type: none"> • Join appropriately for different materials and situations e.g. glue, tape. • Try out different axle fixings and their strengths and weaknesses. • Make vehicles with construction kits which contain free running wheels. • Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels. • Roll paper to create tubes. • Cut dowel using hacksaw and bench hook. • Attach wheels to a chassis using an axle. • Mark out materials to be cut using a template. • Fold, tear and cut paper and card. • Cut along lines, straight and curved. • Use a hole punch. • Insert paper fasteners for card. • Experiment with levers and sliders to find different ways of making things move in a 2D plane. 	<p>Design</p> <ul style="list-style-type: none"> • Use pictures and words to convey what they want to design/make. • Propose more than one idea for their product. • Use kits/reclaimed materials to develop more than one idea. • Model ideas with kits, reclaimed materials. • Select appropriate technique explaining: First... Next... Last.... • Explore ideas by rearranging materials. • Select pictures to help develop ideas. • Use drawings to record ideas as they are developed. • Add notes to drawings to help explanations. • Describe their models and drawings of ideas and intentions. <p>Make</p> <ul style="list-style-type: none"> • Discuss their work as it progresses. • Select materials from a limited range that will meet the design criteria. • Select and name the tools needed to work the materials. • Explain what they are making. • Explain which materials they are using and why. • Name the tools they are using. • Describe what they need to do next. <p>Evaluate</p> <ul style="list-style-type: none"> • Explore existing products and investigate how they have been made. • Decide how existing products do/do not achieve their purpose. • Talk about their design as they develop and identify good and bad points. • Note changes made during the making process as annotation to plans/drawings. • Say what they like and do not like about items they have made and attempt to say why.

		<ul style="list-style-type: none"> • Discuss how closely their finished product meets their design criteria and how well it meets the needs of the user.
<p>(Pentecost 2) Topic: Rainforest Area of DT: Food Final Product: Designed Open Sandwich</p>	<ul style="list-style-type: none"> • Develop a food vocabulary using taste, smell, texture and feel. • Group familiar food products e.g. fruit and vegetables. • Explain where food comes from. • Cut, peel, grate, chop a range of ingredients • Work safely and hygienically. • Understand the need for a variety of foods in a diet. 	<p>Design</p> <ul style="list-style-type: none"> • Use pictures and words to convey what they want to design/make. • Propose more than one idea for their product. • Select appropriate technique explaining: First... Next... Last.... • Explore ideas by rearranging materials. • Select pictures to help develop ideas. • Use drawings to record ideas as they are developed. • Add notes to drawings to help explanations. • Describe their models and drawings of ideas and intentions. <p>Make</p> <ul style="list-style-type: none"> • Discuss their work as it progresses. • Select materials from a limited range that will meet the design criteria. • Select and name the tools needed to work the materials. • Explain what they are making. • Explain which materials they are using and why. • Name the tools they are using. • Describe what they need to do next. <p>Evaluate</p> <ul style="list-style-type: none"> • Explore existing products and investigate how they have been made. • Decide how existing products do/do not achieve their purpose. • Talk about their design as they develop and identify good and bad points. • Note changes made during the making process as annotation to plans/drawings. • Say what they like and do not like about items they have made and attempt to say why. • Discuss how closely their finished product meets their design criteria and how well it meets the needs of the user.

DT – YEAR 3 – TOPIC/SKILLS AND KNOWLEDGE

Topic / Term	KNOWLEDGE AND UNDERSTANDING	SKILLS
<p>(Advent 1) Topic: Stone Age Area of DT: Food Final Product: Stone age food</p>	<ul style="list-style-type: none"> • Develop sensory vocabulary/knowledge using, smell, taste, texture and feel. • Analyse the taste, texture, smell and appearance of a range of foods (predominantly savoury). • Follow instructions/recipes. • Make healthy eating choices – use the Eatwell plate. • Join and combine a range of ingredients. • Explore seasonality of vegetables and fruit. • Develop understanding of how meat/fish are reared/caught. 	<p>Design</p> <ul style="list-style-type: none"> • Develop more than one design or adaptation of an initial design. • Plan a sequence of actions to make a product. • Record the plan by drawing using annotated sketches. • Begin to use cross-sectional and exploded diagrams. • Use prototypes to develop and share ideas. • Think ahead about the order of their work and decide upon tools and materials. • Propose realistic suggestions as to how they can achieve their design ideas. <p>Make</p> <ul style="list-style-type: none"> • Use tools with accuracy. • Select from techniques for different parts of the process. • Plan the stages of the making process. <p>Evaluate</p> <ul style="list-style-type: none"> • Draw/sketch products to help analyse and understand how products are made. • Research needs of user. • Identify the strengths and weaknesses of their design ideas in relation to purpose/user. • Decide which design idea to develop. • Consider and explain how the finished product could be improved. • Discuss how well the finished product meets the design criteria of the user.

(Lent 1)

Topic: Ancient Egypt
Area of DT: Frame
Structures
Final Product:
Shaduf

- Develop vocabulary related to the project.
- Create shell or frame structures.
- Strengthen frames with diagonal struts.
- Make structures more stable by giving them a wide base.
- Measure and mark square section, strip and dowel accurately to 1cm.

Design

- Develop more than one design or adaptation of an initial design.
- Plan a sequence of actions to make a product.
- Record the plan by drawing using annotated sketches.
- Begin to use cross-sectional and exploded diagrams.
- Use prototypes to develop and share ideas.
- Think ahead about the order of their work and decide upon tools and materials.
- Propose realistic suggestions as to how they can achieve their design ideas.

Make

- Prepare pattern pieces as templates for their design.
- Cut slots.
- Cut internal shapes.
- Select from a range of tools for cutting shaping joining and finishing.
- Use tools with accuracy.
- Select from techniques for different parts of the process.
- Select from materials according to their functional properties.
- Plan the stages of the making process.
- Use appropriate finishing techniques.

Evaluate

- Investigate similar products to the one to be made to give starting points for a design.
- Draw/sketch products to help analyse and understand how products are made.
- Research needs of user.
- Identify the strengths and weaknesses of their design ideas in relation to purpose/user.
- Decide which design idea to develop.
- Consider and explain how the finished product could be improved.

		<ul style="list-style-type: none"> • Discuss how well the finished product meets the design criteria of the user. • Investigate key events and individuals in Design and Technology.
<p>(Pentecost 1) Topic: Caribbean Area of DT: Textile Final Product: Batik</p>	<ul style="list-style-type: none"> • Develop vocabulary for tools materials and their properties. • Understand seam allowance. • Join fabrics using running stitch, over sewing, blanket stitch. • Prototype a product using J cloths. • Use prototype to make pattern. • Explore strengthening and stiffening of fabrics. • Explore fastenings (inventors?) and recreate some. • Sew on buttons and make loops. • Use appropriate decoration techniques. 	<p>Design</p> <ul style="list-style-type: none"> • Develop more than one design or adaptation of an initial design. • Plan a sequence of actions to make a product. • Record the plan by drawing using annotated sketches. • Begin to use cross-sectional and exploded diagrams. • Use prototypes to develop and share ideas. • Think ahead about the order of their work and decide upon tools and materials. • Propose realistic suggestions as to how they can achieve their design ideas. <p>Make</p> <ul style="list-style-type: none"> • Use tools with accuracy. • Plan the stages of the making process. • Use appropriate finishing techniques. <p>Evaluate</p> <ul style="list-style-type: none"> • Investigate similar products to the one to be made to give starting points for a design. • Draw/sketch products to help analyse and understand how products are made. • Research needs of user. • Identify the strengths and weaknesses of their design ideas in relation to purpose/user. • Decide which design idea to develop. • Consider and explain how the finished product could be improved. • Discuss how well finished product meets the design criteria of the user. • Investigate key events and individuals in Design and Technology.

DT – YEAR 4 – TOPIC/SKILLS AND KNOWLEDGE

Topic / Term	KNOWLEDGE AND UNDERSTANDING	SKILLS
<p>(Advent 2) Topic: WW2 Area of DT: Electrical systems Final Product: Wire buzzer game</p>	<ul style="list-style-type: none"> • Develop vocabulary related to the project. • Incorporate a circuit into a model. • Use electrical systems such as switches bulbs and buzzers. • Use ICT to control products. 	<p>Design</p> <ul style="list-style-type: none"> • Develop more than one design or adaptation of an initial design. • Plan a sequence of actions to make a product. • Record the plan by drawing using annotated sketches. • Begin to use cross-sectional and exploded diagrams. • Use prototypes to develop and share ideas. • Think ahead about the order of their work and decide upon tools and materials. • Propose realistic suggestions as to how they can achieve their design ideas. • Consider aesthetic qualities of materials chosen. <p>Make</p> <ul style="list-style-type: none"> • Use tools with accuracy. • Select from techniques for different parts of the process. • Select from materials according to their functional properties. • Plan the stages of the making process. • Use appropriate finishing techniques. <p>Evaluate</p> <ul style="list-style-type: none"> • Investigate similar products to the one to be made to give starting points for a design. • Draw/sketch products to help analyse and understand how products are made. • Research needs of user. • Identify the strengths and weaknesses of their design ideas in relation to purpose/user. • Decide which design idea to develop. • Consider and explain how the finished product could be improved. • Discuss how well the finished product meets the design criteria of the user. • Investigate key events (WW2) in Design and Technology.

<p>(Lent 1) Topic: Romans Area of DT: Food Final Product: Roman Banquet</p>	<ul style="list-style-type: none"> • Develop sensory vocabulary/knowledge using, smell, taste, texture and feel. • Analyse the taste, texture, smell and appearance of a range of foods (predominantly savoury). • Follow instructions/recipes. • Make healthy eating choices – use the <i>Eatwell plate</i>. • Join and combine a range of ingredients. • Explore seasonality of vegetables and fruit. • Find out which fruit and vegetables are grown in countries/continents studied in Geography. (Italy) • Develop understanding of how meat/fish are reared/caught. 	<p>Design</p> <ul style="list-style-type: none"> • Develop more than one design or adaptation of an initial design. • Plan a sequence of actions to make a product. • Record the plan by drawing using annotated sketches. • Begin to use cross-sectional and exploded diagrams. • Use prototypes to develop and share ideas. • Think ahead about the order of their work and decide upon tools and materials. • Propose realistic suggestions as to how they can achieve their design ideas. <p>Make</p> <ul style="list-style-type: none"> • Select from techniques for different parts of the process. • Plan the stages of the making process. <p>Evaluate</p> <ul style="list-style-type: none"> • Investigate similar products to the one to be made to give starting points for a design. • Draw/sketch products to help analyse and understand how products are made. • Research needs of user. • Identify the strengths and weaknesses of their design ideas in relation to purpose/user. • Decide which design idea to develop. • Consider and explain how the finished product could be improved. • Discuss how well the finished product meets the design criteria of the user. • Investigate key events and individuals in Design and Technology.
<p>(Pentecost 1) Topic: KrindleKrax Area of DT: Final Product: KrindleKrax Toy</p>	<p>Use mechanical systems such as gears, pulleys, levers and linkages. Use lolly sticks/card to make levers and linkages. Use linkages to make movement larger or more varied.</p>	<p>Design</p> <ul style="list-style-type: none"> • Develop more than one design or adaptation of an initial design. • Plan a sequence of actions to make a product. • Record the plan by drawing using annotated sketches. • Begin to use cross-sectional and exploded diagrams. • Use prototypes to develop and share ideas. • Think ahead about the order of their work and decide upon tools and materials.

- Propose realistic suggestions as to how they can achieve their design ideas.
- Use CAD where appropriate.

Make

- Cut slots.
- Cut internal shapes.
- Select from a range of tools for cutting shaping joining and finishing.
- Use tools with accuracy.
- Select from techniques for different parts of the process.
- Plan the stages of the making process.
- Use appropriate finishing techniques.

Evaluate

- Investigate similar products to the one to be made to give starting points for a design.
- Draw/sketch products to help analyse and understand how products are made.
- Research needs of user.
- Identify the strengths and weaknesses of their design ideas in relation to purpose/user.
- Decide which design idea to develop.
- Consider and explain how the finished product could be improved.
- Discuss how well the finished product meets the design criteria of the user.
- Investigate key events and individuals in Design and Technology.

DT – YEAR 5 – TOPIC/SKILLS AND KNOWLEDGE

Topic / Term	KNOWLEDGE AND UNDERSTANDING	SKILLS
<p>(Lent 1) Topic: Space Area of DT: Mechanisms Final Product: Solar Orrery</p>	<p>Mechanical and Electrical systems</p> <ul style="list-style-type: none"> • Develop a technical vocabulary appropriate to the project. • Use mechanical systems such as cams, pulleys and gears. • Use electrical systems such as motors. <p>Structures</p> <ul style="list-style-type: none"> • Use bradawl to mark hole positions. • Use hand drill to drill tight and loose fit holes. • Cut dowel accurately to 1mm. • Build frameworks to support mechanisms. • Stiffen and reinforce complex structures. 	<p>Design</p> <ul style="list-style-type: none"> • List tools needed before starting the activity. • Plan the sequence of work e.g. using a storyboard. • Record ideas using annotated diagrams. • Use models and drawings to help formulate design ideas. • Combine modelling and drawing to refine ideas. • Devise step by step plans which can be read / followed by someone else. • Use exploded diagrams and cross-sectional diagrams to communicate ideas. • Decide which design idea to develop. <p>Make</p> <ul style="list-style-type: none"> • Make prototypes. • Develop one idea in depth. • Use researched information to inform decisions. • Produce detailed lists of components / materials and tools. • Use a computer to model ideas. • Select from and use a wide range of tools. • Cut accurately and safely to a marked line. • Select from and use a wide range of materials. • Use appropriate finishing techniques for the project. • Refine their product – review and rework/improve. <p>Evaluate</p> <ul style="list-style-type: none"> • Research and evaluate existing products (including book and web based research). • Consider user and purpose. • Identify the strengths and weaknesses of their design ideas. • Give a report using correct technical vocabulary.

		<ul style="list-style-type: none"> • Consider and explain how the finished product could be improved related to design criteria. • Discuss how well the finished product meets the design criteria of the user. Test on the user!
<p>(Lent 2)</p> <p>Topic: Rivers and Floods</p> <p>Area of DT: Structures</p> <p>Final Product: Bridges</p>	<ul style="list-style-type: none"> • Use the correct terminology for tools materials and processes. • Cut strip wood, dowel, square section wood accurately to 1mm. • Join materials using appropriate methods. • Build frameworks. • Stiffen and reinforce complex structures. 	<p>Design</p> <ul style="list-style-type: none"> • List tools needed before starting the activity. • Plan the sequence of work e.g. using a storyboard. • Record ideas using annotated diagrams. • Use models and drawings to help formulate design ideas. • Combine modelling and drawing to refine ideas. • Devise step by step plans which can be read / followed by someone else. • Use exploded diagrams and cross-sectional diagrams to communicate ideas. • Sketch and model alternative ideas. • Decide which design idea to develop. <p>Make</p> <ul style="list-style-type: none"> • Make prototypes. • Develop one idea in depth. • Use researched information to inform decisions. • Produce detailed lists of components / materials and tools. • Use a computer to model ideas. • Select from and use a wide range of tools. • Cut accurately and safely to a marked line. • Select from and use a wide range of materials. • Use appropriate finishing techniques for the project. • Refine their product – review and rework/improve. <p>Evaluate</p> <ul style="list-style-type: none"> • Research and evaluate existing products (including book and web based research). • Consider user and purpose. • Identify the strengths and weaknesses of their design ideas. • Give a report using correct technical vocabulary.

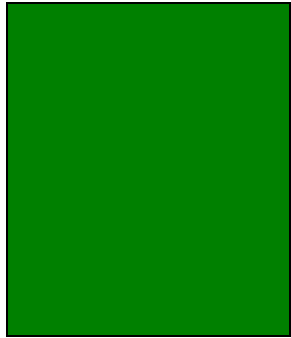
		<ul style="list-style-type: none"> • Consider and explain how the finished product could be improved related to design criteria. • Discuss how well the finished product meets the design criteria of the user. Test on the user! • Understand how key people have influenced design.
<p>(Pentecost 2)</p> <p>Topic: Mountains Area of DT: Food Final Product: Food for the mountains</p>	<ul style="list-style-type: none"> • Prepare food products taking into account the properties of ingredients and sensory characteristics. • Weigh and measure using scales. • Select and prepare foods for a particular purpose. • Work safely and hygienically. • Show awareness of a healthy diet (using the eatwell plate). • Use a range of cooking techniques. • Know where and how ingredients are grown and processed. 	<p>Design</p> <ul style="list-style-type: none"> • List tools needed before starting the activity. • Plan the sequence of work e.g. using a storyboard. • Record ideas using annotated diagrams. • Combine modelling and drawing to refine ideas. • Devise step by step plans which can be read / followed by someone else. • Use exploded diagrams and cross-sectional diagrams to communicate ideas. • Sketch and model alternative ideas. • Decide which design idea to develop. <p>Make</p> <ul style="list-style-type: none"> • Make prototypes. • Develop one idea in depth. • Use researched information to inform decisions. • Produce detailed lists of ingredients • Select from and use a wide range of tools. • Refine their product – review and rework/improve. <p>Evaluate</p> <ul style="list-style-type: none"> • Research and evaluate existing products (including book and web based research). • Consider user and purpose. • Identify the strengths and weaknesses of their design ideas. • Give a report using correct technical vocabulary. • Consider and explain how the finished product could be improved related to design criteria. • Discuss how well the finished product meets the design criteria of the user. Test on the user!

DT – YEAR 6 – TOPIC/SKILLS AND KNOWLEDGE

Topic / Term	KNOWLEDGE AND UNDERSTANDING	SKILLS
<p>(Advent 1)</p> <p>Topic: Slavery Area of DT: Textiles Final Product: Freedom quilt</p>	<ul style="list-style-type: none"> • Use the correct vocabulary appropriate to the project. • Understand pattern layout. • Decorate textiles appropriately (often before joining components). • Pin and tack fabric pieces together. • Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision). • Combine fabrics to create more useful properties. • Make quality products. 	<p>Design</p> <ul style="list-style-type: none"> • List tools needed before starting the activity. • Use drawings to help formulate design ideas. <p>Make</p> <ul style="list-style-type: none"> • Develop one idea in depth. • Use appropriate finishing techniques for the project. • Refine their product – review and rework/improve. <p>Evaluate</p> <ul style="list-style-type: none"> • Identify the strengths and weaknesses of their design ideas. • Consider and explain how the finished product could be improved related to design criteria. • Understand the historical context of the design.
<p>(Advent 2)</p> <p>Topic: Victorians Area of DT: Textiles Final Product: Christmas Stockings decoration</p>	<ul style="list-style-type: none"> • Use the correct vocabulary appropriate to the project. • Create 3D products using patterns pieces and seam allowance. • Understand pattern layout. • Decorate textiles appropriately (often before joining components). • Pin and tack fabric pieces together. • Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision). • Combine fabrics to create more useful properties. 	<p>Design</p> <ul style="list-style-type: none"> • List tools needed before starting the activity. • Plan the sequence of work e.g. using a storyboard. • Record ideas using annotated diagrams. • Use drawings to help formulate design ideas. • Devise step by step plans which can be read / followed by someone else. • Sketch and model alternative ideas. • Decide which design idea to develop.

	<ul style="list-style-type: none"> • Make quality products. 	<p>Make</p> <ul style="list-style-type: none"> • Develop one idea in depth. • Produce detailed lists of components / materials and tools. • Cut accurately and safely to a marked line. • Use appropriate finishing techniques for the project. • Refine their product – review and rework/improve. <p>Evaluate</p> <ul style="list-style-type: none"> • Consider user and purpose. • Identify the strengths and weaknesses of their design ideas. • Give a report using correct technical vocabulary. • Consider and explain how the finished product could be improved related to design criteria. • Discuss how well the finished product meets the design criteria of the user.
<p>(Lent 1)</p> <p>Topic: Choices Area of DT: Food Final Product: A healthy lunch</p>	<ul style="list-style-type: none"> • Prepare food products taking into account the properties of ingredients and sensory characteristics. • Weigh and measure using scales. • Select and prepare foods for a particular purpose. • Work safely and hygienically. • Show awareness of a healthy diet (using the eatwell plate). • Use a range of cooking techniques. • Know where and how ingredients are grown and processed. • Consider influence of chefs e.g. Jamie Oliver and school meals, Hugh Fearnley-Whittingstall and sustainable fishing etc. 	<p>Design</p> <ul style="list-style-type: none"> • List tools needed before starting the activity. • Plan the sequence of work e.g. using a storyboard. • Record ideas using annotated diagrams. • Devise step by step plans which can be read / followed by someone else. • Use exploded diagrams and cross-sectional diagrams to communicate ideas. • Decide which design idea to develop. <p>Make</p> <ul style="list-style-type: none"> • Develop one idea in depth. • Use researched information to inform decisions. • Produce detailed lists of ingredients and tools. • Select from and use a wide range of tools. • Refine their product – review and rework/improve.

		<p>Evaluate</p> <ul style="list-style-type: none"> • Evaluate existing products. • Consider user and purpose. • Identify the strengths and weaknesses of their design ideas. • Give a report using correct technical vocabulary. • Consider and explain how the finished product could be improved related to design criteria. • Discuss how well the finished product meets the design criteria of the user. Test on the user!
<p>(Lent 2)</p> <p>Topic: What a wonderful world</p> <p>Area of DT: Textiles</p> <p>Final Product: Making tote bags</p>	<ul style="list-style-type: none"> • Use the correct vocabulary appropriate to the project. • Create 3D products using patterns pieces and seam allowance. • Understand pattern layout. • Decorate textiles appropriately (often before joining components). • Pin and tack fabric pieces together. • Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision). • Combine fabrics to create more useful properties. • Make quality products. 	<p>Design</p> <ul style="list-style-type: none"> • List tools needed before starting the activity. • Plan the sequence of work e.g. using a storyboard. • Record ideas using annotated diagrams. • Use drawings to help formulate design ideas. • Combine modelling and drawing to refine ideas. • Sketch and model alternative ideas. • Decide which design idea to develop. <p>Make</p> <ul style="list-style-type: none"> • Make prototypes. • Develop one idea in depth. • Use researched information to inform decisions. • Produce detailed lists of components, materials and tools. • Use a computer to model ideas. • Select from and use a wide range of tools. • Cut accurately and safely to a marked line. • Select from and use a wide range of materials. • Use appropriate finishing techniques for the project. <p>Evaluate</p> <ul style="list-style-type: none"> • Research and evaluate existing products (including book and web based research).



- Consider user and purpose.
- Identify the strengths and weaknesses of their design ideas.
- Give a report using correct technical vocabulary.
- Consider and explain how the finished product could be improved related to design criteria.
- Discuss how well the finished product meets the design criteria of the user. Test on the user!
- Understand how key people have influenced design.