

St. Mary's Church of England Primary School, High Crompton



Design and Technology Scheme of Work

EYFS - Autumn

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
<p>Expressive Arts and Design</p> <p>Exploring and using media and materials</p> <ul style="list-style-type: none"> • They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. <p>Being imaginative</p> <ul style="list-style-type: none"> • 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 technology, art, music, dance, role play and stories. 	<p>Exploring and using media and materials</p> <p>Manipulates materials to achieve a particular 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.</p> <p>Being imaginative</p> <p>Create simple representations of events, people and objects.</p>	<p>Make model ships Fruit jelly Melon boats Guy Fawkes</p> <p>Rocket Christmas card Diva lamp</p> <p>Playdough, salt dough, junk modelling.</p>

EYFS - Spring

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
<p>Expressive Arts and Design</p> <p>Exploring and using media and materials</p> <ul style="list-style-type: none"> They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. <p>Being imaginative</p> <ul style="list-style-type: none"> 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 technology, art, music, dance, role play and stories. 	<p>Exploring and using media and materials</p> <p>Manipulates materials to achieve a particular 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.</p> <p>Being imaginative</p> <p>Create simple representations of events, people and objects.</p>	<p>Make moving dragon using split pins</p> <p>Make houses on large and small scale.</p> <p>Make a scarecrow</p> <p>Water flow challenge using tubes and stands</p>

EYFS - Summer

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
<p>Expressive Arts and Design</p> <p>Exploring and using media and materials</p> <ul style="list-style-type: none"> They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. <p>Being imaginative</p> <ul style="list-style-type: none"> 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 technology, art, music, dance, role play and stories. 	<p>Exploring and using media and materials</p> <p>Manipulates materials to achieve a particular 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.</p> <p>Being imaginative</p> <p>Create simple representations of events, people and objects.</p>	<p>Forest fun activities - building homes, joining materials to make stick men, leaf pictures etc</p> <p>Make boats, cars and aeroplanes.</p> <p>Clay mini-beasts</p>

Year 1 - Autumn

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Structures / Construction	<ul style="list-style-type: none"> - Can you think of some ideas of your own? - Can you use pictures and words to plan? - Can you generate ideas for purposeful designs? - Can you explain what you want to do? - Can you explain what you are making and which tools are you using? - Can you describe how something works? - Can you talk about your own work and describe how something works - Can you recognise features of familiar products? - Can you make a structure/model using different materials? - Is your work tidy? - Can you make your model stronger if it needs to be? 	<p>Constructing houses</p> <p>Look at different house designs from internet research and pictures of houses from local walk. Explain ideas and what use. Identify features of parts of home - characteristics.</p> <p>Make and evaluate.</p>

Year 1 - Spring

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Mechanisms	<ul style="list-style-type: none"> -Can you think of some ideas of your own? - Can you use pictures and words to plan? - Can you generate ideas for purposeful designs? - Can you explain what you want to do? - Can you explain what you are making and which tools are you using? - Can you describe how something works? - Can you talk about your own work and describe how something works - Can you recognise features of familiar products? - Can you make a product which moves? - Can you cut materials using scissors? - Can you describe the materials using different words? - Can you say why you have chosen moving parts? 	<p>Moving storybook</p> <p>Look at samples- identify characteristics and how work. Discuss why prefer one design to that of another. Investigate different designs- making process. Make a moving storybook and evaluate.</p>

Year 1 - Summer

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Cooking/Nutrition	<ul style="list-style-type: none"> - Can you think of some ideas of your own? - Can you use pictures and words to plan? - Can you generate ideas for purposeful designs? - Can you explain what you want to do? - Can you explain what you are making and which tools are you using? - Can you describe how something works? - Can you talk about your own work and describe how something works - Can you recognise features of familiar products? - Can you cut food safely? - Can you describe the texture of foods? - Do you wash your hands and make sure that tools & surfaces are clean 	<p>Caribbean fruit cocktail</p> <p>Identify suitable fruits (Handa's Surprise Story) Sample fruits Choose fruits like and appropriate tools to cut. Discuss colour- aesthetics. Make cocktail in small groups. Eat and describe how tastes- wow words Hygiene- why clean hands before food prep. Record process- generating ideas, making, evaluating.</p>

Year 2 - Autumn

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Textiles	<ul style="list-style-type: none"> - Can you think of ideas based upon investigations of products? - Can you plan what to do next based on experience of working with materials? - Can you describe your design by using pictures, diagrams, models and words? - Can you join things (materials/components) together in different ways to make a functional product? - What went well with your work? - If you did it again, what would you want to improve? - Can you measure textile? - Can you join textiles together to make something? - Can you cut textile? - Can you explain why you chose a certain textile? 	<p>Design and make puppets</p> <p>Use The Design and technology Association planning sheet and activities 'Textiles- templates and joining techniques' Including investigative and evaluation activities, focused task and design, make and evaluate assignment</p>

Year 2 - Spring

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Mechanisms	<ul style="list-style-type: none"> - Can you think of ideas based upon investigations of products? - Can you plan what to do next based on experience of working with materials? - Can you describe your design by using pictures, diagrams, models and words? - Can you join things (materials/components) together? - Can you join things (materials/components) together in different ways? - Can you join materials together as part of a moving product? - Can you add some kind of design to your product? - What went well with your work? - If you did it again, what would you want to improve? 	<p>Vehicle with a winch</p> <p>Introduce project to by demonstrating/ creating winch/pulley for lighthouse keepers lunch using ropes etc in hall, baskets etc Use the cogs packs/resources to investigate mechanisms.</p> <p>Use QCA unit 2c- winding up (focus on mechanisms /structures) - use investigation activities and focused tasks but adapt final product to a vehicle with a winch eg rescue helicopter, lifeboat with winch on back.</p>

Year 3 - Autumn

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Mechanisms	<ul style="list-style-type: none">- Can you choose the best tools and materials? Can you give a reason why these are best?- Can you describe your design using an accurately labelled sketch and words?- Can you join and combine materials and components in a variety of ways to make a functional product?-Can you use equipment and tools accurately? What went well with your work? <ul style="list-style-type: none">- If you did it again, what would you want to improve - Can you join materials together as part of a moving product?- Can you add some kind of design to your product?	<p>Pop Up Book linked to Pre History topic.</p> <p>Follow Nuffield Scheme: "Will this pop up book surprise you?"</p>

Year 3 - Spring

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Cooking/Nutrition	<ul style="list-style-type: none"> - Can you choose the best tools and materials? Can you give a reason why these are best? - Can you describe your design using an accurately labelled sketch and words? - Can you join and combine materials and components in a variety of ways to make a functional product? - Can you use equipment and tools accurately? <p>What went well with your work?</p> <ul style="list-style-type: none"> - If you did it again, what would you want to improve <ul style="list-style-type: none"> - Can you describe the properties of the ingredients you are using? - Can you explain what it means to be hygienic? - Are you hygienic in the kitchen? 	<p>Design and make a healthy sandwich. Link to science topic</p> <p>http://www.spinnakertower.co.uk/Libraries/education_documents/Spinnaker_Sandwiches.sflb.ashx</p> <p>QCA Unit 3B Sandwich Snacks</p>

Year 3 - Summer

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Structures / Construction	<ul style="list-style-type: none"> - Can you choose the best tools and materials? Can you give a reason why these are best? - Can you describe your design using an accurately labelled sketch and words? - Can you join and combine materials and components in a variety of ways to make a functional product? -Can you use equipment and tools accurately? What went well with your work? - If you did it again, what would you want to improve - Can you measure materials to use in a model or structure? - Can you join material in different ways? - Can you join, fold or roll material to make it stronger? 	<p>Making bridges</p> <p>Collect pictures of different bridge structures. Investigate and design paper bridges.</p> <p>Bridge challenge activity- Collaborate effectively to build a bridge out of a range of materials. The bridge will need to span the distance of 30 cm between the two tables and will need to hold at least 5 toys cars. The cars need to have the ability to pass each other across the bridge.</p> <p>Evaluate finished bridge using criteria in task.</p>

Year 4 - Autumn

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Electrical	<ul style="list-style-type: none"> - Can you describe your design using an accurately labelled sketch and words? Lesson 3 - Can you show that your design meets a range of requirements? Lesson 3 - How realistic is your plan? Lesson 4 - Can you put together a step-by-step plan which shows the sequence and also what equipment and tools you need? Lesson 4 - Can you use equipment and tools accurately? Lesson 5 - What did you change which made your design even better? Lesson 6 - Do you select the most appropriate tools & techniques? Lessons 5&6 - Can you make a product which uses both electrical & mechanical components? Lesson 5 - Can you use a simple circuit? Lesson 5 - Can you use a number of components? Lesson 5 Lesson 7- additional time to make and modify the product. 	<p>Lighting it up <u>Lesson 1 - Lighting it up</u> Can I evaluate an existing Christmas card, considering materials, purpose, size, reliability, circuit and fastenings? W.C discussion on the design and technology process. Discuss how every product takes time to research, design, create a final design and specification, make modify, complete and evaluate, test and complete. Some products need to be changed after consumer testing. Discuss the sentence back to the drawing board. What does that mean? Use design brief examples on IWB to show ideas. Introduce the design brief for their project. To make a light up Christmas card. Start the process. What is the first decision to be made? Problem, audience and purpose. When we know our audience and purpose we can then begin our research. Children to decide and write down the problem, audience and purpose on a sheet. Whole class look at a number of images on the IWB. What do they all have in common? Which one do they prefer and why? Who is each card aimed at? Children to look at the images and take ideas that they think are good from them. Complete generating ideas sheet. At the bottom of the sheet write which is their favourite card and why? Class report back and discuss.</p> <p><u>Lesson 2</u> Can I set up a circuit with the components needed that is suitable for my card? Can I investigate electrical circuits for my light up Christmas card? W.C demonstration of how to connect the electric circuit using different wires and switches. Demonstrate using a paperclip switch and tin foil connectors to connect the bulbs to the wires and to the batteries. Demonstrate stripping plastic coated wires to ensure the wire connects to wire to complete the circuit and connect to the LED bulbs. Each table set up with a different activity to practise. Children to rotate around each activity to begin to create the circuitry for their card. Electricity word searches for children to carry out whilst waiting for assistance. Children to complete design ladder sheet where they write the criteria for their card. My card should be simple Well- presented Have a hidden electric circuit Be able to be turned off and on etc... Children fill in electrical circuit investigation sheets.</p> <p><u>Lesson 3</u> Can I design a Christmas light up card of my own? Can I describe my design using an accurately labelled sketch and words? (annotated) Can I show that my design meets a range of requirements? W.C discussion of the cards evaluated in lesson 1. What is important in a light up card? Go through lesson two's design ladder sheet where they have written the spec. List on the board and reinforce. Reliability, size, decoration, appearance etc... Explain that the children will be designing their own light up cards with the given audience and purpose from lesson 1. They will need to think about how they will make it, what they will need, how they will decorate it and hide the circuitry and what type of bulb and circuits they will use. Show the children several ideas and listen to their suggestions e.g star on top of a tree, Rudolf's red nose, star above stable etc... Model drawing an annotated diagram and explain what one is. Show how the list of materials needs to be detailed. Activity: Children to complete a design spec sheet where they draw an annotated diagram and write a list of materials and equipment needed to produce the design.</p>

		<p>Does your design meet the range of requirements listed on the design spec? Ext create a circuit sheet where children draw the circuit for their card. Diff by drawing or scientific symbols.</p> <p><u>Lesson 4</u> Can I write a simple action plan to plan the making of my light up card? Discuss the process of making a card. Discuss the use of time connectives e.g firstly, secondly, next etc.. Show how the plan can be broken down in stages. Look at a set of instructions for making a card. Explain the differences by putting a circuit in. Model writing an action plan using numbered steps. Why is this useful? (Any difficulties seen in advance) Children to complete my plan sheet to plan their own card in simple steps. Work with B.A to help with sentence structure and spelling. Whole group to make the same card. Whole class discussion. How realistic is your plan?</p> <p><u>Lesson 5</u> Can I follow my design and action plan to make a light up Christmas card? Can I make any modifications as they are needed? Can I use a range of techniques to add detail and decoration to my card? Can I use a range of equipment and tools accurately? Can you make a product that uses both electrical and mechanical components? This could take two lessons to achieve. Children to begin to make their Christmas cards. Possibly half the class at a time or with T.A support. Horrible histories on the Romans on D.V.D or a Roman historical program on I player to watch if awaiting support. OR complete making the circuit sheet where they identify any problems and think about how they are going to overcome them (BLP). Children to follow their plans and create their Christmas cards. Encourage the correct choice of electrical and mechanical components? Encourage and question on the choice of tools and equipment. Ensure that the children build and check that their circuit is complete and works. Discuss any modifications that can be made to improve the overall card.</p> <p><u>Lesson 6</u> Can I evaluate my card to my design specification criteria? Whole class report back on their cards and share some of the successes and setbacks. Why is it important to evaluate our products? Discuss consumer testing and how great help sell the product results. 9 out of 10 preferred this design etc... Children to complete their evaluation sheets. 2 options- one with more support for B.A. Have a look at several examples and discuss in detail. Review the whole topic. What have we learnt? What do we need to keep practising? What did you change to make your design even better? Did you select the most appropriate tools and techniques?</p> <p><u>Lesson 7</u> An extra lesson for the completion of the cards. Any modifications and improve the overall presentation.</p>
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Year 4 - Spring

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Cooking/Nutrition	<ul style="list-style-type: none"> - Can you describe your design using an accurately labelled sketch and words? Lesson 4&5 - Can you show that your design meets a range of requirements? Lesson 4&5 - How realistic is your plan? that your design meets a range of requirements? Lesson 4&5 - Can you put together a step-by-step plan which shows the sequence and also what equipment and tools you need? that your design meets a range of requirements? Lesson 4&5 -Can you use equipment and tools accurately? Lesson 5. - What did you change which made your design even better? Lesson 6 - Can you choose the right ingredients for a product? Lesson 4&6 - Can you use equipment safely? Lessons 1/2/3/5 - Can you make sure that your product looks attractive? Lesson 5 - Can you describe how your combined ingredients come together? Lesson 6 	<p>Easter ginger biscuits or healthy biscuits.</p> <p><u>Lesson 1</u></p> <p>Can I research, evaluate and investigate a range of existing biscuits or healthy biscuit products to determine which ingredients taste better?</p> <p>Can I say which is the best biscuit product and why?</p> <p>Can you handle food safely?</p> <p>Whole class introduction to our D.T design project. To make biscuit with healthy ingredients or design an Easter ginger biscuit.</p> <p>Give the children a range of packets of biscuits to look at and describe the differences.</p> <p>Discuss food safety and hygiene before opening the products. Children to complete an evaluation sheet for the different biscuits, describing their taste, texture, appearance and ingredients. Which biscuit is the healthiest and why? What ingredients do they think would make a healthy biscuit?</p> <p>Describe how they taste to build up a word bank for their biscuit advertising campaign.</p> <p>FOOD MILES- Damage to environment- Trip to Asda?- See C.H</p> <p>NUMERACY- WORK OUT THE COST OF THE PRODUCT PER BISCUIT AND DECIDE THE PRICE TO SELL TO MAKE A PROFIT</p> <p><u>Lesson 2 D.T/P.S.H.E/Lit.</u></p> <p>Do I understand that a product is designed for different users and purposes and the audience/ purpose affects the design specification?</p> <p>(Can you show that your design meets a range of requirements)</p> <p>Do I understand the different jobs and processes involved in making a biscuit?</p> <p>Can you use equipment safely?</p> <p>Possible demo of basic biscuit making at the start (lesson 3 combined)</p> <p>Whole class discussion on the purpose of different biscuits e.g finger biscuits, party rings - colourful, easy to hold for children's parties.</p> <p>Digestives and shortbreads for adults to dunk in tea.</p> <p>Look at a basic recipe. What are the ingredients? Where do they come from? What processes and jobs are involved in their production? Who gets the majority of the profit?</p> <p>Children to look at the diagrams and create their own flow charts for either the production of butter, sugar, flour of the biscuit making process. Each group to present their flow chart to the class and discuss</p> <p><u>Lesson 3 or groups at a time during lesson2 or as a demonstration.</u></p> <p>Can I use equipment and tools accurately?</p> <p>Can I use equipment safely?</p> <p>Children to follow a basic biscuit making recipe to make a plain biscuit. OR create a flow chart whilst the teacher demonstrates making the biscuits. To be done at the start of lesson 2. Then to complete a worksheet to evaluate the biscuits using taste, texture and appearance. Discuss the food hygiene rules. Children to design and make a poster to show these rules. (Poster can be made whilst each group makes their final biscuits)</p>

Lesson 4

Can I determine the product specification?

Can I design a healthy biscuit of my own?

Can I describe my design using an accurately labelled sketch and words? (annotated)

Can I show that my design meets a range of requirements?

Can I choose the right ingredients for a product?

Whole class recap on the design and technology process. Discuss the design brief- To design and produce a healthy biscuit to be sold in school to raise money for charity.

Discuss the audience and purpose. Children to choose their audience e.g- young children, school children or adults. COMPLETE THE DESIGN SPEC SHEET IN THEIR BOOKS. (Individual, pair or gp design for Buhu)

Discuss the ways that the biscuit recipe can be changed. (See Data help sheet) Look at the different ingredients available and discuss suitability to each audience. E.g. white chocolate chips for young children, dark for adults or dark chocolate with added flavours etc... Fruit for texture, sweet or savoury taste, Which would be the healthiest? What effects would adding these ingredients have on the product. At what stage should they be added and why?

What shape could or product be? Show different cutters available.

How could its appearance be improved? (Adding seeds or fruit) Show the example I made at home using and discuss the problems and modifications that I had to make to my design. Look at and discuss additions to the biscuit- honey, dried mango and pineapple, dried fruit. Discuss crispies or cranberries etc... Why would fresh banana be wrong to decorate but alright to put in the mixture?

Children complete design brief and spec sheet.

Children to decide on their audience then make the choices for their biscuit. Complete a design sheet of four possible ideas.

Choices- Audience

- Shape of biscuit
- Type of texture - apple, banana, oats, Demerara sugar, nuts or seeds
- Additions to biscuit for taste - honey, fruit, chocolate, coconut etc.. Savoury with cheese, salt, garlic herbs or seeds.
- Appearance - seeds, raisins, choc chips, dried fruit etc.

Decide on final design and create an annotated drawing of it with product list. Complete a step by step plan to show how to make it and the equipment and tools needed.

Numeracy- Work out costs.

Lesson 5 and possibly 6?

Can I follow my design and action plan to make a healthy biscuit?

Can I make any modifications as they are needed?

Can I make sure that my product looks attractive?

Can I use equipment and tools accurately and safely?

Can I show that your design meets a range of requirements?

NUMERACY- WORK OUT THE COST OF THE PRODUCT PER BISCUIT AND DECIDE THE PRICE TO SELL TO MAKE A PROFIT.

Market and test.

Could be combined with lesson 7 if two lessons needed for making the product.

Can I test my product to see if it meets my specifications?

		<p>Whole class to make their biscuit product. Recap on the different stages. Discuss the hygiene and safety regulations and why they are important. Six children at a time to make their biscuits, cool on the rack.</p> <p>Whilst rotating groups are making their biscuits, the rest have several activities to continue with.</p> <p>NOTE- Extra biscuits to be made to sell and market test in the school to raise money for charity.</p> <ol style="list-style-type: none">1. Create a name and a catchy slogan for the product using advertising ideas from Literacy lessons.2. Create a radio script for a commercial to advertise their biscuit- possible Big Write activity.3. Complete a step by step plan with the equipment and ingredients needed.4. Food hygiene poster.5. Complete their questionnaire to go with the biscuit as it is sold. Decide on structure e.g. Marks out of ten for Colour, Texture, Flavour, Presentation and Value for money. Would you buy it again? Why or Why not? <p>Product to be sold during healthy school week.</p> <p><u>Lesson 6</u></p> <p>Can I evaluate my biscuit and skills using my design specification criteria?</p> <p>Can I show that my design meets a range of requirements?</p> <p>Can I choose the right ingredients for a product?</p> <p>Can I describe how my combined ingredients came together?</p> <p>Whole class report back on their biscuits and share some of the successes and set-backs. Sample their own biscuits and look at the results of the survey. Why is it important to evaluate our products?</p> <p>Discuss consumer testing and how great results help sell the product? 9 out of 10 preferred this design etc... Children to look at the questionnaires they sent out with the product. What did they find out?</p> <p>Children to complete their evaluation sheets. 2 options- one with more support for B.A. Have a look at several examples and discuss in detail. Review the whole topic. What have we learnt? What do we need to keep practicing? How can we improve our products?.</p>
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Year 4 - Summer

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Textiles	<ul style="list-style-type: none"> - Can you describe your design using an accurately labelled sketch and words? Lesson 4 - Can you show that your design meets a range of requirements? Lesson 3&4 - How realistic is your plan? Lesson 4 - Can you put together a step-by-step plan which shows the sequence and also what equipment and tools you need? Lesson 4 -Can you use equipment and tools accurately? Lesson 2 &5 - What did you change which made your design even better? Lesson 5&6 - Can you join textiles of different types in different ways? Lesson 2 &5 - Can you choose textiles both for their appearance and their qualities? Lesson 3 	<p><u>Anglo Saxon purses or plant themed money carriers.</u></p> <p><u>Lesson 1</u></p> <p>Can I evaluate existing money containers, considering materials, purpose, size, reliability and fastenings.</p> <p>Can I research Anglo Saxon money carriers or purses and designs?</p> <p>Whole class introduction to the project. Reinforce the design and technology process. How do we start the process? How do we know what makes a good money container? What would the design specifications be? Use these specifications to create remember to's for the project. How would we make it authentic? How could we find out what an Anglo Saxon money carrier was like? OR how can we find out what gardening lovers would like? Split the class into half.</p> <p>Children to be given one of two activities.</p> <ol style="list-style-type: none"> 1) Look at a range of money carriers and complete an evaluation sheet/table. 2) Use the I Pads or laptops to research Anglo Saxon artefacts/ shield designs. Draw and annotate a drawing of an Anglo Saxon money carrier or different money carriers. Plant research for flower/plant based purses. <p>Children swap over half way through the afternoon.</p> <p><u>Lesson 2</u></p> <p>Can I sew 2 pieces of fabric together in a strong and secure way?</p> <p>Can I use a range of techniques to add detail and decoration to a piece of cloth?</p> <p>Whole class demo on the different ways of joining two pieces of material together. Demo: of cross stitch, running stitch and snail trail. Use glue and stitching to add embellishment to a piece of cloth. Discuss Anglo Saxon lettering letters and symbols/ shield designs from last week.</p> <p>OR Discuss plants and ideas for money carriers based upon plants/ flowers.</p> <p>Discuss how a draw string bag can be created using a whole punch and thread or ribbon.</p> <p>Whole class have a practise at each technique.</p> <p>Whole punch and thread</p> <p>Glue and stitch</p> <p>Join fabric together.</p> <p>Practise different types of stitching on money carriers. Whole class discuss the outcomes. Which is the best and why? What will they use on their designs?</p> <p><u>Lesson 3</u></p> <p>Can I determine the product specification?</p> <p>Can I design an Anglo Saxon purse or money carrier of my own?</p> <p>Can I describe my design using an accurately labelled sketch and words? (annotated)</p> <p>Can I choose textiles both for their appearance and their qualities?</p> <p>Whole class recap on the design and technology process. Discuss an Anglo Saxon purse or a money carrier for themselves or a family member.</p>

Discuss the audience and purpose. Children to choose their audience. An Anglo Saxon Warrior King, a jeweler or a farmer. Or a family member/eco warrior/ gardener for the plant based purse. Discuss the more detailed design specifications now they know who the audience is. Does it need gold thread and jewels for royalty? Would it be simpler for an Anglo Saxon farmer and why? Would it be smaller to hold less money???! Consider what they learnt in the practice session.

What worked well?

COMPLETE THE DESIGN SPEC SHEET IN THEIR BOOKS. (Individual, pair or gp design for B.A)

Look at images of different Anglo Saxon and plant inspired purses from the internet and their research.

What could our purses have?

What symbols like the Anglo Saxon writing and shields of the owner could be on it?

What colour symbolises royalty or eco -friendly or nature lover? How could we make the symbol/ pattern stand out?

What shape would draw up the best?

What textiles will you use and why? What are their qualities? Does it need a base in it? What shape will it be? What will be used to draw it up?

Children to decide on their audience then make the choices for their purse. Complete a design sheet of four possible ideas.

Choices- Audience

- Shape
- Colour of fabric
- How it is to be drawn up/ fastening
- Choice of ribbon, thread or leather/ raffia/ string.
- Logo or lettering to go on it.

Decide on final design and create an annotated drawing of it with product list.

Lesson 4

Can I write a simple action plan to plan the making of my money container/ Anglo Saxon purse?

W.C discuss the process of making the money container. What steps will they have to follow?

What are the design specifications and how they do they form our remember to's?

Model writing an action plan using numbered steps.

Lesson 5 and possibly 6?

Can I follow my design and action plan to make an Anglo Saxon purse or a carrier for money with a plant theme?

Can I make any modifications as they are needed?

Whole class to make their purse.

COULD START LAST WEEK WITH HALF THE CLASS WRITING THE ACTION PLAN.

NEED T.A FOR TWO LESSONS.

Teacher one table, T.A with the other table.

Help with needle threading and modelling.

Rest or the class either completing the above OR creating an evaluation sheet for the end product in grps. Does the purse: prevent the coins from falling out?

Attach to clothing? Show the Anglo Saxon or Eco style?

Is it well presented? Fit is a pocket? Is it a good size?

EXT: Children create an sales marketing pitch which would be presented persuade an Anglo Saxon or Eco- warrior to purchase or promote the product!!! Write a script in gps.

		<p><u>Lesson 6</u> Can I evaluate my purse and skills using my design specification criteria? Whole class report bac on their purses and share some of the successes and set- backs. Why is it important to evaluate our products? What would our audience have thought about our designs? Have a look at several examples and discuss in detail. Review the whole topic. What have we learnt? What do we need to keep practicing? What have we done well? What would we change next time and why?</p>
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Year 5 - Autumn

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Textiles	<ul style="list-style-type: none">- Can you put together a step-by-step plan which shows the sequence and also what equipment and tools you need?- Can you come up with a range of ideas after you have collected information?- Can you use equipment and tools accurately?- Is your finished product going to be of good quality?- Do you keep checking that your design is the best it can be? - Can you join textiles of different types in different ways?- Can you choose textiles both for their appearance and their qualities?- Could your product be sold?- What would improve it even more?	<p>Design a T-Shirt to promote your favourite sport. Use an iron-on logo design and transfer materials onto it. Use a press-stud machine to adapt the garment and add a removable pocket for a mobile phone. (Some minor cost involved for parents)</p>

Year 5 - Spring

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Computing	<ul style="list-style-type: none"> - Can you put together a step-by-step plan which shows the sequence and also what equipment and tools you need? - Can you come up with a range of ideas after you have collected information? - Can you use equipment and tools accurately? - Is your finished product going to be of good quality? - Do you keep checking that your design is the best it can be? - Can they understand that software relies on codes to run and that a range of different coding languages exist? can they name some? - Can they explore different ways in which computer software can be created? - Can they use a range of assisted programming software (e.g Scratch and/or Kodu) to plan, design and create basic software (for example a simple game), which interact with external controllers (e.g. keyboard and/or mouse). - Using software can they control the movement and responses of different commands on screen? - Can they use software to create models of 3D objects, landscapes or items? - Can they explore a range of increasingly complex simulations, exploring the effect of changing variables and recording the results? <i>(text in italics is from the ICT scheme of work)</i> 	<p>Build on using scratch as a mean to extend the programming environment to using sensors and control. (enchanting) compare scratch with logo programming. talk about a range of different apps and the programme language they use. Java - hakitzu, Html - mozilla thimble, khan academy.</p> <p>Teach algorithms via Espresso coding or 2code.</p> <p>Plan and design a simple building and create in tinkercad or Blockify,.</p> <p>Use Purple Mash to begin work on algorithms and control features on screen.</p> <p>Control a sprite on screen using basic coding and make it move / command it to follow a set of instructions.</p>

Year 5 - Summer

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Cooking/Nutrition	<ul style="list-style-type: none"> - Can you put together a step-by-step plan which shows the sequence and also what equipment and tools you need? - Can you come up with a range of ideas after you have collected information? - Can you use equipment and tools accurately? - Is your finished product going to be of good quality? - Do you keep checking that your design is the best it can be? - Can you choose the right ingredients for a product? - Can you use equipment safely? - Can you make sure that your product looks attractive? - Can you describe how your combined ingredients come together? - Can you explain how your product should be stored with reasons? 	<p>Healthy pizzas</p> <p>Children work in teams of 3 to research and then design 2 pizzas to sell for a charity of their choice.</p> <p>Children will prep and assemble the pizza bases according to guidelines.</p> <p>They will divide their team into working roles in order to ensure the task is completed professionally.</p>

Year 6 - Autumn

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Computing	<ul style="list-style-type: none"> - Can you follow and refine your plan if necessary? - Can you justify your plan to someone else? - Can you use a range of data to inform your design? - Can you use market research to inform plans? - Can you work within constraints? - Do you consider cultural & societal factors in your designs? - Can you use a range of tools, ingredients, equipment, components and materials precisely? - Do you change the way you are working if needed? <p>How well do you test and evaluate your final product?</p> <ul style="list-style-type: none"> - Can you show that it is fit for purpose? - What would improve it? - Would different resources have improved your product? - Would you need more or different information to make it even better? <ul style="list-style-type: none"> - Do they know how to use a range of visual based Programing software (e.g Scratch and Kodu) to plan and design basic software (for example a simple game), controlling the movement and responses of different elements on screen? - Can they use a range of visual programing software to plan and design a game? - Can they control an on-screen icon using text based controls, and respond to sensors and repeating written algorithms (e.g. Robomind)? - Can they begin to explore text based programing languages and create basic scripts ? - Can I Use software to create models of 3D objects, landscapes or items, including creating to scale ? - Can they use a range of more complex simulations, exploring the link to 'real life' and the impact of changing variables? <p><i>(text in italics is from the ICT scheme of work)</i></p>	<p style="text-align: center;">Design a shelter</p> <ul style="list-style-type: none"> - Continue using scratch as a mean to extend the programming environment to using sensors , lights and control. (enchanting with nxt robots) - Teach algorithms via Espresso coding or 2code. - Plan and design a simple building and create in, tinkercad or Blockify,. - Electronic circuit building simulation, traffic light control. (flowal)
Structures / Construction	<ul style="list-style-type: none"> - Can you put together a step-by-step plan which shows the sequence and also what equipment and tools you need? - Can you come up with a range of ideas after you have collected information? - Can you use equipment and tools accurately? - Is your finished product going to be of good quality? - Do you keep checking that your design is the best it can be? 	<p style="text-align: center;">Design and make a shelter</p>

	<ul style="list-style-type: none">- Do you use the most appropriate materials?- Can you work accurately to make cuts and holes?- Can you join materials?	
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Year 6 - Spring

Programme of Study	Knowledge, Skills and Understanding	Activity/ Link to scheme of work
Electrical	<ul style="list-style-type: none"> - Can you follow and refine your plan if necessary? - Can you justify your plan to someone else? - Can you use a range of data to inform your design? - Can you use market research to inform plans? - Can you work within constraints? - Do you consider cultural & societal factors in your designs? - Can you use a range of tools, ingredients, equipment, components and materials precisely? - Do you change the way you are working if needed? How well do you test and evaluate your final product? - Can you show that it is fit for purpose? - What would improve it? - Would different resources have improved your product? - Would you need more or different information to make it even better? - Do you select the most appropriate tools & techniques? - Can you make a product which uses both electrical & mechanical components? - Can you use a simple circuit? - Can you use a number of components? - Can you use different kinds of circuit in your product? 	