

Hitherfield Curriculum Overview: Design and Technology

Year 1 Term 2: Textiles, Tie-dye fabric	Year 1 Term 3: Design and make a puppet	Year 1 Term 4: Cooking and nutrition: Fruit salad/kebabs
<p>Knowledge</p> <ul style="list-style-type: none"> - know that dye is used to change the colour of textiles - know that manipulating textiles before the dying process can affect the finished product <p>Skills</p> <ul style="list-style-type: none"> - design a product following simple design criteria (t-shirt for sports day) - explain what I want to do to achieve desired result - use pictures and some words to plan - measure and manipulate textiles, with support - choose suitable textiles and materials and explain choices, describing differences in materials - talk about my work, what I did and what went well or could have been done differently <p>Vocabulary</p> <ul style="list-style-type: none"> - textile/fabric/cotton/manmade/natural - dye -twist/knot/fold/tie <p>Learning Revisited</p> <ul style="list-style-type: none"> - Explore different materials to develop their ideas about how to use them and what to make <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - How can colour be applied to textiles/fabric? - How can we affect the way that a colour/dye is applied to textile/fabric? 	<p>Knowledge</p> <ul style="list-style-type: none"> - know that there are many different types of puppet and what they are used for - know that to join different materials you need to use the correct glue or attachment techniques <p>Skills</p> <ul style="list-style-type: none"> - talk about existing products considering: use, materials, how they work, and say what is and isn't good - design a product following simple design criteria and explain what I want to do to achieve desired result - select appropriate materials and tools/ equipment to cut, shape, join, finish and explain choices - measure, mark out, cut and shape, with support and suggest ways to make material/product stronger and work in a safe manner - talk about my work, what I did and what went well or could have been done differently <p>Vocabulary</p> <ul style="list-style-type: none"> - puppet: finger, glove, stick, shadow, marionette, ventriloquist - join, stick, attach, glue, stitch <p>Learning Revisited</p> <ul style="list-style-type: none"> - Explore different materials to develop their ideas about how to use them and what to make <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - What different types of puppet are there? - What are puppets for? - How can different materials be cut and joined together? 	<p>Knowledge</p> <ul style="list-style-type: none"> - Foods have different textures - When we cook it is important to clean our hands and surfaces - Some foods come from animals while others come from plants - Fruits and vegetables are good for your health <p>Skills</p> <ul style="list-style-type: none"> - Present food in different ways - Cut, peel and grate safely, with support <p>Vocabulary</p> <ul style="list-style-type: none"> - sweet, bitter, sour, salty, juicy, fresh, crunchy, soft -meat, vegetable/vegetarian <p>Learning Revisited</p> <ul style="list-style-type: none"> - Managing own needs (personal hygiene) <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - What textures can foods have and how can we describe these? - What must you do before preparing any foods? -Where do some foods come from (plant/animal)? -What foods are good for your health?

Year 2 Term 3: DT Design and make a vehicle	Year 2 Term 5: Textile- Weaving	Year 2 Term 6: Cooking and nutrition: Dips and dippers
<p>Knowledge</p> <ul style="list-style-type: none"> - know that clay pots can be created using pinch or coil technique - know that when clay is dry it can be painted - know that Rangoli is a type of art which originated in India <p>Skills</p> <ul style="list-style-type: none"> - Use a sketchbook to plan and develop simple ideas - Explore the work of a range of artists, craft makers and designers - Use a malleable media such as clay with increasing confidence. - Use equipment and media safely and correctly with increasing confidence - understand symmetry and choose effective colour combinations <p>Vocabulary</p> <ul style="list-style-type: none"> - coiling, shaping, pinching, carving, pressing <p>Learning Revisited</p> <ul style="list-style-type: none"> - Clay can be shaped and modelled. - Objects and tools can be used to shape clay and to make imprints into it. <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - What are two techniques which can be used to create clay pots? - What is Rangoli and where does it come from? 	<p>Knowledge</p> <ul style="list-style-type: none"> - Know that weaving is the craft of lacing fibres together to make fabric or cloth - Know that sewing is making or mending cloth using a needle and thread - Know that embroidery is the craft of decorating fabric using a needle to apply thread - Know that these techniques have been used around the world and in different times in history <p>Skills</p> <ul style="list-style-type: none"> - Have own ideas, explain what I want to do and describe how -Describe design using pictures, words and diagrams -Design a product following design criteria -Talk about existing products considering: use, materials, how they work. -Work safely - Carefully cut textiles to produce accurate pieces -Join materials/ components together in different ways - Measure and join textiles together to make a product, and explain how I did it <p>Vocabulary</p> <ul style="list-style-type: none"> - Embroidery, weaving, sewing - Fabric, textile, thread - Stitch, loom, needle <p>Learning Revisited</p> <ul style="list-style-type: none"> - design a product following simple design criteria and explain what I want to do to achieve desired result <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - What is weaving/embroidery/sewing? - How are sewing and weaving used in everyday products? 	<p>Knowledge</p> <ul style="list-style-type: none"> - Know that when preparing food it is important to be hygienic - Know the importance of a varied diet - Food can come from different sources (animal, underground etc) and can be farmed, home-grown caught etc. - Foods can be put into groups and we should be eating 'five-a-day' <p>Skills</p> <ul style="list-style-type: none"> - Cut, peel, grate with increasing confidence <p>Vocabulary</p> <ul style="list-style-type: none"> - Hygiene - Varied diet - Ingredients - Food groups - 'Five-a-day' <p>Learning Revisited</p> <ul style="list-style-type: none"> - Say where some foods come from, (i.e. plant or animal) - Discuss how fruit and vegetables are healthy - Cut, peel and grate safely, with support <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - What does it mean to prepare food hygienically? - Why is it important to have a varied diet? - Where can ingredients come from and how are they grown or caught?

Year 3 Term 1: Cooking and nutrition: Healthy Breakfast	Year 3 Term 3: Mechanical posters	Year 3 Term 5: Saxon style model building/village
<p>Knowledge</p> <ul style="list-style-type: none"> - Plants can be grown and used in cooking - Food can come from the UK and the wider world - A healthy diet is one which is varied and balanced - Food and drink are needed for active/healthy bodies <p>Skills</p> <ul style="list-style-type: none"> - Prepare, cook and use equipment safely and hygienically - Use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading <p>Vocabulary</p> <ul style="list-style-type: none"> - Balanced and varied diet, peeling, chopping, slicing, grating, mixing <p>Learning Revisited</p> <ul style="list-style-type: none"> - Explain there are groups of food and describe “five a day” <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - Where can foods come from and how can they be grown? - What does a healthy diet look like? 	<p>Knowledge</p> <ul style="list-style-type: none"> - know that levers and linkages can be used to create mechanisms. - know that a mechanism is a device that creates movements <p>Skills</p> <ul style="list-style-type: none"> - Begin to understand simple mechanical systems that use levers and linkages - Create a design criteria and plan which shows function, purpose, order, equipment and tools and make design decisions - Describe design using an accurately labelled sketch and words - Select suitable tools/equipment, and materials, explain choices. - Work accurately to make cuts and holes - Begin to apply a range of finishing techniques with some accuracy - Use design criteria to evaluate finished product, saying what I would change to make design better <p>Vocabulary</p> <ul style="list-style-type: none"> - mechanical systems - mechanism - lever, linkage, pivot <p>Learning Revisited</p> <ul style="list-style-type: none"> - Measure, mark out, cut and shape materials and components, with support and use finishing techniques to make a product look good <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - What are levers and linkages and what do they create? - How can levers and linkages create a moving mechanism? 	<p>Knowledge</p> <ul style="list-style-type: none"> - That different pencil grades can be used to develop intricate patterns and marks - The artefacts of Sutton Hoo show that the people of Anglo Saxon Britain were great craftspeople <p>Skills</p> <ul style="list-style-type: none"> - Use different pencils and techniques to draw from observation <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - What can the artefacts of Sutton Hoo tell us about the craftsmen of Anglo Saxon times? <p><i>*These objectives are from the art curriculum but are taught as part of this sequence of learning</i></p> <p>Knowledge</p> <ul style="list-style-type: none"> - Know that joining techniques can be used to create and strengthen 3D models - Know that Anglo Saxon homes were built according to the skills and available materials at the time <p>Skills</p> <ul style="list-style-type: none"> - Begin to measure, mark out, cut and shape, assemble, join and combine materials/ components with some accuracy - Begin to apply a range of finishing techniques with some accuracy <p>Vocabulary</p> <ul style="list-style-type: none"> - Attachment and joining techniques - Craft knife - Cutting board - PVA glue/Glue gun - Tabs - 3D model <p>Learning Revisited</p> <ul style="list-style-type: none"> - Begin to use tools and equipment safely and in the correct way. <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - How can materials be used and joined to create 3D models?

Year 4 Term 1: Design and make a Headdress for carnival	Year 4 Term 4: Design and make a Kite	Year 4 Term 5: Cooking and nutrition Bread making
<p>Knowledge</p> <ul style="list-style-type: none"> - Know that a carnival headdress is worn by masqueraders on parade - Know that the mas bands follow a theme when creating their costumes - Know that to be fit for purpose a headdress should be colourful, lightweight and strong <p>Skills</p> <ul style="list-style-type: none"> - Create a design criteria and plan which shows function, purpose, order, equipment and tools -Describe design using an accurately labelled sketch and words -Select suitable tools/equipment, and materials, explain choices. -Work safely using tools and equipment, begin to measure, mark out, cut and shape, assemble, join and combine materials/ components with some accuracy -Begin to apply a range of finishing techniques with some accuracy <p>Vocabulary</p> <ul style="list-style-type: none"> - headdress, masquerader, theme, attachments <p>Learning Revisited</p> <ul style="list-style-type: none"> - Describe design using pictures, words and diagrams - Design a product following design criteria <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - Who would wear a headdress and why? - What does a headdress need to be like and why? 	<p>Knowledge</p> <ul style="list-style-type: none"> -Kites were invented by the Chinese about 3000 years ago -Kites are a toy but they have also had practical uses -Kites fly thanks to their structure and the materials used to make them <p>Skills</p> <ul style="list-style-type: none"> -Discuss by whom, when and where products were designed - Produce and work through a plan which includes an annotated sketch and explains how a product will work -Select suitable tools, equipment and materials, explaining choices, and use accurately -Measure, mark out, cut, assemble, join and combine materials/components with some accuracy - Attempt to make product strong by making a strong, stiff structure and explain how to join things in a different way to strengthen structures -Show design meets a range of requirements and is fit for purpose and begin to explain how I could improve original design <p>Vocabulary</p> <ul style="list-style-type: none"> -Parts, function, bridle, line, tow point, keel, sail, spars, tail. <p>Learning Revisited</p> <ul style="list-style-type: none"> - Create a design criteria and plan which shows function, purpose, order, equipment and tools and make design decisions <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - Where, when and by whom were kites invented? -What materials are used for making kites and why? -Can you name the parts of a kite? 	<p>Knowledge</p> <ul style="list-style-type: none"> - Hygiene is important in food preparation in order to avoid the spread of germs - Understand ingredients can be fresh, pre-cooked or processed and that food is grown, reared or caught in the UK and wider world - Describe eat well plate and how a healthy diet = variety /balance of food and drinks <p>Skills</p> <ul style="list-style-type: none"> -Prepare, cook and use equipment safely and hygienically and explain why this is important - Use the following techniques: mixing, kneading and baking <p>Vocabulary</p> <ul style="list-style-type: none"> - yeast, flour, knead, prove <p>Learning Revisited</p> <ul style="list-style-type: none"> - Explain there are groups of food and describe “five a day” <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - Why is hygiene important in food preparation? -What does a healthy diet look like?

Year 5 Term 1: Design and make a wooden framed lantern (with electrical component)	Year 5 Term 2: Cooking and nutrition Global food that represents our local community	Year 5 Term 6: Free standing structures/ marble run
<p>Knowledge</p> <ul style="list-style-type: none"> - Know that different lanterns have been used throughout time in different parts of the world to provide light - Know that a product should meet the design criteria to be fit for purpose - know that a 3D frame can be reinforced and strengthened <p>Skills</p> <ul style="list-style-type: none"> - Evaluate and discuss existing products. - Create own design criteria - Use selected tools/ equipment with a good level of precision and select appropriate materials, fit for purpose. - Mainly measure, mark out, cut accurately, assemble, join and combine materials/components with precision and apply a range of finishing techniques - Evaluate quality of design while designing and making and test and evaluate finished product against design criteria, considering purpose and appearance. <p>Vocabulary</p> <ul style="list-style-type: none"> - lantern/lamp - candle/oil/electric - translucent - Frame, windows <p>Learning Revisited</p> <ul style="list-style-type: none"> - Select appropriate materials, fit for purpose; explain choices (kites Y4) <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - How are/have lanterns been used around the world? - What design criteria would a lantern need to fulfil? - How can a 3D frame be strengthened? 	<p>Knowledge</p> <ul style="list-style-type: none"> - know that foods are seasonal - know that different countries and cultures use different ingredients due to availability of produce and trade - know that in our local community there are different cultures and this is reflected in the foods and ingredients we can find <p>Skills</p> <ul style="list-style-type: none"> - Begin to understand seasonality of foods - Describe how different cultures use different ingredients and this is linked to where they are grown or traded - Explain how there are different substances in food / drink needed for health - Explain how and why to be safe / hygienic and prepare and cook some savoury dishes safely and hygienically - Use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. <p>Vocabulary</p> <ul style="list-style-type: none"> - Seasons/in season - ingredients/produce - peeling, chopping, slicing, grating, mixing <p>Learning Revisited</p> <ul style="list-style-type: none"> - Begin to understand food comes from UK and wider world - Describe how healthy diet= variety/balance of food/drinks <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - Are all ingredients grown all year round in all parts of the world? - Why do different countries and cultures enjoy different foods? 	<p>Knowledge</p> <ul style="list-style-type: none"> - That a free standing structure must be strong and stable in order to be able to remain upright - A wide base can help stabilise a free standing structure <p>Skills</p> <ul style="list-style-type: none"> - Evaluate and discuss existing products. - Explore various attachment/joining techniques to create a structure including bends and bridges - Produce a logical, realistic plan and explain it to others. - Make design decisions considering resources and clearly explain how the product will work. - Select and use appropriate materials, tools and equipment fit for purpose and with a good level of precision. - Mainly measure, mark out, cut, assemble, join and combine materials/components - Test and evaluate final product <p>Vocabulary</p> <ul style="list-style-type: none"> - Free standing structure - strong and stable - bridge, bend, spiral <p>Learning Revisited</p> <ul style="list-style-type: none"> - Measure, mark out, cut, assemble, join and combine materials/components with some accuracy <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - What is a free standing structure? - What day-to-day examples of free standing structure can you name? - What does a marble run need to do to be successful?

Year 6 Term 2: Automata, cams toy	Year 6 Term 3: Cooking and nutrition- Egyptian style salad & flatbread	Year 6 Term 4: Jewellery making (fastenings)
<p>Knowledge</p> <ul style="list-style-type: none"> - Cams and followers can be used to create mechanical toys that move - The movement created depends on the shape of the cams - Cams are a form of wheel and axle <p>Skills</p> <ul style="list-style-type: none"> -Begin to use cams to create movement - Select carefully and produce suitable lists of tools, equipment, materials needed - Use selected tools precisely; accurately measure, mark out, cut, assemble and join components using a range of techniques; apply a range of finishing techniques to make a product attractive and strong - Test and evaluate final product against specification; explain the effect different resources may have had <p>Vocabulary</p> <ul style="list-style-type: none"> - Cams and follower - Mechanical system <p>Learning Revisited</p> <ul style="list-style-type: none"> - Know that wheels and axles act together to create a moving vehicle <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - How can mechanical toys include moving mechanisms? - What are cams and how do they work? - What effect does the shape of the cams have on the movement it creates? 	<p>Knowledge</p> <ul style="list-style-type: none"> - know that the climate in Egypt affects the produce grown there and the diets of people - know that in Ancient Egypt people grew and ate vegetables that we eat today - know that in Ancient Egypt bread was an important part of their diet <p>Skills</p> <ul style="list-style-type: none"> - Explain seasonality of foods and how different cultures use ingredients depending on availability and regionality - Name some types of food that are grown, reared or caught in the wider world - Prepare and cook savoury dishes safely and hygienically including the use of a heat source. - Use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking <p>Vocabulary</p> <ul style="list-style-type: none"> - peel, chop, slice, knead, bake - seasons, climate, agriculture - diet, nutrition <p>Learning Revisited</p> <ul style="list-style-type: none"> - Describe how different cultures use different ingredients and this is linked to where they are grown or traded - Describe the role of yeast in bread making <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - What was the diet of ancient Egyptians? - How is flatbread made? How is this different from yeast risen bread? 	<p>Knowledge</p> <ul style="list-style-type: none"> - Jewellery has been worn by humans since prehistoric times. -People throughout history and across the world have traditions of designing, making and wearing jewellery -Jewellery can be fastened in different ways, depending on materials available and the use and wearer <p>Skills</p> <ul style="list-style-type: none"> -Do thorough evaluations of existing products using annotated sketches and diagrams -Create design criteria, explaining how a product will appeal to user and considering available materials -Create, follow, and adapt detailed step-by-step plans which include lists of tools, equipment and materials -Accurately measure, mark out, cut, assemble, join and combine carefully selected materials/components which are fit for purpose and consider aesthetics and functionality - Make product attractive and strong using a range of joining techniques -Test and evaluate finished product against specification, stating if it meets design criteria, explain the effect different resources may have had and refine it considering aesthetics <p>Vocabulary</p> <ul style="list-style-type: none"> - Jewellery: necklace/bracelet/headpiece - Fastenings: hook, clasp, toggle, s-hook, tie, elasticated <p>Learning Revisited</p> <ul style="list-style-type: none"> -Show design meets a range of requirements and is fit for purpose and begin to explain how I could improve original design <p>Key Questions (Assessment)</p> <ul style="list-style-type: none"> - Where and when has jewellery been designed/made and worn? - How can items of jewellery be fastened and why are there different fastening methods?