

Peel Hall Primary School Design and Technology Knowledge and Skills Progression Map

Design and Technology matters because it helps us to solve problems relating to important issues such as transport, communication and sustainability.

Intent:

We believe, at Peel Hall Primary School that Design and Technology (D.T.) is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation. Pupils draw on their knowledge of mathematics, science, engineering, computing, art, and the principles of nutrition and cookery to become resourceful, innovative, enterprising and capable problem solvers. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world.

The curriculum has been developed to give children the opportunity to combine practical skills with an understanding of aesthetic, social and environmental issues as well as inspiring them to be curious about the world and encouraging them to find out more about how things work. Our curriculum will give children the opportunity to make decisions for themselves and do plenty of practical work for a purpose. They will research the products that already exist and use this knowledge to help in the design of their product. They will enjoy creating products they can see; touch and taste and they will feel pride and achievement in what they have done.

Aims:

- To develop imaginative and creative thinking in children and to enable them to talk about what they like and dislike when designing and making;
- To build and apply a repertoire of knowledge, understanding and skills in order to design and make suitable products for a purpose; □To test, evaluate and critique their products, drawing comparisons with current products on the market; □ To understand the principles of nutrition, where our food comes from and to instil a love of cooking.

Implementation:

Teaching of Design and Technology in Early Years Foundation Stage

In the Early Years Foundation Stage, design and technology is covered within knowledge and understanding of the world, creative development and within some aspects of Physical Development. Early skills in design and technology are taught in a playful, exploratory way alongside discussion at appropriate levels, and will be an integral part of

the child's learning. Children will be taught specific skills such as simple joining, cutting and assembling techniques. They will be encouraged to manipulate construction kits, taught to use and identify simple tools and will use a variety of simple materials to make things.

Design Technology in Key Stage 1 & 2

In KS1 and KS2 teachers plan for design and technology following our skills and progression document. Each year group will cover one unit in a designated Design and Technology Week with a clear focus from:

- Cooking and nutrition
- Materials and structures
- Energy and movement

The curriculum has been developed so our children will learn skills which become progressively more challenging as they move through the school. Each unit follows the same teaching cycle:

1. Pre-Evaluation (user and purpose);
2. Design;
3. Make;
4. Evaluate.

There will also be a constant thread of Technical Knowledge throughout the process.

What skills are we developing through design and technology?

- Researching, developing, planning and communicating ideas. Children will develop skills in planning and designing functional creations;
- Drawing sketches and detailed diagrams to develop and communicate their ideas;
- Children will learn to prepare food products. They will weigh and measure using scales and cut and shape ingredients using appropriate tools and equipment. Children will also learn about healthy diets and develop an understanding about safety (including hygiene), nutrition and where our food comes from; □ Children will develop their creativity and imagination and make links with science and art and design;
- They will develop resourcefulness when faced with challenging problems;

- Children will develop skills to use various tools to cut accurately and safely, join and combine materials and choose appropriate materials fit for purpose;
- Children will evaluate not only their own designs and products; but those of others too. They will make informed decisions and reflect on their work, suggesting its strengths and ways it could be improved.

Impact:

At Peel Hall Primary School we assess design and technology by:

☐ Teachers filling in a basic RAG rated tick sheet link to the expected knowledge and skills;

- Evaluating children's design and technology work on displays and in classrooms;
- Monitoring children's planning, designing and evaluating though talking to them and looking at their work; ☐ Teacher's observations of pupils in lesson time;
- Talking to children about knowledge and skills they have learned during lessons and over time and they wider understanding of the importance of technology in life;
- Teachers adding photos and work to the school blog; ☐ Children presenting their work in assemblies.

Design Technology Overview: **The order of the units can be swapped around if natural links can be made with other curriculum areas.*

Assessment: Use Pupil Voice / Books

Year group:	Autumn	Spring	Summer
Year 1	<p>Mechanisms A Toy With An Axle</p> <p>Can you design a moving toy that uses an axle?</p> <p>Pre-evaluation – Toys from the past and how they worked.</p>	<p>Food Healthy Sandwich</p> <p>Can you design a healthy sandwich using your knowledge of healthy food and where it comes from?</p> <p>Pre-evaluation – Inventor – John Montagu (The 4th Earl of Sandwich)</p>	<p>Textiles Cup Warmers</p> <p>Can you design a cup warmer using the best materials to insulate the cup?</p> <p>Pre-evaluation – Materials and where they come from.</p>
Year 2	<p>Food – Cooking with Vegetables and Preparing Fruit Soup & Fruit Kebabs</p> <p>Can you design and make a tasty vegetarian meal with food that is grown in Britain?</p> <p>Pre-evaluation – How vegetables and fruit are grown.</p>	<p>Structures – Frame Structures Outdoor Shelters</p> <p>Can you design and make a strong, stable, habitat for a mini-beast / rodent?</p> <p>Pre-evaluation – Mini beast hotels. Their structure and how they are used.</p>	<p>Mechanisms Propellers</p> <p>Can you design and make a vehicle/flying machine that incorporates a propeller?</p> <p>Pre-evaluation - Inventor – Orville/Wilbur Wright (Aeroplane)</p>
Year 3	<p>Food A Healthy Lunch</p> <p>Can you design a healthy packed lunch using all the food groups?</p> <p>Pre-evaluation – What makes up a healthy diet and where does the food come from?</p>	<p>Textiles – Sewing/buttons Purse /wallet</p> <p>Can you design and make a purse to protect notes and coins and prevent them from getting lost/wet? Pre-evaluation – Purses and wallets that are used today. Waterproof Materials.</p>	<p>Mechanisms Folding Doors</p> <p>Can you design and make a door that will concertina to open and close?</p> <p>Pre-evaluation – Different types of doors. How and why they work in different ways (concertina, sliding, French doors, stable doors).</p>
Year 4	<p>Mechanisms Roman Chariots</p> <p>Can you design and make a Roman vehicle which moves with wheels for transporting soldiers or supplies?</p> <p>Pre-evaluation – different types of Roman Chariots and how they were used.</p>	<p>Electrical systems Torch</p> <p>Can you design and make a torch which integrates a simple circuit with a bulb, battery and switch? (link with science topic)</p> <p>Pre-evaluation – Examples of how electrical circuits are used in our everyday life.</p>	<p>Food – Healthy Baking Biscuits</p> <p>Can you design and make a popular savoury biscuit for a class picnic?</p> <p>Pre-evaluation - Inventor – Ruth Graves Wakefield (Choc. Chip Cookie) /Which different types of sweet and savoury biscuits are on the market?</p>
Year 5	<p>Mechanisms Moon Buggies</p> <p>Can you design and make a motorised moon buggy which moves with wheels for moving on the moon surface? Pre-evaluation – What components make up a moon buggy and what they are used for.</p>	<p>Food Bread – Varied Ingredients</p> <p>Can you design and make your own unique bread product using seasonal ingredients?</p> <p>Pre-evaluation – What are the ingredients of bread, how is it made and what types of bread are on the market.</p>	<p>Computer programming Programming Bots</p> <p>Can you programme a bot to move safely through a 3D map?</p> <p>Can you design and build a 3D map?</p> <p>Pre-evaluation – What bots are and how they are used. Engineer – James Brindley (Bridgewater Canal)</p>
Year 6	<p>Electrical systems – Circuits Lighthouses - Simple circuits and switches</p> <p>Can you design and make a battery powered lighthouse that turns, and switches on and off?</p> <p>Pre-evaluation – What components make up a lighthouse and explain what a lighthouse is used for. Inventor – Winstanley (First lighthouse)</p>		<p>Food – Planning & costing a menu Banquet for a Celebration</p> <p>Can you design and make a Mayan inspired banquet using seasonal ingredients?</p> <p>Pre-evaluation – What the Mayans ate and how they sourced their food.</p>

Assessment: Pupil Voice / books

Year 1	Autumn	Spring	Summer
	<p style="text-align: center;"><u>Textiles</u> <u>Cup Warmers</u></p> <p>Pre-evaluation:</p> <ul style="list-style-type: none"> · What are cup warmers used for? · What components make up a cup warmer? · What does our cup warmer need to be able to do? · What material do we predict will be best at keeping liquid warm? <p>Design:</p> <ul style="list-style-type: none"> · How will the cup warmer work? · Draw a design of the cup warmer, label all the parts and explain why the materials have been chosen. <p>Make:</p> <ul style="list-style-type: none"> · Put the chosen material around the plastic cup and then design the cup warmer. · Test the cup warmer with warm water over a specific time period. <p>Evaluation:</p> <ul style="list-style-type: none"> · Did the cup warmer do what I intended it to do? · What worked well on the cup warmer? · What did not work and why? · How could I improve my cup warmer? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> · Why have you chosen certain materials? · What practical skills have I used to create the cup warmer? 	<p style="text-align: center;"><u>Food</u> <u>Healthy Sandwich</u></p> <p>Pre-evaluation:</p> <ul style="list-style-type: none"> · What do we need to know about food hygiene? · What foods are healthy and unhealthy? · What ingredients could we use in a sandwich? · Children taste test different types of healthy foods that can be used to make their sandwich. <p>Design:</p> <ul style="list-style-type: none"> · Children decide which ingredients they want to use to make their sandwich. · Draw a labelled diagram of the sandwich (ingredients, shape etc). <p>Make:</p> <ul style="list-style-type: none"> · Children use a variety of skills to make their sandwich (cutting, spreading, hygiene and safety etc). <p>Evaluation:</p> <ul style="list-style-type: none"> · Taste the sandwich. · What worked well? · What didn't work and why? · How would you improve your sandwich? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> · Why have you chosen certain ingredients? · What skills will you use when making the product? 	<p style="text-align: center;"><u>Mechanisms</u> <u>A Toy With An Axel</u></p> <p>Pre-evaluation:</p> <ul style="list-style-type: none"> · What are toys used for? · Toys from the past – what were they made from and how did they work? · · What components make up a toy? · What does our toy need to be able to do? · What is an axel? <p>Design:</p> <ul style="list-style-type: none"> · How will the axel work? · Draw a design of the toy, label all the parts and explain how they will work. <p>Make:</p> <ul style="list-style-type: none"> · Build the axels. · Build the toy shell. · Put all these parts together to build the final toy. · Test the toy. Does it work? <p>Evaluation:</p> <ul style="list-style-type: none"> · Did the toy do what I intended it to do? · What worked well with the toy? · What did not work and why? · How could I improve my toy? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> · Why has the toy been designed this way? · What practical skills have I used to build the toy? · What is an axel and how do I create one?

Assessment: Pupil Voice / books

Year 2	Autumn	Spring	Summer
	<p style="text-align: center;"><u>Food</u> <u>Vegetable soup</u></p> <p>Pre – Evaluation:</p> <ul style="list-style-type: none"> • What soup have we eaten before? • What ingredients could go into soup? • Where do these ingredients come from? • Do all our ingredients have to come from the shop? <p>Design:</p> <ul style="list-style-type: none"> • Children will decide which ingredients will go into their soup. • Children will draw a bowl of soup and will label this so they know which ingredients they will include. <p>Make:</p> <ul style="list-style-type: none"> • Children will use a variety of skills to make the soup. (cutting, peeling, mixing, measuring, hygiene and safety) <p>Evaluation:</p> <ul style="list-style-type: none"> • The children will discuss what they enjoyed about making the soup and what they found difficult. • The children will taste the soup and discuss what they liked about the soup. • The children will complete a table where they will record the information from the discussions with their peers. • Finally, the children identify ways they could improve the soup if they were to do it again. <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • Why did we choose these ingredients to make the soup? • What skills we have used to make the soup? 	<p style="text-align: center;"><u>Structures</u> <u>(Forest school) mini shelters</u></p> <p>Pre – Evaluation:</p> <ul style="list-style-type: none"> • What is a shelter? • Why do animals and humans need shelter? • What materials are effective for making structures? • What would an animal need for their shelter? <p>Design:</p> <ul style="list-style-type: none"> • Children design a picture of their chosen shelter labelling the outdoor/natural materials they can use. • Children list materials explaining why they are important for the structure. <p>Make:</p> <ul style="list-style-type: none"> • Find and gather materials from outside. • Create pillars to hold up a roof for their shelter. • Dig and push materials into the ground. • Attach materials on top of each other to stack and create walls and ceilings. • Leave a small animal toy inside to test conditions of the shelter. <p>Evaluation:</p> <ul style="list-style-type: none"> • Children discuss their choice of materials and how they used them. • Children return outside a day later to assess how effective their shelter was. • If it rained, did the structure leak? Did the wind knock it down? How could they make their structures stronger? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • Why is it important to select your materials carefully for building a structure? • What can be used to join and attach parts of structures together? 	<p style="text-align: center;"><u>Mechanisms</u> <u>Propellers</u></p> <p>Pre – Evaluation:</p> <ul style="list-style-type: none"> • Where would we see a propeller? • What are propellers used for? • What could we make our propellers out of? <p>Design:</p> <ul style="list-style-type: none"> • Who were the Wright brothers? • Children will draw a diagram of their model plane which will include a design for their propeller. • The children will write a list of materials that they will use to make their model. <p>Make:</p> <ul style="list-style-type: none"> • Draw the outline of their model onto the material. • Cut the model out using scissors. Attach the different part of the model together. • Use the materials to make the propeller and use the safety pin to attach it to the model. <p>Evaluation:</p> <ul style="list-style-type: none"> • We will discuss what we enjoyed about making our models and what we found difficult. • We will then test our propellers to see if they spin as well as testing our models to see if they fly. • The children will then answer questions to help them evaluate their product. • Finally, the children will identify ways they could improve their model if they were to make them again. <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • Why do planes/ helicopters use propellers? • How to attach different materials together without using glue/ cellotape?

Assessment: Pupil Voice / books

Year 3	Autumn	Spring	Summer
	<p style="text-align: center;"><u>Food</u> <u>A Healthy Lunch</u></p> <p>Pre-Evaluation:</p> <ul style="list-style-type: none"> • What is a healthy lunch? • Which food groups are there? • Where does the food come from? • Why is a healthy lunch important? • What is needed in order to make the lunch healthy? • Which ingredients are needed to contribute to a healthy meal? <p>Design:</p> <ul style="list-style-type: none"> • How will the lunch be healthy? • Which food groups will be incorporated? • Draw a design of the lunch, labelling the ingredients and food groups, explaining how they are healthy. <p>Make:</p> <ul style="list-style-type: none"> • Collect all ingredients from different food groups. • Add all the ingredients from different food groups together. • Put all these parts together to complete the healthy lunch, using a variety of skills (including hygiene and safety). • Taste the healthy lunch. <p>Evaluation:</p> <ul style="list-style-type: none"> • Did the healthy lunch taste nice? • How was the meal healthy? • What worked well when making the meal? • What did not work and why? • How could I make the meal healthier? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • Why has the meal been designed this way? • What practical skills have I used when making the healthy lunch? • How did I ensure the meal was nutritious? 	<p style="text-align: center;"><u>Textiles</u> <u>Making A Purse</u></p> <p>Pre Evaluation:</p> <ul style="list-style-type: none"> • What are purses/wallets used for? • What components make up a purse/wallet? • What does our purse/wallet need to be able to do? • How can items be protected in the purse/wallet? • Which materials can be used to keep items inside the purse/wallet separate and dry? <p>Design:</p> <ul style="list-style-type: none"> • How will the sections be joined? • How will the opening be done? <p>Make:</p> <ul style="list-style-type: none"> • Draw a design of the purse/wallet, label all the parts and explain how they will work. • Cut out the shape of the purse/wallet, using a template. • Sew the edges together (using a running or zigzag stitch). • Create a purse/wallet, incorporating a personal design (buttons can be used and sequins can be added). • Put all these parts together to make the purse/wallet. <p>Evaluation:</p> <ul style="list-style-type: none"> • Test the durability of the purse/wallet by inserting a variety of objects, checking whether it is fit for purpose or not. • Does the purse/wallet look like I want it to? • Does it hold objects correctly? • Is the stitching done properly? • What worked well with the purse/wallet? • What did not work and why? • How could I improve my purse/wallet? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • Why has the purse/wallet been designed this way? • What practical skills have I used to mark the purse/wallet • What stitching method have I used to make my wallet? 	<p style="text-align: center;"><u>Mechanisms</u> <u>Folding Doors</u></p> <p>Pre Evaluation:</p> <ul style="list-style-type: none"> • What are doors used for? • What components make up a door? • What are the different types of doors? • How do types of doors work in different ways? • What do our doors need to be able to do? • Which materials can be used to make the doors? • What equipment do I need when making them? <p>Design:</p> <ul style="list-style-type: none"> • How will the door concertina to open and close? • How will the hinges work? • Draw a design of the door, labelling all the parts. • Explain how these parts will work. <p>Make:</p> <ul style="list-style-type: none"> • Build the doors. • Build the shape of the doorframe. • Create a door with a doorframe, including a hinge. • Put all these parts together to build door that will Concertina to open and close. <p>Evaluation:</p> <ul style="list-style-type: none"> • Test whether the door will open and close. • Did the door open and close like I wanted it to do? • What worked well with the door? • What did not work and why? • How could I improve my door? • Could I use another method to make it work? <p>Technical knowledge:</p> <ul style="list-style-type: none"> • Why has the door been designed this way? • What practical skills have I used to build the door? • How do I use another type of door?

Assessment: Pupil Voice / books

Year 4	Autumn	Spring	Summer
	<p style="text-align: center;"><u>Mechanisms</u> <u>Roman Chariots</u></p> <p>Pre – Evaluation:</p> <ul style="list-style-type: none"> • What were chariots? • Why were they used? • Who would use them? • What does a chariot need? <p>Design:</p> <ul style="list-style-type: none"> • Research chariots- what design did they have? • Design their chariot; • How will it move?- axel; • Look at how an axel moves- label; <p>Make:</p> <ul style="list-style-type: none"> • Make an axel- test it works; • Create chariot design; • Add chariot design to the structure; • Add all components together- test it moves. <p>Evaluation:</p> <ul style="list-style-type: none"> • Did the axel work? • Did the chariot move easily? • Which part was the hardest? • What would I do differently next time? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • Why has the chariot been designed this way? • What practical skills have I used? • How do I create an axel? 	<p style="text-align: center;"><u>Electrical Systems</u> <u>Torch</u></p> <p>Pre – Evaluation:</p> <ul style="list-style-type: none"> • What uses a light switch? • What makes a switch? • Where does the electrical energy come from? • What is a faulty circuit? <p>Design:</p> <ul style="list-style-type: none"> • Look at difference torches- different designs, sizes and uses • Design and draw their torch- outer case-label, circuit- label • Look and test different colours/ materials, which gives out the most light? <p>Make:</p> <ul style="list-style-type: none"> • Create and test a circuit; • Create the outer case, choosing colours which best reflect the light. <p>Evaluation:</p> <ul style="list-style-type: none"> • Did the circuit work? • Did the chosen colour best reflect the light? • Did the torch have a use? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • Why did the light work? • How is the torch practical? • Why does the light switch on and off? 	<p style="text-align: center;"><u>Food</u> <u>Healthy Biscuits</u></p> <p>Pre – Evaluation:</p> <ul style="list-style-type: none"> • Who is Ruth Graves Wakefield? • What types of biscuits can we name? • Why do people enjoy eating biscuits? • What is the difference between a healthy snack and an unhealthy snack? <p>Design:</p> <ul style="list-style-type: none"> • Research different types of biscuits- what ingredients are included? • Look and taste different biscuits- which do they prefer? • Draw and label their biscuits. <p>Make:</p> <ul style="list-style-type: none"> • Children use a variety of skills to make and bake their bread (measuring, kneading, mixing, hygiene and safety etc). <p>Evaluation:</p> <ul style="list-style-type: none"> • Taste the biscuit, then describe and score it. • What worked well? • What problems occurred and how did you overcome them? • How would you change the process? • Which ingredients worked? • Which other ingredients might you change? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • Why have you chosen certain ingredients? <p>(Characteristics)</p> <ul style="list-style-type: none"> • What will help to make the best quality product? • What skills will you use when making the product?

Assessment: Pupil Voice / books

Year 5	Autumn	Spring	Summer
	<p style="text-align: center;"><u>Mechanisms</u> <u>Moon Buggies</u></p> <p>Pre Evaluation:</p> <ul style="list-style-type: none"> • What are moon buggies used for? • What components make up a moon buggy? • What do our boogies need to be able to do? <p>Design:</p> <ul style="list-style-type: none"> • How will incorporate a motor? • How will the axel work? • Draw a design of the moon buggy, label all the parts and explain how they will work. <p>Make:</p> <ul style="list-style-type: none"> • Build the axels. • Build the net of the moon buggy shell. • Create an electrical circuit including a motor. • Put all these parts together to build the final moon buggy. • Test the moon buggy over different surfaces. <p>Evaluation:</p> <ul style="list-style-type: none"> • Did the moon buggy do what I intended it to do? • What worked well on the buggy? • What did not work and why? • How could I improve my moon buggy? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • Why has the moon buggy been designed this way? • What practical skills have I used to build the buggy? • How do I create an electrical circuit? 	<p style="text-align: center;"><u>Food</u> <u>Bread</u></p> <p>Pre Evaluation:</p> <ul style="list-style-type: none"> • What ingredients are in bread? • How is bread made? • What types of bread are on the market? • Children taste test different types of bread and score them. <p>Design:</p> <ul style="list-style-type: none"> • Children decide which bread they would like to make and which ingredients they need. • Draw a labelled diagram of the bread (ingredients, shape etc). <p>Make:</p> <ul style="list-style-type: none"> • Children use a variety of skills to make and bake their bread (measuring, kneeding, mixing, hygiene and safety etc). <p>Evaluation:</p> <ul style="list-style-type: none"> • Taste the bread, then describe and score it. • What worked well? • What problems occurred and how did you overcome them? • How would you change the process? • Which ingredients worked? Which other ingredients might you change? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • Why have you chosen certain ingredients? (Characteristics) • What will help to make the best quality product? • What skills will you use when making the product? 	<p style="text-align: center;"><u>Computer Programming</u> <u>Programming Bots/ 3D Model Making</u></p> <p>Pre Evaluation:</p> <ul style="list-style-type: none"> • What are bots and how are they used? • Children have a go at using the beebots. Manoeuvring around a table through different tasks. <p>Design:</p> <ul style="list-style-type: none"> • Research the layout of the Bridgewater Canal. • Draw a labelled diagram of the 3D canal model. <p>Make:</p> <ul style="list-style-type: none"> • Make nets out of card to create landmarks of the canal in different shapes and sizes. • Draw the path of the canal on the large sheets of paper to create the bots route. • Stick the landmarks to the model using the design to position them correctly. • When the 3D model is complete, programme the bot to move through the model. • Through trial and error, children use their programming skills to improve the bots journey through the model. <p>Evaluation:</p> <ul style="list-style-type: none"> • Did the map work? • Did you programme the boy correctly? • What worked well? • What could I improve next time? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • How did you know what to change to improve the movement of your bots? • What skills did you use when making the model? • How did you make your model strong and stable?

Assessment: Pupil Voice / books

Year 6	Autumn	Spring	Summer
	<p style="text-align: center;"><u>Electrical Systems</u> <u>Lighthouses</u></p> <p>Pre Evaluation:</p> <ul style="list-style-type: none"> • Look at how lighthouses have changed over time (timeline) and look at the inventor Winstanley. • Identify the parts of a lighthouse (cupola, lantern room, gallery deck, lighthouse tower, lamp) • What are lighthouses used for? • Identify the parts needed to create an electrical circuit that will light a bulb when a switch is pressed <p>Design:</p> <ul style="list-style-type: none"> • Identify what materials and equipment are needed to create the lighthouse model • Draw and label your lighthouse design • Use Science knowledge to draw a circuit diagram using the correct symbols <p>Make:</p> <ul style="list-style-type: none"> • Make the lighthouse tower and cupola using appropriate materials • Make a working electrical circuit – can a motor be incorporated to make the bulb turn? • Attached the circuit to the lighthouse tower – how will you hide the wires? • How will you make sure the switch can be used? • Make a base for the lighthouse tower so that the lighthouse stands. <p>Evaluation:</p> <ul style="list-style-type: none"> • Does the lighthouse do what you intended it to do? • What has worked well? • What would you improve on next time? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • Why has the lighthouse been designed the way it has? (red and white stripes? Light that turns?) • How do I create a working circuit that includes a bulb, switch and motor? • What practical skills have I used to create the lighthouse? 		<p style="text-align: center;"><u>Food</u> <u>Mayan Banquet</u></p> <p>Pre Evaluation:</p> <ul style="list-style-type: none"> • _What did the Mayans eat? • How did the Mayans source their food? • What food is grown in central America (trip to supermarket) • Children taste different ingredients – salsa, guacamole, tortilla chips. <p>Design:</p> <ul style="list-style-type: none"> • Decide what ingredients to put into the salsa. • Draw a labelled diagram of the salsa. <p>Make:</p> <ul style="list-style-type: none"> • Use recipe to make guacamole • Use a variety of skills to make salsa and guacamole (chopping, cutting, mixing, crushing, hygiene, safety) <p>Evaluation:</p> <ul style="list-style-type: none"> • Taste the salsa and guacamole and give it a rating • What worked well? • What problems occurred and how did you overcome them? • How would you change the process? • Which ingredients worked? Which other ingredients might you change? <p>Technical Knowledge:</p> <ul style="list-style-type: none"> • Why have you chosen certain ingredients? (Characteristics) • What will help to make the best quality product? <ul style="list-style-type: none"> • What skills will you use when making the product?

