

2022-23	D&T		
	Autumn 2022	Spring 2023	Summer 2023
Whole School Theme	HERE WE ARE	WATER	POWERFUL PEOPLE
What does this mean to me? Why does this matter?			
Little Wrens N1		Make simple models which express their ideas.	
Little Wrens N2	Explore different materials freely, in order to develop their ideas about how to use them and what to make.	Develop their own ideas and then decide which materials to use to express them.	Explore different materials freely, in order to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures.
EYFS YR	YR – Junk modelling	YR – Food Prep	YR – Design – Boat making
Leading into...			
Base 1 Y1 D&T	Structures – freestanding structures	Mechanisms – sliders and levers	Textiles – templates and joining techniques
Base 1 Y1 Base 2 Y1/2	Structures – freestanding structures	Mechanisms – sliders and levers	Textiles – templates and joining techniques
Base 3 Y3/4	Food – Healthy and Varied Diet	Structures – using a shell structure to make a box.	Mechanical systems – levers and linkages
Base 4 Y4/5	Mechanical structures – CAMS	Structures – Shell structures using Computer Aided Design (CAD)	Making boats
Base 5 Y6	Electrical systems – monitoring and control	Structures - frame structures	Textiles – sewing into maps

Design Technology			
Little Wrens – N1			
Whole School Theme	Here we are	Water	Powerful People
What does this mean to me? Why does this matter?			
EYFS Curriculum	Use their imagination as they consider what they can do with different materials.	Make simple models which express their ideas.	
C&L Provision Links	<b>By around 3 years old, can the child shift from one task to another if you get their attention. Using the child's name can help: "Jason, can you stop now? We're tidying up."</b> Identify familiar objects and properties for practitioners when they are described. For example:	<b>Can the child follow instructions with three key words like: 'can you wash dolly's face?'</b> Understand and act on longer sentences. Understand simple questions about 'who', 'what', and 'where' Develop pretend play: 'putting the baby to sleep' or 'driving the car to the shops'.	Listen to simple stories and understand what is happening with the help of the pictures. Start to develop conversation, often jumping from topic to topic. <b>Can the child use around 300 words? These words</b>

	‘Katie’s coat’, ‘blue car’, ‘shiny apple’. <b>Is the child frequently asking questions, such as the names of people and objects?</b>	<b>Is the child linking up to 5 words together?</b>	<b>include descriptive language. Is the child using pronouns and using plurals and prepositions.</b>
<b>PSED Provision Links</b>	<p>Feel strong enough to express a range of emotions. Grow in independence, rejecting help. Express preferences and decisions. They also try new things and start establishing their autonomy. Develop friendship with other children.</p>	<p>Be increasingly able to talk about and manage their emotions. Safely explore emotions beyond their normal range through play and stories. Are talking about their feelings in more elaborate ways: “I’m sad because...” or “I love it when...”</p>	<p>Notice and ask questions about differences. Begin to show ‘effortful control’. For example, waiting for a turn and resisting the strong impulse to grab what they want or push their way to the front.</p>
<b>PD Provision Links</b>	<p>Walk, run, jump and climb – and start to use the stairs independently.</p> <p>Learn to use the toilet with help, and then independently.</p>	<p>Show an increasing desire to be independent, such as wanting to feed themselves and dress or undress.</p> <p>Spin, roll and independently use ropes and swings (for example, tyre swings).</p>	<p>Use large and small motor skills to do things independently, for example manage buttons and zips, and pour drinks.</p> <p>Sit on a push-along wheeled toy, use a scooter or ride a tricycle.</p> <p>Use large and small motor skills to do things independently, for example manage buttons and zips, and pour drinks.</p>
<b>Prior Learning</b>	Experiences in their home life prior to Little Wrens		
<b>Why this, why now?</b>	Using materials found in our local environment, children will create their own nature crown. This will allow children to express their own creativity and build relationships with their peers and familiar adults.	Building on prior knowledge from last term, children will explore junk modelling to create their own model linked to under the sea.	Giving children a range of materials to create their own model allows child led learning. Children can follow their own thoughts and ideas to create a model, talking about what they have done and how they have done it.
<b>Core Learning</b>	<p><b>Enquiry Question: What can you make with natural materials from our environment?</b></p> <p>To collect natural materials to create a nature crown. To create a nature crown.</p>	<p><b>Enquiry Question: Can you create your own model?</b></p> <p>To make a model using tape and glue.</p>	<p><b>Enquiry Question: Can you tell me how you made your model?</b></p> <p>To select materials to make a chosen object. To create different models using clay and building blocks.</p>
<b>Opportunities for deepening learning</b>  <i>Know more and remember more.</i>	<p>Explore different materials and what they can be used for, encourage imagination of what the children could make and link to interests of the children.</p> <p>Make simple hats (card around the head and attach decoration), bracelets and badges using tape.</p>	<p>Provide appropriate tools and joining methods for the materials offered. Provided tape, string, different sized boxed and materials. Make a den as a class to sit in and enjoy a story/rhyme time or quiet time.</p>	<p>Encourage young children to explore materials/ resources finding out what they are/what they can do and decide how they want to use them.</p> <p>Explore clay to make models and large duplo blocks to create a simple model.</p>

<b>Vocabulary</b>	Make, design, join, glue, stick, paper, leaves, twigs, grass.	Model, make, join, glue, tape, material, box	Model, junk, make, stick, build, make, model, picture, copy, proud.
<b>Quick Quiz</b>	What natural materials did you use? How did you attach them together?	What can you use to stick to different objects together? What are junk modelling materials?	What materials can you use to make a model? How can you change the shape of clay/playdough?
<b>Discussion question/point:</b>	Are you happy with your nature crown?	What did you make?	Which model were you proud of?
<b>Impact</b>			

Whole School Theme	Here we are	Water	Powerful People
<b>What does this mean to me? Why does this matter?</b>			
<b>EYFS Curriculum</b>	Explore different materials freely, in order to develop their ideas about how to use them and what to make.	Develop their own ideas and then decide which materials to use to express them.	Explore different materials freely, in order to develop their ideas about how to use them and what to make.  Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures.
<b>C&amp;L Provision Links</b>	Use longer sentences of four to six words. Can start a conversation with an adult or friend and continue it for many turns. <b>Around the age of 4, is the child using sentences of four to six words – “I want to play with cars” or “What’s that thing called?”</b>	Understands ‘why’ questions Use talk to organise themselves and their play: “Let’s go on a bus... you sit there... I’ll be the driver”. Know many rhymes	Use longer sentences of four to six words. Be able to express a point of view and to debate when they disagree with an adult or a friend, using words as well as actions. Can start a conversation with an adult or friend and continue it for many turns. Use talk to organise themselves and their play: “Let’s go on a bus... you sit there... I’ll be the driver”.
<b>PSED Provision Links</b>	Play with one or more other children, extending and elaborating play ideas. <b>Around the age of 3, can the child sometimes manage to share or take turns with others, with adult guidance and understanding ‘yours’ and ‘mine’?</b> <b>Around the age of 4, does the child play alongside others or do they always want to play alone?</b>	<b>Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen, or one which is suggested to them.</b> <b>Develop their sense of responsibility and membership of a community.</b>	<b>Does the child take part in pretend play (for example, being ‘mummy’ or ‘daddy’?)</b> <b>Does the child take part in other pretend play with different roles – being the Gruffalo, for example? Can the child generally negotiate solutions to conflicts in their play?</b> Play with one or more other children, extending and elaborating play ideas.
<b>PD Provision Links</b>	Use large-muscle movements to wave flags and streamers, paint and make marks. Start taking part in some group activities which they make up for themselves, or in teams. Choose the right resources to carry out their own play. Be increasingly independent as they get dressed and undressed, for example, putting coats on and doing up zips.	Be increasingly independent in meeting their own care needs, e.g. brushing teeth, using the toilet, washing and drying their hands thoroughly. Show a preference for a dominant hand. Collaborate with others to manage large items, such as moving a long plank safely, carrying large hollow blocks.	Start to eat independently and learning how to use a knife and fork. Use a comfortable grip with good control when holding pens and pencils. Use one-handed tools and equipment, for example, making snips in paper with scissors
<b>Prior Learning</b>	Experiences in their home life prior to Little Wrens		
<b>Why this, why now?</b>	During the first term the Little Wrens will be learning all about	Following the whole school theme of ‘Water’ Little Wrens are going to be	By widening children’s knowledge of artist,

	<p>their friends. The children will start building relationships and working together to make their chosen den. They will talk to their friends about what materials they could use and what they will do in their den.</p>	<p>learning about lots of different underwater animals. Children will then create their own underwater animals using junk modelling to add to an underwater role play area/small world.</p>	<p>musicians and crafts people, children will explore different techniques and colours that have been used. Children will study these techniques to create their own pieces of artwork.</p>
<b>Core Learning</b>	<p><b>Enquiry Question: What materials were best for a den?</b> To explore scale. To explore den building and talk about what is needed.</p>	<p><b>Enquiry Question: Can you work with your peers to create a role play?</b> To make a toy out of junk modelling, using glue or masking tape to stick them together. To build a den for the troll, using fasteners to join two materials together. To work with their peers to create a role play area.</p>	<p><b>Enquiry Question: What techniques could you use to create your own artwork?</b> To explore different artists and musicians to widen their ideas. To focus attention to widen their ideas with new techniques.</p>
<p><b>Opportunities for deepening learning</b></p> <p><i>Know more and remember more.</i></p>	<p>Offer opportunities to explore scale. Suggestions: - long strips of wallpaper - child size boxes - different surfaces to work on e.g. paving, floor, table top or easel Explore den building and discuss what type of den we might need and what materials will be best to use.</p>	<p>Listen and understand what children want to create before offering suggestions. Suggestions: glue and masking tape for sticking pieces of scrap materials onto old cardboard boxes, hammers and nails, glue guns, paperclips and fasteners. Based on children ideas link to role play area, can the children work together to create a new role play area.</p>	<p>Invite artists, musicians and craftspeople into the setting, to widen the range of ideas which children can draw on.</p>
<b>Vocabulary</b>	<p>Boxes, paper, make, create, den, building, materials, heavy, light, together, pegs, balance, tall, short, low, high</p>	<p>Model, glue, masking tape, stick, join, clip, den, fastener, material, role play, ideas, props</p>	<p>Instrument, guitar, piano, ideas, mould, clay, roll, squeeze, press, shape, tool, Jackson Pollock.</p>
<b>Quick Quiz</b>	<p>What is a den? What different materials could you use to make a den?</p>	<p>How can you attach to thing together? What can you make with junk modelling?</p>	<p>What did Jackson Pollock use to create his artwork?</p>
<b>Discussion question/point:</b>	<p>What would you put in your den?</p>	<p>Which underwater animal is your favourite? What features does it have that you need to include in your junk model animal?</p>	<p>Did you like making your own Jackson Pollock inspired artwork? What was your favourite part?</p>
<b>Impact</b>			

Design Technology			
Base 1 – Year R/1			
Whole School Theme	Here we are	Water	Powerful People
What does this mean to me? Why does this matter?			
Unit of Work	YR – Junk modelling Y1 - Structures – freestanding	YR – Food Prep Y1 - Mechanisms – sliders and levers	YR – Design – Boat making Y1 - Textiles – templates and joining techniques
Curriculum	<p>YR Return to and build on their previous learning, refining ideas and developing their ability to represent them.</p> <p>Y1 Make: Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>Select from and use a wide range of materials and components, including construction materials</p> <p>Technical knowledge: Build structures, exploring how they can be made stronger, stiffer and more stable</p>	<p>YR Return to and build on their previous learning, refining ideas and developing their ability to represent them.</p> <p>Y1 Design: Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups</p> <p>Evaluate: Explore and evaluate a range of existing products</p> <p>Technical knowledge: Explore and use mechanisms [for example, levers, sliders], in their products</p>	<p>YR Create collaboratively, sharing ideas, resources and skills.</p> <p>ELG <u>Creating with Materials</u> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used.</p> <p>Y1 Design: Design purposeful, functional, appealing products for themselves and other users based on design criteria</p> <p>Make: Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>Select from and use a wide range of materials and components, including textiles according to their characteristics</p>

<p><b>Prior Learning</b></p>	<p>New learning for YR (Some previously LWs)</p> <p>In 2021/22 as Yr R, students will have had experience of using construction kits to build walls, towers and frameworks. They will have developed how to use basic tools e.g. scissors and hole punches.</p>	<p>New learning for YR (Some previously LWs)</p> <p>In 2021/22 as Yr R, students will have experienced different methods of joining card and paper, e.g. slot join, tab join and split pin join.</p>	<p>New learning for YR (Some previously LWs)</p> <p>In 2021/22 as Yr R students learnt how to mold malleable materials. Children will know which glue or tape to use for their chosen purpose.</p>
<p><b>Why this, why now?</b></p>	<p>YR</p> <p>Children would have perhaps seen scarecrows on the farming fields around Wrenbury. We will explore farm life further and why scarecrows are used. The children will then work together, to create their own scarecrow for our school field.</p> <p>Y1</p> <p>The children are focussing on school and the local environment to understand their own personal experience of 'Here we are'. In Science Y1 are learning about Everyday Materials which supports them in their construction of structures within this DT unit. In geography, the children are undertaking simple fieldwork and observational skills of the school and their grounds and human /physical features of its surrounding environment which supports their design in their DT planning. The children have access to play structures within the school grounds: climbing frames, traversing walls, stages and shelters which allows them to have a deeper understanding of this unit. Just beyond the school grounds, they have play in the play area on swings and slides. The children can use their lived experience and their exploration of</p>	<p>YR</p> <p>Lunar New year is on 23<sup>rd</sup> January and the children will be learning about the festival and Chinese culture. To celebrate the Lunar New Year in school we will be making our own Chinese food and decorations!</p> <p>Y1</p> <p>In Autumn term the children will have developed joining techniques by designing, making and evaluating playground/park equipment. The text to lead the learning is Storm Whale – a story set by the sea. In science, the children are learning that most things are adapted to the habitats that they live in and will 'visit' the sea as a habitat as well as a visit to Blue Planet. This will support the design of the 'whale/fish' for the finishing techniques within this DT unit. In art the children will explore watercolour as a medium for their artwork. The exploratory work will lead into a final piece of artwork focused on fish which supports this DT unit by creating a moving 'whale'.</p>	<p>YR</p> <p>This term, children will be exploring which materials are best to create their own boat to take 'mini David Attenborough' across the jungle river. The children will then use these tested materials to create larger scale boat.</p> <p>Y1</p> <p>The children will learn new joining techniques linked to fabric and material such as pinning and sewing, building on what they have developed previously in the autumn term and taking this a step further by using fabrics. In Science in the Autumn term, both year groups covered 'everyday materials' topics which will support the DT unit by having a prior learning of materials and their properties. In computing this term, the children will be looking at robots and algorithms which will support the DT unit as the children will be required to follow step by step instructions when creating a puppet.</p>

	<p>materials to construct free standing play structures. In art, they are looking at the concept, structures. These things combined, supported deepened learning.</p>		
Core Learning	<p><b>YR</b>  <b>Enquiry Question: What materials can you use to construct a scarecrow?</b>          Making a scarecrow          To work as part of a team to begin a whole class project.          To think about what we want to make and begin to share my ideas          To build on the skills taught in previous learning.          To use a variety of strategies to complete my own representation.          Y1  <b>Concept: Design, Make &amp; Evaluate</b>  <b>Y1 Enquiry Question:</b>          Can you design, make and evaluate a playground/park equipment?            I can choose an appropriate playground/park equipment.          I can generate ideas through talking and drawing based on own experiences.          I can develop ideas using construction kits to create mock-ups.          I can explore and evaluate joining techniques.          I can select from a range of tools, techniques and materials, to create a playground/park equipment then explain my choices.          I can evaluate my playground/park equipment against a design criteria</p>	<p><b>YR</b>  <b>Enquiry Question: Can you prepare decorations and food to celebrate the Lunar New Year?</b>          Chinese Lantern – Lunar New Year          To join different materials using a range of techniques, ensuring it remains strong.          Stir fried noodles – Lunar New Year          To peel, grate and slice food, using equipment safely and correctly.          Y1  <b>Concept: Mechanisms</b>  <b>Enquiry Question:</b> Can you design, make and evaluate a moving 'whale' using a lever?            I can explore and evaluate a collection of books and everyday products that have moving parts, including those with levers and sliders.          I can try out and evaluate ideas by replicating the slider and lever mechanisms using inexpensive card and paper.          I can work to a design criteria after group discussions.          I can design and create a card strip lever for a fish.          I can evaluate the final product against design criteria.</p>	<p><b>YR</b>  <b>Enquiry Question: Can you make a boat that will float?</b>          Design a boat          To use tested waterproof materials to create their own boat.          To design a boat          Make a boat          To work collaboratively with my peers.          To follow the design to help to make a boat          Test boats and record          To test the models created, identifying what went well and what would make my boat even better          To record the results of the test          To use a range of materials and techniques to join the parts of the boat together.          Y1  <b>Concept: Textiles</b>  <b>Enquiry Question:</b> Can you design, make and evaluate a glove puppet?          I can generate ideas through talking and drawing based on own experiences with glove puppets.          I can develop ideas using templates or pattern pieces to create mock ups.          I can explore and evaluate joining techniques such as gluing, stapling, pinning and sewing.          I can explore and evaluate media and materials such as dipryl, felt, reclaimed fabric.</p>



			<p>I can select from a range of tools, techniques and materials to create a glove puppet.</p> <p>I can evaluate the puppet with the intended user and against original design criteria.</p>
<p><b>Opportunities for deepening learning</b></p> <p><i>Know more and remember more.</i></p>	<p>YR</p> <p>Provide children with a range of materials for children to construct with. Encourage them to think about and discuss what they want to make.</p> <p>Teach children different techniques for joining materials, such as how to use adhesive tape.</p> <p>Provide a range of materials and tools and teach children to use them with care and precision.</p> <p><b>Skills: Cutting, folding, tearing, taping</b></p> <p>Promote independence, taking care not to introduce too many new things at once.</p> <p>Y1</p> <p>In science the children will be learning about everyday materials. In art the children will be learning about sculptures/3D.</p> <p>In Geography the children are learning fieldwork and observational skills to study the school and its grounds.</p> <p>In Art the children are learning about sculpture.</p>	<p>YR</p> <p>Discuss problems with their plans and makes, and how they might be solved as they arise.</p> <p>Teach children different techniques for joining materials, such as how to use different sorts of glue.</p> <p>Provide a range of materials and tools and teach children to use them with care and precision.</p> <p><b>Skills: gluing, peeling, grating and slicing</b></p> <p>Promote independence, taking care not to introduce too many new things at once.</p> <p>Y1</p> <p>In mathematics the children are learning about measurement, length and height.</p> <p>In science the Y2 children are learning about habitats</p> <p>In art the children are learning to use watercolours</p>	<p>YR</p> <p>Reflect with children on how they have achieved their aims.</p> <p>Make: Provide a range of materials and tools and teach children to use them with care and precision.</p> <p>Technical Knowledge: Skills: pinching, punching (shapes and holes), sliding mechanism</p> <p>Promote independence, taking care not to introduce too many new things at once.</p> <p>Design: Create a simple design, talking about its purpose and appeal.</p> <p>Evaluate: Talk about how you could improve your design or make for next time.</p> <p>Y1</p> <p>In mathematics the children are learning about measurement, position and direction.</p> <p>In Computing the children are learning to create and manipulate digital content, e.g. change a backdrop.</p>
<b>Vocabulary</b>	<p>YR</p> <p>Scarecrow, materials, newspaper, create, join, tape, skills, independent, choose, select, complete, construct</p> <p>Y1</p> <p>cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner,</p>	<p>YR</p> <p>Join, glue, string, tape, best, stronger, stuck, peel, grate, slice, cut, skin, sharp, careful, safely, noodles, cook, hob, garlic press, fine grater, chopping board, frying pan/wok, colander</p> <p>Y1</p> <p>slider, lever, pivot, slot, bridge/guide card, masking tape, paper fastener, join pull, push, up, down, straight, curve, forwards, backwards design,</p>	<p>YR</p> <p>waterproof, float, design, plan, create, join, float, adapt, evaluate, results, record</p> <p>Y1</p> <p>names of existing products, joining and finishing techniques, tools, fabrics and components template, pattern pieces, mark out,</p>

	thicker, corner, point, straight, curved metal, wood, plastic, circle, triangle, square, rectangle, cuboid, cube, cylinder design, make, evaluate, user, purpose, ideas, design criteria, product, function	make, evaluate, user, purpose, ideas, design criteria, product, function	join, decorate, finish features, suitable, quality mock-up, design brief, design criteria, make, evaluate, user, purpose, function
<b>Quick Quiz</b>	<p>YR</p> <p>Why are scarecrows used?</p> <p>What materials were used to create scarecrows?</p> <p>Did scarecrows work to scare away birds?</p> <p>Y1</p> <p>Why was your choice of playground equipment effective?</p> <p>Can you explain your ideas to me? Can you show me how you improved them?</p> <p>What was the best/ worst joining technique? Why?</p> <p>Which tools did you use? Why did you use them?</p> <p>How effective was your playground equipment, how do you know?</p>	<p>YR</p> <p>What are we cooking?</p> <p>What decoration have we made?</p> <p>Can you name some of the ingredients in the stir-fried noodles?</p> <p>Y1</p> <p>Which book/everyday product that has moving parts was your favourite and why?</p> <p>Can you explain your slider and lever mechanisms?</p> <p>What slider/lever technique did you use? Why?</p> <p>Did your product meet your design requirements?</p>	<p>YR</p> <p>What materials were the best for the boat?</p> <p>How did you stick the parts of the boat together?</p> <p>What was the process of making a boat?</p> <p>Y1</p> <p>Can you tell me about an experience with a glove puppet?</p> <p>Why do we create a mock up?</p> <p>What was the best/worse joining techniques? Why?</p> <p>Which material have you chosen? Why?</p> <p>Which tools did you use? Why?</p> <p>Was your puppet successful with the intended audience?</p>
<b>Discussion question/point:</b>	<p>YR: Which scarecrow was your favourite and why?</p> <p>Y1: Do you think x playground is effective? (Show images of playgrounds)</p>	<p>YR: What did you think of the stir-fried noodles?</p> <p>Y1: Which slider/lever is the most effective? Can you explain why you think this?</p>	<p>YR: Which material did you use for your boat? Did it work?</p> <p>Y1: Could puppets be made with any material? Why, why not?</p>
<b>Impact</b>			

<b>DT</b>			
<b>Base 2 – Y1/2</b>			
<b>Whole School Theme</b>	<b>Here we are</b>	<b>Water</b>	<b>Powerful people</b>
<b>What does this mean to me? Why does this matter?</b>			
<b>Unit of Work</b>	Structures – freestanding structures	Mechanisms – sliders and levers	Textiles – templates and joining techniques
<b>National Curriculum</b>	Make:	Design:	Design:

	<p>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>Select from and use a wide range of materials and components, including construction materials</p> <p>Technical knowledge: Build structures, exploring how they can be made stronger, stiffer and more stable</p>	<p>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups</p> <p>Evaluate: Explore and evaluate a range of existing products</p> <p>Technical knowledge: Explore and use mechanisms [for example, levers, sliders], in their products</p>	<p>Design purposeful, functional, appealing products for themselves and other users based on design criteria</p> <p>Make: Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>Select from and use a wide range of materials and components, including textiles according to their characteristics</p>
<b>Prior Learning</b>	<p>In 2021/22 Y2 as Y1 students designed, made and created castles.</p> <p>In 2021/22 as Yr R, students will have had experience of using construction kits to build walls, towers and frameworks. They will have developed how to use basic tools e.g. scissors and hole punches.</p>	<p>In 2021/22 Y2 as Y1 students learnt and experienced working with paper and card making simple flaps, hinges, and joining techniques.</p> <p>In 2021/22 as Yr R, students will have experienced different methods of joining card and paper, e.g. slot join, tab join and split pin join.</p> <p>In 2022/23 as Base 2 (autumn term) the children created basic freestanding structures</p>	<p>In 2021/22 Y2 as Y1 students explored and used different fabrics and materials to create a collage and boats. They cut and joined fabrics and materials by using PVA glue, pritt stick, cellotape and split pins. As part of Science they explored different fabrics and materials.</p> <p>In 2021/22 as Yr R students learnt how to mould malleable materials. Children will know which glue or tape to use for their chosen purpose.</p>
<b>Why this, why now?</b>	<p>The children are focussing on school and the local environment to understand their own personal experience of 'Here we are'. In Science Y1 are learning about Everyday Materials; in Y2 they are learning about the properties of everyday materials which supports them in their construction of structures within this DT unit. In geography, the children are undertaking simple fieldwork and observational skills of the school and their grounds and human /physical features of its surrounding environment which supports their design element of their DT planning. The children have</p>	<p>In Autumn term the children will have developed joining techniques by designing, making and evaluating playground/park equipment.</p> <p>The text to lead the learning is Storm Whale – a story set by the sea. In science, the children are learning that most things are adapted to the habitats that they live in and will 'visit' the sea as a habitat as well as a visit to Blue Planet. This will support the design of the 'whale/fish' for the finishing techniques within this DT unit. In art the children will explore watercolour as a medium for their artwork. The exploratory work will lead into a final piece of artwork focused on</p>	<p>The children will learn new joining techniques linked to fabric and material such as pinning and sewing, building on what they have developed previously in the autumn term and taking this a step further by using fabrics.</p> <p>In Science in the Autumn term, both year groups covered 'everyday materials' topics which will support the DT unit by having a prior learning of materials and their properties.</p> <p>In computing this term, the children will be looking at robots and algorithms which will support the DT unit as the children will be required</p>

	<p>access to play structures within the school grounds: climbing frames, traversing walls, stages and shelters which allows them to have a deeper understanding of this unit. Just beyond the school grounds, they have play in the play area on swings and slides. The children can use their lived experience and their exploration of materials to construct free standing play structures.</p> <p>In art, they are looking at the concept, structures. These things combined, supported deepened learning.</p>	<p>fish which supports this DT unit by creating a moving 'whale'.</p>	<p>to follow step by step instructions when creating a puppet.</p>
<p><b>Core Learning</b></p>	<p><b>Concept:</b> Structures <b>Enquiry Question:</b> Can you design, make and evaluate a playground/park equipment?</p> <p>I can choose an appropriate playground/park equipment to make.</p> <p>I can generate ideas through talking and drawing based on own experiences.</p> <p>I can develop ideas using construction kits to create mock-ups.</p> <p>I can explore and evaluate joining techniques.</p> <p>I can select from a range of tools, techniques and materials, to create a playground/park equipment then explain my choices.</p> <p>I can evaluate my playground/park equipment against a design criteria.</p>	<p><b>Concept:</b> Mechanisms <b>Enquiry Question:</b> Can you design, make and evaluate a moving 'whale' using a lever?</p> <p>I can explore and evaluate a collection of books and everyday products that have moving parts, including those with levers and sliders.</p> <p>I can try out and evaluate ideas by replicating the slider and lever mechanisms using inexpensive card and paper.</p> <p>I can work to a design criteria after group discussions.</p> <p>I can design and create a card strip lever for a fish.</p> <p>I can evaluate the final product against design criteria.</p>	<p><b>Concept:</b> Textiles <b>Enquiry Question:</b> How can you design, make and evaluate a glove puppet?</p> <p>I can generate ideas through talking and drawing based on own experiences with glove puppets.</p> <p>I can develop ideas using templates or pattern pieces to create mock ups.</p> <p>I can explore and evaluate joining techniques such as gluing, stapling, pinning and sewing.</p> <p>I can explore and evaluate media and materials such as dipryl, felt, reclaimed fabric.</p> <p>I can select from a range of tools, techniques and materials to create a glove puppet.</p> <p>I can evaluate the puppet with the intended user and against original design criteria.</p>
<p><b>Opportunities for deepening learning</b></p> <p><i>Know more and remember more.</i></p>	<p>In Science the children are learning about everyday materials and their properties.</p> <p>In Geography the children are learning fieldwork and observational skills to study the school and its grounds.</p> <p>In Art the children are learning about sculpture.</p>	<p>In Mathematics the children are learning about measurement – length and height.</p> <p>In science the Y2 children are learning about habitats</p> <p>In art the children are learning to use watercolours</p>	<p>In Mathematics the children are learning about measurement using non-standard and standard units.</p> <p>In Computing the children are learning to create and manipulate digital content, e.g. change a backdrop.</p>

<b>Vocabulary</b>	cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cylinder design, make, evaluate, user, purpose, ideas, design criteria, product, function	slider, lever, pivot, slot, bridge/guide card, masking tape, paper fastener, join pull, push, up, down, straight, curve, forwards, backwards design, make, evaluate, user, purpose, ideas, design criteria, product, function	names of existing products, joining and finishing techniques, tools, fabrics and components template, pattern pieces, mark out, join, decorate, finish features, suitable, quality mock-up, design brief, design criteria, make, evaluate, user, purpose, function
<b>Quick Quiz</b>	Why was your choice of playground equipment effective? Can you explain your ideas to me? Can you show me how you improved them? What was the best/ worst joining technique? Why? Which tools did you use? Why did you use them? How effective was your playground equipment, how do you know?	Which book/everyday product that has moving parts was your favourite and why? Can you explain your slider and lever mechanisms? What slider/lever technique did you use? Why? Did your product meet your design requirements?	What are glove puppets? What are they used for? Why do we create a mock up? What was the best/worst joining techniques? Why? Which material have you chosen? Why? Which tools did you use? Why? Was your puppet successful with the intended audience?
<b>Discussion question/point:</b>	Do you think x playground is effective? (Show images of playgrounds)	Which slider/lever is the most effective? Can you explain why you think this?	Could puppets be made with any material? Why, why not?
<b>Impact</b>			

<b>DT</b>			
<b>Base 3 – Y3/4</b>			
<b>Whole School Theme</b>	<b>Here we are</b>	<b>Water</b>	<b>Powerful people</b>
<b>What does this mean to me? Why does this matter?</b>			
<b>Unit of Work</b>	Food – Healthy and Varied Diet	Structures – using a shell structure to make a box.	Mechanical systems – levers and linkages
<b>National Curriculum</b>	Cooking and nutrition: Prepare and cook a variety of predominantly savory dishes using a range of cooking techniques.	Make: Select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities. Evaluate: Investigate and analyse a range of existing products.	Design: Generate, develop, model and communicate their ideas through discussion, annotated sketches Make: Select from and use a wider range of tools and equipment to perform practical tasks accurately Evaluate: Evaluate their ideas and products against their own

			design criteria and consider the views of others to improve their work Technical knowledge: Understand and use mechanical systems in their products [for example levers and linkages]
<b>Prior Learning</b>	<p>As Y2 in B2 in 2021/22 during Health and Wellbeing Week – the children looked at the ‘Eatwell Plate’.</p> <p>As Y2 in B2 in 2021/22 for DT, the children created fruit salads, learning how to chop, peel and prepare fruit.</p> <p>As Y2/3 in B3 in 2021/22 in DT, the children made butter and taste tested different varieties of cheese and butter.</p>	As Y2 in B2 in 2021/22 for DT the children created castle structures, focusing on joining techniques.	<p>As Y2/3 in B3 in 2021/22 for DT the children looked at mechanical systems with a focus on pneumatics creating a volcano.</p> <p>As Y2 in B2 in 2021/22 for DT the children created castle structures, focusing on joining techniques.</p> <p>In 2022 (Spring term) as Y3/4 the children created structures, boxes.</p>
<b>Why this, why now?</b>	<p>In science, Y3 will be looking at nutrition and balanced diet, whilst Y4 will be learning about the digestive system. Both these science units will support and deepen the current learning in this DT unit.</p> <p>The children will be able to build on the knowledge they have gained from our Health and Wellbeing week which will help them to retain this learning.</p> <p>Previously the children have worked with food, preparing fruit and making butter. They will be able to use this knowledge and take it further as now they will be combining ingredients and making a larger meal.</p> <p>In history, the children are learning about the Stone Age to Iron age. As part of this learning, they will learn about what the people of the time ate, they will be able to compare food, diet and tools with our modern day which threads learning in DT, Science and history-deepening learning.</p>	<p>Previously In KS1, the children created their own castles focusing on joining techniques, they can now build on this by becoming more accurate with their joining methods and take it a step further by making their own boxes.</p> <p>In history, the children will be studying the Shang Dynasty in Ancient China. This will be used as a tool for our DT learning as the children are making a box which will hold a special weapon from the Shang dynasty, this gives this activity purpose and meaning which in turn supports learning.</p> <p>The children will also be learning about area and perimeter in maths, this supports both maths and DT as this learning now becomes practical and purposeful.</p> <p>In art the children are learning about 3D structures, they will be able to bring this learning and understanding to this DT unit.</p>	<p>In history, the children will be studying the Roman Empire and its impact on Britain. In battle the Romans would have used catapults, hence the reasoning behind creating catapults for the DT unit. This will support the DT unit by deepening the learning.</p> <p>In geography, there will be also a Roman Empire focus on areas such as Hadrian’s Wall.</p> <p>Last term, the children learnt about structures, making boxes. They will now be taking this a step further by making structures out of a different, harder material.</p>

<p><b>Core Learning</b></p>	<p><b>Concept: Food</b>  <b>Enquiry Question:</b> In what ways can you design, make and evaluate a bread based product with a filling for lunch, such as a wrap, a sandwich, or a roll?</p> <p>I can research existing products, draw annotated sketches, to generate a design criteria.  I can discuss ideas focusing on how the type of food product and the way it is eaten will affect the design.  I can peel, chop, slice, grate, and spread a variety of food suitable for a sandwich filling.  I can use tools such as round ended knives, vegetable peelers, apple corers and graters.  I can evaluate the food product against the design criteria including the user and purpose.  I can record the final product through an annotated sketch.</p>	<p><b>Concept: Structures</b>  <b>Enquiry Question:</b> What is the best material to build a shell structure used to store the arrowhead?</p> <p>I can discuss ideas, draw annotated sketches and generate a design criteria.  I can investigate and evaluate possible materials.  I can discuss, construct and compare different nets.  I can explore strengthening techniques.  I can evaluate prototypes against a success criteria.  I can discuss, explore, trial and evaluate different graphic effects.  I can try out and modify the design.  I can evaluate the product against the success criteria.</p>	<p><b>Concept: Mechanical systems</b>  <b>Enquiry Question:</b> In what ways can you design and make a catapult using a lever or linkage?</p> <p>I can discuss ideas, draw annotated sketches, and generate a design criteria.  I can model a possible lever and linkage mechanisms.  I can discuss and evaluate mock-ups and prototypes against a design criteria.  I can discuss, explore and trial media and materials.  I can build, test, and modify a catapult.  I can evaluate the catapult against design criteria.</p>
<p><b>Opportunities for deepening learning</b>   <i>Know more and remember more.</i></p>	<p>In Science Y3 children will be learning about nutrition and a balanced diet, Y4 children will be learning about the digestive system.  In history the children are learning about the Stone Age to Iron Age.</p>	<p>In Mathematics the children are learning about length and perimeter.   In Art the children are learning about 3D/structures.   In history, the children are learning about the Shang dynasty.</p>	<p>In History the children are learning about the Roman Empire.</p>
<p><b>Vocabulary</b></p>	<p>Name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet planning, design criteria, purpose, user, annotated sketch, sensory evaluations</p>	<p>Shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating font, lettering, text, graphics, decision, evaluating, design brief design criteria, innovative, prototype</p>	<p>mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating user, purpose, function prototype, design criteria, innovative, appealing, design brief</p>

<b>Quick Quiz</b>	<p>What tool is easiest to use? Why?</p> <p>Which technique for cutting did you find the most practical? Did it depend on the type of food?</p> <p>Does your food product meet your design criteria? Is your final sketch, similar or different to your original design?</p>	<p>Can you discuss what you would like your shell structure to be like? Was the net chosen, suitable? If not, why not?</p> <p>What strengthening technique was the best? Which was the worst?</p> <p>Why did you choose the graphic?</p>	<p>Which lever and linkage mechanism is the best/worst? Why?</p> <p>Have you used a fixed or loose pivot on your catapult? Was this the same or different compared to your design?</p> <p>Was your catapult successful?</p>
<b>Discussion question/point:</b>	How does your sandwich compare to supermarket sandwiches?		In what ways were catapults effective? In what ways weren't they effective?
<b>Impact</b>			

<b>DT</b>			
<b>Base 4 – Y4/5</b>			
<b>Whole School Theme</b>	<b>Here we are</b>	<b>Water</b>	<b>Powerful people</b>
<b>What does this mean to me? Why does this matter?</b>			
<b>Unit of Work</b>	Mechanical structures – CAMS	Structures – Shell structures using Computer Aided Design (CAD)	Making boats
<b>National Curriculum</b>	<p><b>Design:</b> Use research and develop a design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.</p> <p><b>Make:</b> Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p>	<p><b>Design:</b> Generate, develop, model and communicate their ideas through discussion, and computer-aided design</p> <p><b>Technical knowledge:</b> Apply their understanding of computing to program, monitor and control their products</p>	<p><b>Make:</b> Select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities</p> <p><b>Evaluate:</b> Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p>
<b>Prior Learning</b>	<p>In B2 in 2020/21 as Y2 the children in science studied the topic of everyday materials.</p> <p>In B4 in 2021/22 as Y4 the children created wardrobes made out of cardboard. In science the children studied the properties of materials.</p>	<p>In B4 in 2021/22 as Y4 the children created wardrobes made out of cardboard. In science the children studied the properties of materials.</p> <p>In 2022/23 in Base B4, Year 4/5 learnt about mechanical structures- CAMS</p> <p>In 2022/23 in Computing, the children learnt how to use a</p>	<p>In B4 in 2021/22 as Y4 the children created wardrobes made out of cardboard. In science the children studied the properties of materials.</p> <p>In 2022/23 in Base B4, Year 4/5 (Autumn term) learnt about mechanical structures- CAMS</p>



		computer programme to animate.	In 2022/23 in Base B4, Year 4/5 (spring term) learnt how to create structures using computer aided design.
<b>Why this, why now?</b>	<p>In History the children are studying railways with a link to the village railway and surroundings in Geography. This will make learning more purposeful, deepening and supporting the mechanical structures focus.</p> <p>Previously the children have learnt about everyday materials which will help the children when they select tools and materials to create their product.</p> <p>Previously the DT topics have heavily been Food Technology and Textiles topics, we now want to introduce a new focus.</p>	<p>In the autumn term in science the children in Y5 studied the properties and materials topic. This will support the DT unit of structures by determining what the best material for a structure will be.</p> <p>This term will build on the children's DT learning from the autumn term where they designed and made a product using cams. They can build on this by now using computer design.</p> <p>In computing in the autumn term of this year, the children learnt about stop frame animation which will support them in this unit where they will also be using computing to design.</p>	<p>In science, the children will identify the effects of air resistance, water resistance and friction, that act between moving surfaces. They will also recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect.</p> <p>The children will be able to build on their learning from the Autumn and Spring terms where they have designed and made (in different ways) products. They will be able to bring this knowledge to their design and making of their boats. This will also build on their previous science learning where the children know about materials, their properties and their current learning where the children are learning about forces. This will support the design and make element of this unit.</p> <p>In history, the children are learning about the Vikings and will learn that the Vikings arrived on longboats. This will connect to their DT learning and they can use the knowledge of these boats to influence their design.</p>
<b>Core Learning</b>	<p><b>Concept:</b> CAMS <b>Enquiry Question:</b> In what ways can CAMS improve products?</p> <p>I can discuss ideas and draw annotated sketches. I can generate a simple design specification. I can discuss, model and evaluate different systems</p>	<p><b>Concept:</b> Structures <b>Enquiry Question:</b> In what ways can you use CAD-based packaging to protect and display your arrowhead?</p> <p>I can research ideas and generate a design criteria using CAD. I can investigate and evaluate possible tools and materials. I can discuss, construct and compare different nets.</p>	<p><b>Concept:</b> Design <b>Enquiry Question:</b> Which boat design is the best for carrying the most passengers safely?</p> <p>I can look at existing boats and discuss their design and how successfully they would take passengers. I can design and make a boat to take the maximum</p>

	<p>using mechanical components.</p> <p>I can investigate and trial possible materials and components.</p> <p>I can discuss, explore and evaluate prototypes.</p> <p>I can discuss, test and modify the design.</p> <p>I can evaluate the product with the intended user group and against the original design specification.</p>	<p>I can explore strengthening techniques.</p> <p>I can evaluate prototypes against a success criteria.</p> <p>I can explore, trial and evaluate graphic effects.</p> <p>I can evaluate the product with the intended user and against the success criteria.</p>	<p>number of passengers with the given materials.</p> <p>I can alter the shape so that the boat will take more 'passengers' before it sinks.</p>
<p><b>Opportunities for deepening learning</b></p> <p><i>Know more and remember more.</i></p>	<p>In History the children are learning about the railways.</p>	<p>In Computing the children will be learning about selection in quizzes.</p>	<p>In Science the Y5 children are learning about forces.</p> <p>In History the children are learning about the Vikings</p>
<p><b>Vocabulary</b></p>	<p>cam, snail cam, off-centre cam, peg cam, pear shaped cam follower, axle, shaft, crank, handle, housing, framework rotation, rotary motion, oscillating motion, reciprocating motion annotated sketches, exploded diagrams mechanical system, input movement, process, output movement design decisions, functionality, innovation, authentic, user, purpose, design specification, design brief</p>	<p>shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating font, lettering, text, graphics, decision, evaluating, design brief design criteria, innovative, prototype</p>	<p>design, float, examine, investigate, force, upthrust, fair test, container</p>
<p><b>Quick Quiz</b></p>	<p>In what ways is your design effective?</p> <p>Can you draw a system using mechanical components?</p> <p>Which materials and mechanical components work the best?</p> <p>Do you need to make amendments to the prototypes?</p> <p>Does your product meet your design specification?</p>	<p>Can you discuss what you would like your shell structure to be like?</p> <p>How did you find using the computer to design your shell structure?</p> <p>In what ways was your net suitable? If it was not, why not?</p> <p>What strengthening technique was the best? Which was the worst?</p> <p>Why did you choose the graphic?</p>	<p>In what ways is your design effective?</p> <p>Was the material chosen the best? Did this make a difference?</p> <p>Do you think the shape of the boat will affect its ability to float?</p> <p>Can you include something from an existing boat in your design?</p>
<p><b>Discussion question/point:</b></p>	<p>CAMS do not improve products? Discuss.</p>	<p>Does CAD packaging make a difference?</p>	<p>Do you think that boats have improved in design through history? Why do you think this?</p>
<p><b>Impact</b></p>			

DT			
Base 5 – Y6			
Whole School Theme	Here we are	Water	Powerful people
<b>What does this mean to me? Why does this matter?</b>			
Unit of Work	Electrical systems – monitoring and control	Structures - frame structures	Textiles – sewing into maps
National Curriculum	<p>Technical knowledge: Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</p>	<p>Design: Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Make: Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Technical knowledge: Apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p>	<p>Design: Generate, develop, model and communicate their ideas through discussion, pattern pieces Make: Select from and use a wider range of materials and components, <b>textiles</b> according to their functional properties and aesthetic qualities Evaluate: Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p>
Prior Learning	<p>In 2021/22 as year 5 in B5 in DT the children created boats which use mechanical systems in products such as gears and pulleys.</p> <p>In 2021/22 as year 5 in B4 in science they looked at electrical systems – simple circuits and switches.</p>	<p>In 2021/22 as Year 5 in B4 ,within art, the children researched and designed products to solve the housing crisis in Rio de Janeiro making links to science with suitable materials.</p> <p>In 2021/22 as year 5 in B5 in DT the children created boats which use mechanical systems in products such as gears and pulleys.</p>	<p>In 2021/22 as year 5 in B5 the children designed and made a mattress, using cross sectional and exploded diagrams to develop ideas then test and evaluate (against a clear criteria) designed products.</p> <p>In the spring term, in art, the children looked at mixed media; cloth, thread and paint.</p>
Why this, why now?	<p>In science the children are focussing on electricity and light, this will support and deepen their knowledge in DT as they will also be creating electrical systems through DT.</p> <p>Their previous learning in science on electrical systems will support them in DT as they have a base knowledge of electrical circuits.</p>	<p>In Geography, the children are studying the use of dams, which will give them a good understanding of dam structures and how they work. This will support and deepen their DT learning. It will also build on their previous learning. This will also allow them to build on IKB Thames tunnel disasters, which will support a deepening of their knowledge and understanding of both DT and history.</p>	<p>In Geography, the children are focussing on time zones, to build their knowledge of This will support them when sewing into maps by supporting their knowledge in DT as these will be focused the same area.</p> <p>In history, the children are focussing on Ancient Greece, where they will be basing their map.</p>

	In Art the children are investigating colour where light boxes will be investigated, this supports learning about electricity in DT.		By looking at cloth during the spring term in art this will support the children's knowledge of cloth.  Evaluations from making mattresses in Year 5 will support their ability to make evaluations in this unit.
<b>Core Learning</b>	<p><b>Concept:</b> Electrical systems <b>Enquiry Question:</b> In what ways can you make a circuit that can create light?</p> <p>I can develop innovative ideas through discussion and annotated sketches, generating a design specification. I can discuss ideas, by modelling possible electrical circuits. I can record design ideas pictorially or using circuit diagrams. I can develop a step-by-step plan. I can write and test programs and connect to a microcontroller. I can evaluate the alarm against the original design specification.</p>	<p><b>Concept:</b> Structures <b>Enquiry Question:</b> What is the most effective dam?</p> <p>I can discuss ideas, draw and annotate sketches. I can generate a simple design specification. I can discuss, model and evaluate different options for dams. I can investigate and test possible materials. I can discuss, explore and evaluate prototypes. I can discuss, explore and evaluate different rigid covering options. I can negotiate, develop and agree a step-by-step-plan. I can discuss, test and modify the design. I can evaluate the product against the original design specification.</p>	<p><b>Concept:</b> Textiles <b>Enquiry Question:</b> In what ways can stitching be used to show features of a map?</p> <p>I can research, investigate, disassemble and evaluate existing products. I can Investigate and practise a range of methods to join fabrics together and make judgments about the strength and appropriateness of each technique. I can practise finishing techniques. I can think about the user and purpose and developing specifications for products. I can constantly self-evaluate and make changes if the product is not fulfilling the specification.</p>
<b>Opportunities for deepening learning</b>	In Science the children are learning about Electricity and Light.  In Art the children are investigating light boxes.	In Geography the children are learning about the use of dams.	In Geography the children are learning about time zones which will focus on Greece, where the children are creating their maps.
<i>Know more and remember more.</i>			
<b>Vocabulary</b>	reed switch, toggle switch, push-to-make switch, push-to-break switch, light dependent resistor (LDR), tilt switch light emitting diode (LED), bulb, bulb holder, battery, battery holder, USB cable, wire, insulator, conductor, crocodile clip control, program, system, input device, output device, series circuit, parallel circuit function, innovative, design	frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional	seam, seam allowance, reinforce, right side, wrong side, hem, template, pattern pieces name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings, iron transfer paper design criteria, annotate, design decisions, functionality, innovation, authentic, user, purpose,

	specification, design brief, user, purpose		evaluate, mock-up, prototype
<b>Quick Quiz</b>	<p>In what ways was your design effective?</p> <p>Can you draw me an electrical circuit and explain the components?</p> <p>How will adding/removing components change your circuit?</p> <p>Did connecting to a microcontroller change output?</p> <p>How effective was your product, how do you know?</p> <p>Which product was the most effective? Why?</p>	<p>In what ways was your design effective?</p> <p>Which materials have you decided to use? Can you explain why?</p> <p>What covering have you chosen, how did this make a difference?</p> <p>How effective do you think your dam will be?</p> <p>How do you know that your friend would be able to follow your step-by-step plan?</p> <p>Are there any changes that you would like to make to improve your dam?</p>	<p>What do you think the best joining method is? Why?</p> <p>Is the joining method you chose, the strongest? Can you tell me why you think that?</p> <p>Which finishing technique have you chosen?</p> <p>Did you need to make any changes that weren't on your design?</p> <p>If you were to complete this activity again, would you change anything? What would you do the same?</p>
<b>Impact</b>			