## Year 2 DT Long Term Plan

Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
		Which materials will make the strongest castle?  Structures		Moving pictures  Mechanisms	Pizza and balanced diet  Cooking and Nutrition

## Term 3 DT- Which materials will make the strongest castle?

National Curriculum Links	Key Vocabulary	Pupil Offer
<ul> <li>I can design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>I can generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> <li>I can select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> <li>To select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> <li>I can explore and evaluate a range of existing products</li> <li>To evaluate their ideas and products against design criteria</li> <li>To build structures, exploring how they can be made stronger, stiffer and more stable</li> <li>To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</li> </ul>	investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function, cut, fold, join, fix structure, wall, tower, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cylinder,  cutting, joining, shaping, finishing, fixed, free, moving, mechanism names of tools.	Making a castle

equipment and materials used

Term 3	Week 1	Week 2	Week 3
Lesson Overview including Substantive knowledge	Research and design  Cross curriculum retrieval: Use pictures of castles from History lessons, as a variety of castles and their features have been covered.  Present children with task of making the strongest castle. Discuss different sections that they would need (e.g. battlements and drawbridge), and the most suitable materials for these parts.  Cross curriculum retrieval: Materials that are transparent and opaque from Science.  Conduct a test to see which of the available building materials have the properties required, possibly including experiment on which material lets in the most light (do not want to be seen by enemies).  Children will use this information to make an annotated plan to show the structure and materials needed.	Make  Retrieval – cutting and joining skills.  Children to start making the main structure for their castle, focusing on the cutting and shaping elements.  Before moving onto turrets, windows and other further enhancements, children will need to explore whether tape, glue sticks or pva glue will be best for their materials. This will also cover strengthening.  Use levers or sliders to create drawbridges where appropriate to challenge but note that this is not taught knowledge yet.	Evaluate  Children to be given success criteria, linked to both History and Science knowledge aims.  Children will practise evaluating different castles around Kent, and use this to help them decide if their castle is strong and protective.
Disciplinary Knowledge	<ul> <li>Generating and communicating ideas using sketching and modelling</li> <li>Learning about different types of structures, found in the natural world and in everyday objects</li> </ul>	<ul> <li>Making a structure according to design criteria</li> <li>Creating joints and structures from paper/card and tape</li> <li>Building a strong and stiff structure by folding paper</li> </ul>	<ul> <li>Exploring the features of structures</li> <li>Comparing the stability of different shapes</li> <li>Testing the strength of own structure</li> <li>Identifying the weakest part of a structure</li> <li>Evaluating the strength, stiffness and stability of own structure</li> </ul>
Organisation and Communication	Annotated plan of castle – filed in Science book	Photographs of making process, and of finished products	Evaluation sheets photographed on Seesaw

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	Term 4 DT- Cooking and balanced diet								
National Curriculum Links					ılary	Pupil Offer			
<ul> <li>To understand where food comes from.</li> <li>To use the basic principles of a healthy and varied diet to prepare dishes</li> </ul>		=	armed, grown, balanced/ ood groups, cut, peel, grate	Eating pizza					
	Term 6	Week 1	Week 2		W	/eek 3			

Term 6	Week 1	Week 2	Week 3	
	Research and design	<u>Make</u>	<u>Evaluate</u>	
Lesson Overview including Substantive knowledge	Cross curriculum retrieval: food groups and balanced diets  Children to discuss their favourite pizza and compile information into a pictogram. They will also consider healthy eating and complete a balanced plate by sorting their favourite pizza ingredients.  Children to design a healthy and balanced pizza, making sure they remember to follow the pizza criteria.	Children to chop and peel suitable fruits and vegetables to go on their pizzas, e.g. grated carrot, chopped mushroom  Children to spread sauce over their base and sprinkle cheese.  Ensure children know how to work safely and hygienically.	They will evaluate their pizzas once they have been made, by eating them and rating them. Children to make a traffic light food rating for their packaging.	
Disciplinary Knowledge	Designing a healthy wrap based on a food combination which work well together	<ul> <li>Slicing food safely using the bridge or claw grip</li> <li>Constructing a wrap that meets a design brief</li> </ul>	<ul> <li>Describing the taste, texture and smell of fruit and vegetables</li> <li>Taste testing food combinations and final products</li> <li>Describing the information that should be included on a label</li> <li>Evaluating which grip was most effective</li> </ul>	
Organisation and Communication	•	•	•	
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## Term 5 DT- Moving pictures (taught in art)

National Curriculum Links	Key Vocabulary	Pupil Offer
<ul> <li>I can design purposeful, functional, appealing products for myself and other users based on design criteria.</li> <li>I can generate, develop, model and communicate my ideas through mock-ups.</li> <li>I can use a range of tools to cut, shape, join and finish.</li> <li>I can use levers or sliders to make my picture move in the way I would like it to.</li> </ul>	Levers, sliders, draw/ sketch, cut, design criteria, evaluate, product	To make a moving picture for an intended user.

• I can	n evaluate my work against the design criteria.					
Term 5	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Lesson Overview including Substantive knowledge	Research  Word doc: Y2 Levers and sliders Watch: TBC Global - Moving Parts Books x7 - YouTube We're going to be making our own moving pictures to show what happened during the Great Fire of London. Draw or cut out the screen shot showing an example of a lever and a slider. Get the children to stick them in their books and label them. Think of a list of design criteria for our pictures. What do we want them to do? Eg tell a story, be eye-catching, moving parts need to move smoothly etc. Children to write them on post- it notes. Word doc: levers and sliders Then show them how to make a moving part on an animal e.g. a trunk on an elephant using a split pin. Make this and tick it in your book.	Research  Today we are going to be trying out some different ways of making moving pictures. Show the children how to make a slider by cutting 2 slits in a piece of card and making an animal/robot/vehicle etc. That can move across the page.  Decorate the background.  Record photos on Seesaw	Design  Today the children are going to work in their art books and design their moving part. Decide if it will have a slider or a lever and draw in book. What will you use to make your background – chalk pastels, paint, oil pastels, pencils, felt tip pens etc – your choice. 1. Fire starting in the bakery. Spark coming out of the fire (lever) 2. Fire starting to come out of the buildings (slider) 3. Wind blowing fire (slider) 4. Londoners running away with belongings. 5. People throwing buckets of water onto the fire (levers)	Make  Recap work taught last week.  What are the two ways that we have learnt to make a moving picture? Look in books at their designs to remind them what they are going to make.  Make the background for your page on white card.	Make the moving part and stick it together. Colour the moving picture in. Discuss how we are going to put the pages together to make the moving Great Fire of London story book.	Evaluate  I can evaluate my work against the design criteria. Evaluate the product against the design criteria. Tick/cross on the post-it notes in books.
Knowledge	books that have moving parts  Explore and use sliders		mechanisms produce different types of movement	Know and use technical vocabulary linked to the project		discussing how well it works in relation to the purpose and the user and

			•	Make a moving page linked to the design criteria		whether it meets design criteria
Organisation and Communication	•	•	•	•	•	•
Famous People						