

<p>Year 2 National Curriculum objectives: Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art.</p>	
<p>Year 2 Areas of study: Baby Bears Chair Fairground Wheel Making a Moving Monster</p>	<p>Design: Generating and communicating ideas using sketching and modelling. Selecting a suitable linkage system to produce the desired motions • Designing a wheel Selecting appropriate materials based on their properties. Creating a class design criteria for a moving monster • Designing a moving monster for a specific audience in accordance with a design criteria.</p>
<p>Make: Making a structure according to design criteria • Creating joints and structures from paper/card and tape • Building a strong and stiff structure by folding paper. Selecting materials according to their characteristics • Following a design brief. • Making linkages using card for levers and split pins for pivots • Experimenting with linkages adjusting the widths, lengths and thicknesses of card used • Cutting and assembling components neatly.</p>	<p>Evaluate: Testing the strength of own structures • Identifying the weakest part of a structure • Evaluating the strength, stiffness and stability of own structure. • Evaluating different designs • Testing and adapting a design. • Evaluating own designs against design criteria • Using peer feedback to modify a final design.</p>
<p>Technical: To know that materials can be manipulated to improve strength and stiffness • To know that a structure is something which has been formed or made from parts • To know that a 'stable' structure is one which is firmly fixed and unlikely to change or move • To know that a 'strong' structure is one which does not break easily • To know that a 'stiff' structure or material is one which does not bend easily. To know that different materials have different properties and are therefore suitable for different uses. To know that mechanisms are a collection of moving parts that work together as a machine to produce movement • To know that there is always an input and output in a mechanism • To know that an input is the energy that is used to start something working • To know that an output is the movement that happens as a result of the input • To know that a lever is something that turns on a pivot • To know that a linkage mechanism is made up of a series of levers.</p>	<p>Additional: To know the features of a ferris wheel include the wheel, frame, pods, a base an axle and an axle holder • To know that it is important to test my design as I go along so that I can solve any problems that may occur. To know some real-life objects that contain mechanisms.</p>

<p>Year 2 National Curriculum objectives: Children will be taught to: Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art.</p>	
<p>Year 2 Areas of study: A Balanced Diet Pouches</p>	<p>Design:</p> <ul style="list-style-type: none"> • Designing a healthy wrap based on a food combination which work well together. Designing a pouch.
<p>Make:</p> <p>Slicing food safely using the bridge or claw grip • Constructing a wrap that meets a design brief.</p> <p>Selecting and cutting fabrics for sewing • Threading a needle • Sewing running stitch, with evenly spaced, neat, even stitches to join fabric • Neatly pinning and cutting fabric using a template.</p>	<p>Evaluate:</p> <p>Describing the taste, texture and smell of fruit and vegetables • Taste testing food combinations and final products • Describing the information that should be included on a label • Evaluating which grip was most effective.</p> <p>Troubleshooting scenarios posed by teacher.</p>
<p>Knowledge:</p> <p>To know that 'diet' means the food and drink that a person or animal usually eats • To understand what makes a balanced diet • To know where to find the nutritional information on packaging • To know that the five main food groups are: Carbohydrates, fruits and vegetables, protein, dairy and foods high in fat and sugar</p> <ul style="list-style-type: none"> • To understand that I should eat a range of different foods from each food group, and roughly how much of each food group • To know that nutrients are substances in food that all living things need to make energy, grow and develop • To know that 'ingredients' means the items in a mixture or recipe • To know that I should only have a maximum of five teaspoons of sugar a day to stay healthy • To know that many food and drinks we do not expect to contain sugar do; we call these 'hidden sugars' <p>To know that sewing is a method of joining fabric • To know that different stitches can be used when sewing • To understand the importance of tying a knot after sewing the final stitch • To know that a thimble can be used to protect my fingers when sewing.</p>	

