

Sandon Primary Academy – Design Technology

Year 2

| Autumn Term | Spring Term | Summer Term |
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| Where we use a range of tools and equipment to design, make and evaluate our product. | | |
| Theme: Structures: Baby Bear's Chair | Theme: Food: Wraps (balanced diet) | Theme: Textiles: Pouches |
| <p>Key Objectives:</p> <p>Lesson 1: Explore the concept and key features of a structure</p> <ul style="list-style-type: none"> I can become familiar with the story of Goldilocks and the Three Bears. I can explore and evaluate a range of existing chairs I understand what is meant by stability and can identify when a structure is more or less stable than another <p>Lesson 2: To compare the stability of different shapes</p> <ul style="list-style-type: none"> I can identify 3D shapes and recognise their properties I can explore the stability of different shapes with an experiment I can measure the height of my shapes/structures I know that shapes and structures with wide, flat bases or legs are the most stable <p>Lesson 3: To explore strength in different structures</p> <ul style="list-style-type: none"> I understand that the shape of the structure affects its strength I know the meaning of the words: strength, stiffness and stability I know there are different ways paper can be folded to improve its strength and stiffness I can build a strong and stiff structure by folding paper I can test the strength of my structure <p>Lesson 4: Make a structure according to design criteria</p> <ul style="list-style-type: none"> I can remember that chairs are structures and need to be strong, stiff and stable I know how to create joints and structures from paper/card and tape I can assemble, join and combine materials in order to make a product <p>Lesson 5: Evaluation</p> <ul style="list-style-type: none"> I can evaluate my structure according to the design criteria I can peer evaluate products as a class | <p>Key Objectives:</p> <p>Lesson 1: Taste test food combinations</p> <ul style="list-style-type: none"> I know that there are 5 food groups I can experience food through touch and smell I can explore and evaluate a range of existing products I can consider and review food combinations I know that the most ideal ingredient combinations for my wrap will contain foods from more than one food group <p>Lesson 2: Design a healthy wrap</p> <ul style="list-style-type: none"> I can recall which food combinations from the previous lesson worked well I can design 3 possible wraps based on the combinations I can choose one of these to make as my 'final design' I can discuss and decide on a simple design criteria I can design purposeful, functional, appealing products for themselves and other users based on design criteria <p>Lesson 3: Practice of skills</p> <ul style="list-style-type: none"> I can follow safe procedures for food safety and hygiene I can demonstrate hygienic food preparation I can slice food safely using the bridge or claw grip <p>Lesson 4: Make a healthy wrap</p> <ul style="list-style-type: none"> I can remember how to prepare food safely I can use my design to make a healthy wrap I can ensure my wrap meets the design brief <p>Lesson 5: Evaluate</p> <ul style="list-style-type: none"> I can review my design I can talk about my ideas, saying what I liked and disliked about my wrap I can evaluate the work of others against the original design brief I can discuss strengths and possible changes I might make if I were to make it again | <p>Key Objectives:</p> <p>Lesson 1: Evaluate existing products and begin to use running stitch</p> <ul style="list-style-type: none"> I can look at how pieces of fabric are joined together I can identify techniques for joining fabric and their effectiveness I can sew a running stitch to practise <p>Lesson 2: Cut out fabric and begin to assemble my pouch</p> <ul style="list-style-type: none"> I can use a paper template I can pin fabric to paper accurately I can cut fabric neatly I can sew using the running stitch I can use neat and evenly spaced stitches to join fabric <p>Lesson 3: Complete my pouch and design the decorations</p> <ul style="list-style-type: none"> I can continue to use running stitch (neatly and evenly) I can complete my plain pouch I can tie a knot in the end of my thread I can design decorations for my product I can identify a purpose for my pouch <p>Lesson 4: Make any changes and add decorations</p> <ul style="list-style-type: none"> I can verbally evaluate my product so far and make any changes before continuing I can decorate my pouch using fabric glue or stitching I can decorate my pouch using different items taking my target audience into consideration <p>Lesson 5: Evaluation</p> <ul style="list-style-type: none"> I can evaluate my own designs I can evaluate my finished product, talk about my ideas saying what I like and dislike about it. I can identify strengths/possible changes. |
| <p>Key Vocabulary:</p> <p>structure evaluate/evaluation</p> <p>stability</p> <p>comfort/comfortable</p> <p>strength</p> <p>sturdy</p> <p>2D shapes/3D shapes</p> <p>fair test</p> <p>design criteria</p> <p>target audience</p> <p>purpose</p> | <p>Key Vocabulary:</p> <p>diet</p> <p>balanced diet</p> <p>hygiene</p> <p>healthy</p> <p>slice</p> <p>food groups</p> <p>bridge/claw grip</p> <p>protein</p> <p>target audience</p> <p>fruits and vegetables</p> <p>evaluate/evaluation</p> <p>dairy</p> <p>strengths</p> <p>carbohydrates</p> <p>improvements</p> <p>oils and spreads</p> <p>ingredients</p> | <p>Key Vocabulary:</p> <p>decorate</p> <p>fabric</p> <p>sew</p> <p>running stitch</p> <p>knot</p> <p>template</p> <p>purpose</p> <p>target audience</p> <p>strengths/improvements</p> <p>evaluate</p> |
| <p>Resources:</p> <ul style="list-style-type: none"> Cardboard Playdough Plain paper Masking tape A4 paper Pipe cleaners Goldilocks and the three bears story Plastic/paper straws Ziplock food bags | <p>Resources:</p> <ul style="list-style-type: none"> 'Change4Life Food scanner app' on iPads Cocktail sticks Knives Chopping boards Peelers | <p>Resources:</p> <ul style="list-style-type: none"> fabric glue needle running stitch template fabric knot needle threader sew thread |

Cross-Curricular Links:

Autumn: Maths: Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces. Identify 2D shapes on the surface of 3D shapes. Compare and sort common 2D and 3D shapes and everyday objects.

Maths: Compare and order lengths

Literacy – Become familiar with key stories, fairy stories and traditional tales, retelling them and considering their particular characteristics

Spring: Maths: Compare and order lengths, mass, volume/capacity and record the results using >, < and =.

Science: describe the importance of humans eating the right amounts of different types of food

Summer: N/A

Enrichment:

Autumn: N/A

Spring: Food tasting and use of the cookery room

Summer: N/A

Key DT Skills which can be revisited throughout other Subject Areas:

- Measure, cut and score with some accuracy
- Use hand tools safely and appropriately
- Assemble, join and combine materials in order to make a product

National Curriculum: By the end of KS1, pupils will be able to:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria