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| <b>Knowledge Organiser</b> | <b>Subject: Design and Technology</b> | <b>Topic: Playgrounds</b> | <b>Year: 1</b> |
|----------------------------|---------------------------------------|---------------------------|----------------|

| <p><b><u>Key Knowledge</u></b><br/> <b><u>Technical knowledge I have already learnt about structures</u></b></p> <p>‘Different structures are used for different purposes.</p> <ul style="list-style-type: none"> <li>• Shapes and structures with wide, flat bases or legs are the most stable.</li> <li>• Understanding the terminology tie, strut, span and beam.</li> <li>• The difference between frame and shell structures.</li> <li>• Architects consider light, shadow and patterns when designing.</li> <li>• Considering effective and ineffective designs.</li> <li>• Finding different ways to reinforce structures.</li> </ul>   | <p><b><u>Key Learning</u></b></p> <p><b>What are Playgrounds?</b><br/>         Playgrounds are a special area where children can play, have fun, and be active outside. They are like a big adventure land with equipment and spaces specifically designed for kids to enjoy.</p> <p><b>Components of Playgrounds:</b></p> <ul style="list-style-type: none"> <li>• <b>Swings:</b> Swings are seats attached to chains or ropes that move back and forth when pushed.</li> <li>• <b>Slides:</b> Slides are sloped ramps that children can slide down to the ground.</li> <li>• <b>Climbing Frames:</b> Climbing frames are structures with bars, ropes, and platforms for children to climb on.</li> <li>• <b>Roundabouts:</b> Roundabouts are spinning platforms where children can stand and push to make it spin around.</li> </ul> <p><b>Examples of Playgrounds Through History</b></p> <ol style="list-style-type: none"> <li>1. <b>Victorian Era Playgrounds:</b> In the Victorian times, playgrounds were basic, often just an empty field or a small area with simple equipment like swings and see-saws. Children played freely and creatively, sometimes using objects like stones and branches for games.</li> <li>2. <b>20th Century Playgrounds:</b> As we moved into the 20th century, with improvements in technology and safety regulations, playgrounds started to have more structured equipment like slides, climbing frames, and roundabouts. These playgrounds were designed to provide safe and supervised play experiences.</li> <li>3. <b>Modern Playgrounds:</b> In more recent times, there's been a big focus on creating inclusive and stimulating playgrounds that cater to children of all abilities. These playgrounds often have unique designs, sensory elements, and interactive features to encourage imaginative play.</li> </ol> | <p><b><u>Disciplinary Skills</u></b></p> <ul style="list-style-type: none"> <li>• Generate ideas through brainstorming and identify a purpose for their product.</li> <li>• Draw up a specification for their design.</li> <li>• Select appropriate materials, tools and techniques.</li> <li>• Use skills in using different tools and equipment safely and accurately.</li> <li>• Evaluate a product against the original design specification.</li> </ul> <table border="1"> <thead> <tr> <th colspan="3"><b>Key Concepts</b></th> </tr> </thead> <tbody> <tr> <td> <b>Design-</b><br/>                     Design purposeful, functional, appealing products for themselves and other users based on design criteria.<br/>                     Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.                 </td><td> <b>Make-</b><br/>                     Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]<br/>                     Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.                 </td><td> <b>Evaluate –</b><br/>                     Explore and evaluate a range of existing products.<br/>                     Evaluate their ideas and products against design criteria.                 </td></tr> </tbody> </table> | <b>Key Concepts</b> |  |  | <b>Design-</b><br>Design purposeful, functional, appealing products for themselves and other users based on design criteria.<br>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. | <b>Make-</b><br>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]<br>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. | <b>Evaluate –</b><br>Explore and evaluate a range of existing products.<br>Evaluate their ideas and products against design criteria. |
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| Key Vocabulary |                                                                                            |
|----------------|--------------------------------------------------------------------------------------------|
| Apparatus      | Equipment designed for recreation and play, such as see-saws and swings.                   |
| Modify         | To change something in order to improve or fix it.                                         |
| Join           | A place or line where two or more things are connected or fastened together.               |
| Construct      | Build or make (something, typically a building, road, or machine).                         |
| Mark out       | To measure and mark where a piece of material needs to be cut or shaped.                   |
| Balance        | An even distribution of weight enabling someone or something to remain upright and steady. |



There are many types of apparatus in a playground such as monkey bars, tunnels, slides, swings, see-saws and slides. What is your favourite?



The first children's playground was built in a park in Manchester, UK, in 1859

| Linking Thinking Across Our Learning Journey |                             |                               |                                  |                                               |                     |                                                      |
|----------------------------------------------|-----------------------------|-------------------------------|----------------------------------|-----------------------------------------------|---------------------|------------------------------------------------------|
| Early Years                                  | Year One                    | Year Two                      | Year Three                       | Year Four                                     | Year Five           | Year Six                                             |
| Once upon a time-<br>Building structures     | Playgrounds –<br>Structures | Carnival hats -<br>Structures | ROH Stage design –<br>Structures | Light up signs-<br>Constructing/<br>designing | Bridges- Structures | African instruments/<br>Fairgrounds-<br>Constructing |