








## Knowledge Organiser

**Year: 4**

**Subject: Design and Technology**

**Unit: Pencil cases.**

| Overview   |  |   |
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| <p>In this unit the children will learn about making pencil cases. They will look at some shop bought cases and investigate how they are made. They will learn some new hand-sewing techniques and how to fasten material together using buttons. They will learn how to make their pencil cases more attractive using embellishments. The children will design, make and evaluate their own pencil case.</p>  |  |   |
| What should I already know?  | Vocabulary:  |   |
| <p><b>Design</b></p> <ul style="list-style-type: none"> <li>Can discuss and assess how functional and existing design is - Christmas stockings:-               <ul style="list-style-type: none"> <li>Can it hold presents?</li> <li>Does it look attractive?</li> <li>Can it hang (Extension)?</li> <li>Which do you prefer and why?</li> </ul> </li> <li>Can apply what they know to create a design for an attractive seasonal stocking.</li> <li>Create an accurate labelled diagram</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>Can follow their design to make a seasonal stocking that looks appealing and holds a present</li> <li>Be able to use running stitch, back stitch and overstretch to make a product.</li> <li>Can use finishing techniques like embroidery and applique</li> <li>Can sew a mixture of buttons, beads, sequins and ribbons onto fabric accurately</li> </ul> <p><b>Working with tools</b></p> <ul style="list-style-type: none"> <li>To thread a needle and secure the thread with a knot.</li> <li>Can join two pieces of material using a stitch (overstretch, running stitch and back stitch)</li> <li>Measure and cut out using centimetres</li> <li>Can select the most appropriate materials, tools and techniques to use and can use them safety</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>Recognise what has gone well, but suggest further improvements for the finished article</li> <li>Suggest which elements they would do better in the future</li> <li>Can assess how well their product works in relation to the purpose</li> </ul> <p><b>Technical Knowledge</b></p> <ul style="list-style-type: none"> <li>To know that a backstitch is a method of sewing with overlapping stitches to form a solid line.</li> </ul> | <p>Running stitch</p> <p>Back stitch</p> <p>Whip stitch</p> <p>Embellish</p> <p>Applique</p> <p>Felt</p> <p>Transparent</p> <p>Opaque</p> <p>Fasten</p> <p>Zip</p> | <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <p>Make more attractive by adding decorations.</p> <p>Pieces of material of fabric are sewn onto a larger piece of fabric to make a pattern or design.</p> <p>A fabric that is made by rolling and pressing wool.</p> <p>Can be seen through</p> <p>Cannot be seen through</p> <p>To close/do something up securely.</p> <div style="text-align: center;">  </div> |

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|--|--|---|
| <ul style="list-style-type: none"> <li>• To know that an over stitch is a stitch made over an edge.</li> <li>• To know that applique is pieces of fabric sewn on to a larger piece to form a picture or pattern</li> <li>• To know that embroidery is decorating fabric using stitches to apply thread or yarn to a piece of material</li> </ul>   | <p>Button</p>                                |    |
| <p>What will I know by the end of the unit?</p>  | <p>Velcro</p>                                |    |
| <p><b>Design</b></p> <ul style="list-style-type: none"> <li>• Can identify the features of pencil cases: - <ul style="list-style-type: none"> <li>○ Shape</li> <li>○ Material it has been made from</li> <li>○ How it has been put together</li> <li>○ How it opens and closes</li> </ul> </li> <li>• To know that pencil cases can be made from lots of different materials, including fabric, wood, leather, metal and plastic.</li> <li>• Can design a pencil case for a particular purpose (e.g., someone they know, for a particular subject/job)?</li> <li>• Can create a detailed plan with relevant drawing and labels, including the materials they will use.</li> <li>• Can identify the sequence of steps needed to make their pencil case.</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>• Can join two pieces of fabric together using a backstitch, running stitch and whip stitch</li> <li>• Can follow their design to make a pencil case using securely sewn: - <ul style="list-style-type: none"> <li>○ seams,</li> <li>○ fastenings (buttons, poppers, toggles)</li> <li>○ Embellishments (buttons, beads and sequins)</li> </ul> </li> <li>• Can use the whip stitch to attach ribbons and fabric offcuts to felt</li> </ul> <p><b>Working with tools</b></p> <ul style="list-style-type: none"> <li>• Can thread a needle and secure the thread with a knot.</li> <li>• Can measure in cm, cut and assemble accurately</li> <li>• Can use equipment and tools with increased accuracy and safety e.g.: - needles, pins and scissors.</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>• Can investigate and analyse a range of existing products as a source of ideas.</li> <li>• Can explain what has gone well and how their product could be improved.</li> <li>• Can identify problems faced and talk through how they were overcome.</li> </ul> | <p>Popper</p> <p>Button hole</p> <p>Flap</p> |  <p>The space the button is pushed through</p> <p>A flat piece of material that is attached on one side and covers an opening.</p> |

- Can assess how well their product works in relation to the design criteria and the intended purpose:
  - Does your pencil case look like your design?
  - Does your pencil case hold pencils securely?
  - Are your stitches strong and neat?

### Technical Knowledge

- To know that fabric pencil cases can be fastened in different ways: -
  - Zip (most common)
  - Buttons
  - Velcro
  - Poppers
  - Lids and hinges (closed with a catch)
- Know that a zip is difficult to secure without a sewing machine.
- Know that there are different stitches that are used to join fabric together: -
  - Backstitch - a line of overlapping stitches
  - Running stitch - a simple stitch consisting of a line of small even that do not overlap.
  - Whip stitch - a line of parallel line stitches that often goes around the edge.
- Know that the backstitch gives the most secure join
- Know that there are different ways of adding embellishments to fabric: -
  - Buttons (practical and embellishment),
  - Appliqué (pieces of material are sewn onto a larger piece to create a picture or pattern)
  - Beads, ribbons, sequins (to add detail and decoration)
- Embellishment can be attached to fabric by sewing or sticking them on using glue.
- Sewing is a much more secure way of adding embellishments.

