

**ABOUT THE UNIT**

In this unit, children create fabric from thread, incorporating a design of their own. They have the opportunity to develop their understanding of strong structures as they make their weaving frames, practicing accurate measuring and cutting. The woven panel they create is made using equipment (weaving frame and bodkin) that they have made (and in the case of the bodkin, also designed) themselves.

**PRIOR LEARNING**

It is helpful if the children have:

- learnt ways of showing their design ideas on paper
- learnt how to handle tools safely

**VOCABULARY**

In this unit, children have opportunities to use words and phrases relating to:

- designing *eg sequence, annotated diagram, sketch, decision, choice, prototype, model, communicate*
- making *eg shape, assemble, accurate, saw, mark out*
- knowledge and understanding
  - names of tools and equipment
  - words to describe threads and fabrics

**RESOURCES**

- lengths of 8mm x 8mm wood
- selection of types of bodkins
- selection of types and colours of wool
- workmate benches
- saws, sand paper, rulers

**EXPECTATIONS****at the end of this unit**

*most children will:*

have developed their skills in working with textiles and will have designed and made a woven panel for inclusion in a gift; have measured, marked out and cut accurately; have selected and used materials with suitable properties for a given task; have included in their designs drawings showing several alternative bodkin ideas; have followed an order of work and have chosen equipment appropriately; have been able to evaluate critically both the function and the appearance of the bodkin against the original specifications; have used appropriate vocabulary in talking about materials

*some children will not have made so much progress and will:*

have used given techniques and simple patterns/templates when making their weaving frame; have used tools carefully and safely, with appropriate safety equipment; after discussion with the teacher and/or others, have produced one workable bodkin design; have developed limited skills in working with textiles and will have required support in designing and making their woven panel;

*some children will have progressed further and will:*

have evaluated several ideas and drawn up a specification to inform their design; have produced annotated diagrams showing several alternative bodkin ideas; have worked independently and systematically to design and make a woven panel and bodkins of high quality; have identified in their evaluation why they made changes to their design as it developed;

LEARNING OBJECTIVES CHILDREN SHOULD LEARN	POSSIBLE TEACHING ACTIVITIES	LEARNING OUTCOMES CHILDREN	POINTS TO NOTE
<b>INVESTIGATIVE, DISASSEMBLY AND EVALUATIVE ACTIVITIES (IDEAs)</b>			<p><b>Links to this unit</b>  <b>Design and technology:</b> making picture frames in Y3  <b>Science:</b> materials  <b>Mathematics:</b> accurate measurement and observation skills</p>
<ul style="list-style-type: none"> <li>• that there are different ways of constructing fabrics and this gives them different properties</li> <li>• to use an appropriate vocabulary to describe fabrics</li> </ul>	<ul style="list-style-type: none"> <li>∇ Ask children to examine and disassemble samples of knitted and woven fabrics.</li> <li>∇ Provide hand lenses to aid and encourage close observation of detail.</li> <li>∇ Ask children to compare the way different fabrics stretch (woven fabrics usually stretch more across the weave than along it, because the warp threads need to be inelastic).</li> <li>∇ Demonstrate the effect of a cut or tear in woven and knitted fabric.</li> <li>∇ Demonstrate and discuss basic knitting and weaving</li> </ul> <hr/> <p>∇ essential activities                      ∅ optional activities                      ⊕ assignment stages (all are essential)</p>	<ul style="list-style-type: none"> <li>• can describe a range of features of a fabric</li> <li>• can tell which of their clothes are woven and which are knitted</li> </ul>	

<b>LEARNING OBJECTIVES</b> CHILDREN SHOULD LEARN	<b>POSSIBLE TEACHING ACTIVITIES</b>	<b>LEARNING OUTCOMES</b> CHILDREN	<b>POINTS TO NOTE (cont.)</b>
<b>FOCUSED PRACTICAL TASKS (FPTs)</b>			
<ul style="list-style-type: none"> <li>• to measure and mark out accurately</li> <li>• to use tools for cutting safely and effectively</li> <li>• to follow instructions</li> <li>• to join and combine materials accurately</li> <li>• how to use a construction guide</li> <li>• how to weave neatly</li> <li>• how to introduce new threads/colours to create design in a woven panel</li> </ul>	<ul style="list-style-type: none"> <li>▽ Show children how to make a weaving frame</li> <li>▽ Ask children to mark off 2 x 15 cm and 2 x 14 cm lengths on a 60 cm length of 8 mm square section softwood.</li> <li>▽ Ask children to cut the 4 pieces. Remind the children of safe practice when using a saw. Children will use eye protection. Revise use of bench hook and junior hacksaw. Emphasise correct sawgrip, with index finger along side of saw to aid control of direction; opposite foot to sawing hand placed forward, same foot as hand back; head in line with saw blade, to enable sighting of cutting direction, and help keep the saw vertical; make initial groove by drawing the saw towards you several times.</li> <li>▽ Ask children to mark positions of warp thread grooves on one edge of each of the 15 cm lengths of softwood using a template.</li> <li>▽ Ask children to make the grooves using a hacksaw - the grooves should be just deep enough to hold the warp threads in position – ensuring that the saw blade runs horizontally so that the grooves are the same depth right across the wood.</li> <li>▽ Ask children to mark out 4 x 2.5 cm squares on a strip of stiff card. Divide each square along one diagonal into 2 triangles. Cut out the triangles.</li> <li>▽ Ask children to assemble the weaving frame as shown in a diagram provided. Use squared paper to position the pieces prior to fixing card triangles to one side with PVA adhesive. Allow to set. Fix triangles to the other side.</li> <li>▽ Ask children to attach warp thread to weaving frame, ensuring that it is fairly tight.</li> </ul> <hr style="width: 50%; margin-left: 0;"/> <p>                     ▽ essential activities                      ⊘ optional activities                      ⊕ assignment stages (all are essential)                 </p>	<ul style="list-style-type: none"> <li>• measure accurately when marking out</li> <li>• follow safe procedures for use of sharp tools to ensure safety and accurate cutting</li> <li>• construct an accurately made weaving frame</li> <li>• produce a neat woven panel</li> </ul>	

LEARNING OBJECTIVES CHILDREN SHOULD LEARN	POSSIBLE TEACHING ACTIVITIES	LEARNING OUTCOMES CHILDREN	POINTS TO NOTE (cont.)
<b>FOCUSED PRACTICAL TASKS (cont.)</b>			
	<ul style="list-style-type: none"> <li>∇ Weave a striped panel using a plastic bodkin with lengths of different colours of weft thread. Weave between the warp threads at the front of the frame only.</li> <li>∇ N.B. For neatness - start each new thread near the centre of the panel, and finish lengths of thread in a similar position to avoid loose ends being visible at the "edges" of the finished panel. Try not to pull the weft thread tight at the end of each row. This helps to prevent the panel from narrowing.</li> <li>∇ When complete, remove the panel by cutting through the warp threads half way down the back of the frame. Tie pairs of warp threads in knots, reaching the ends of the weaving.</li> <li>∇ Tidy up loose ends of warp and weft threads.</li> </ul>		
<hr style="width: 30%; margin-left: auto; margin-right: 0;"/> <p>∇ essential activities                      ∅ optional activities                      ⊕ assignment stages (all are essential)</p>			

