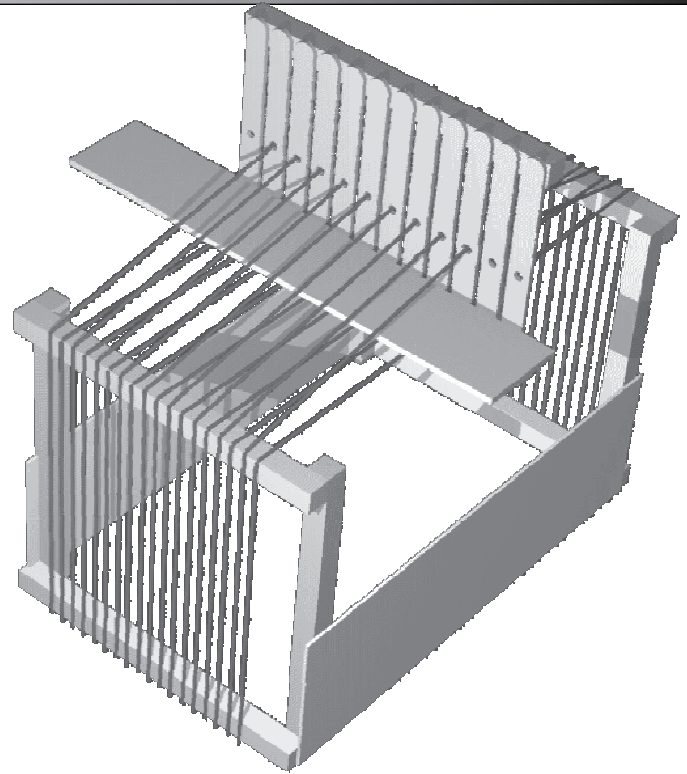
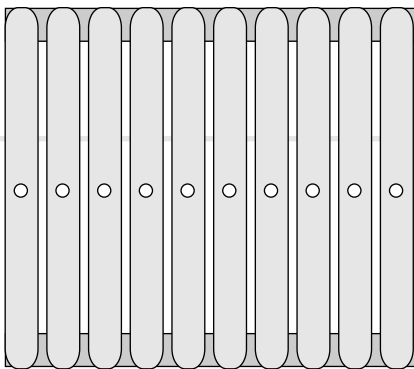


Any frame can serve as a frame for a loom. An old picture frame works well, but here we have a purpose made loom that can be used to weave strips of cloth. The important extra equipment is the HEDDLE. This is a relatively simple device that allows the weft to be woven 'over-and-under' the warp threads with ease.



You may recognise the frame of our loom, it's very like one of the frames illustrated on the page dealing with cuboid frames. Any system you choose is likely to work, as long as it's rigid. The size isn't very important, it depends somewhat on the width of the cloth you want to weave. A reasonable size would be something like: length 30cm: width 20cm: and height 15cm. Make two end frames and connect them using either wood or thick card, (perhaps stiffened?).



You can buy plastic, metal and wire heddles; they usually have very fine slots and holes. They can take many more warp threads than any we might make.

Our heddle is made from lolly sticks. Each lolly stick has a hole in the centre. These may be made with a heavy duty hole punch or drilled. This is one time when drilling is better - if you have a drill smaller than 5mm diameter. A hole about 3mm diameter would allow more wood to remain across the width of the lolly stick so it will keep more of its strength. If the drill leaves any rough bits then sandpaper them off. The heddle must be smooth.

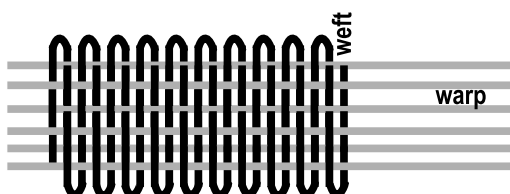
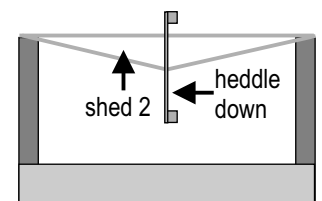
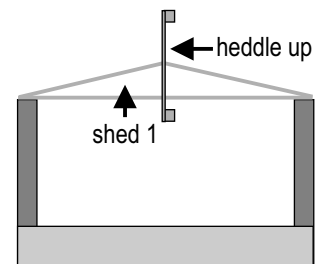
Glue the lolly sticks to two lengths of wood, leaving a narrow gap (2mm) between them. The number of lolly sticks you use is up to you, but don't end up with the heddle wider than the frame. You will be able to weave cloth with double the number of warp threads than you have lolly sticks in your heddle.

WEAVING

First thing to do is to tie the warp. These are the threads that run from one end of the cloth to the other. The picture at the top of the page shows the warp in place (*though there aren't any knots!*) If we are going to weave a short panel of cloth we can tie our warp threads to one end of our frame, pass them through the heddle and tie them to the other end of the frame. They should be pulled quite tight.

Now when they pass through the heddle the first one goes through the first hole and the second one goes through the gap between the sticks. Then, next hole - next gap - next hole - and so on until all the warp is threaded.

Now, when you lift the heddle, you should find that it lifts alternate warp threads and a triangular space is created between those lifted and those that aren't. This is the SHED and if you pass a length of thread or wood through this space you will find that it has gone over and under alternate warp threads. Now press the heddle down and a new shed appears. Pass the wool back through the shed and you will discover that it has passed under the warp threads that it passed over the first time. Keep going. First lifting the heddle to make a shed, then lowering to make the other. Each time pass the wool (called the WEFT) through the shed, and the cloth will grow.



To make it easier to handle the weft wool you can wind it onto a shuttle, which you can then pass through the shed. Why not make a shuttle from thick card (or even a wooden spatula).