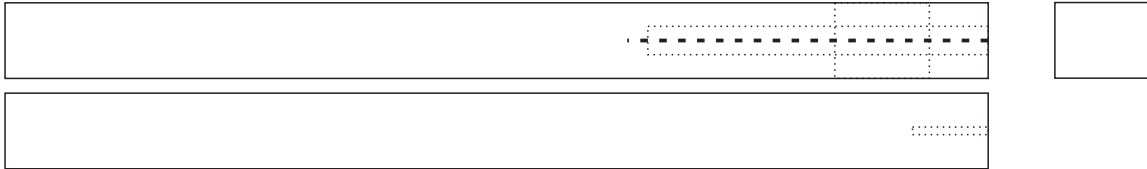




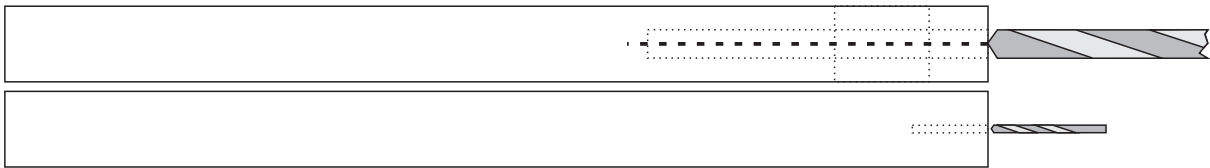
## Compass with Pencil

A Bruce Wood Design

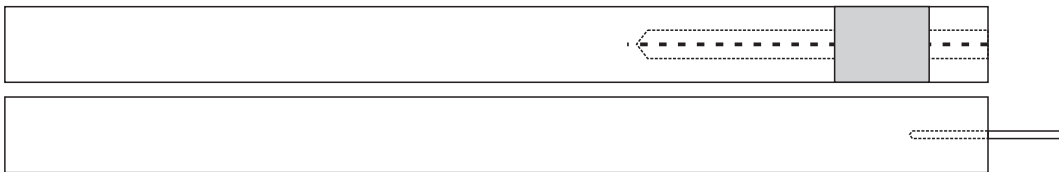
Start with a length of 20 x 10mm straight-grained wood 550mm long. Half a pencil, one 40mm nail and two 30mm bolts with washers and wing nuts. Both bolts may be 4mm diameter or one may be up to 6mm dia. Cut a 25mm block from one end of the wood. Then cut the long piece in half to get two equal pieces about 260mm long.



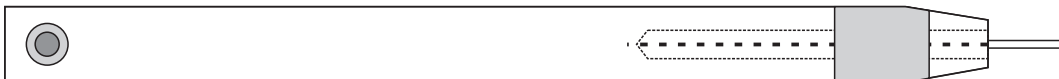
Drill a 7.5mm diameter hole into the centre of the end that is to hold the pencil. Make this hole 90mm deep if possible. Drill a hole the same diameter as your nail and about 20mm into the end of the second piece of wood.



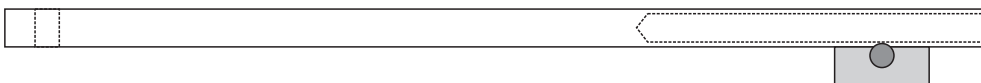
Glue the small block onto the pencil holding leg about 15mm back from the end of the leg. Glue the nail into the hole in the end of the pointer leg.



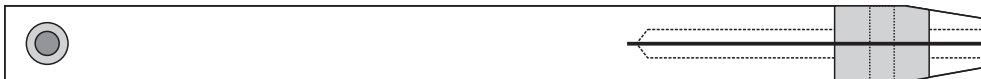
Put the pencil leg exactly on top of the pencil leg. Drill a hole through both pieces for one of your bolts. The larger one if you have a choice. While the two pieces of wood are together cut the corners off the pencil and pointer ends.



Turn the pencil leg onto one side. Drill a hole for the second bolt through the glued-on block as close as possible to the hole drilled to hold the pencil.



Make a saw cut through the centre of the pencil leg and the glued-on block for the length of the drilled pencil hole.



Sharpen the nail end protruding from the pointer leg.



Sand and apply a finish. Assemble the compass.

