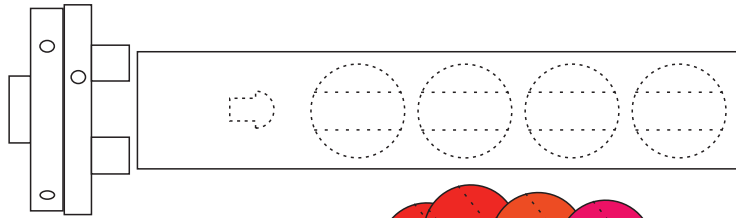
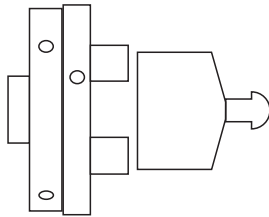
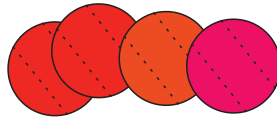


Michelin Doll

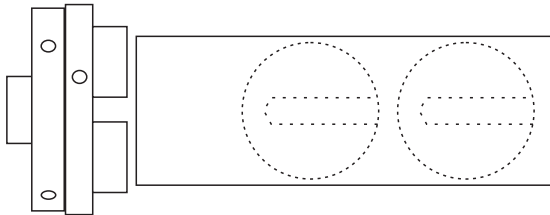
A doll whose shape has similarities to the Michelin Tyre man - mascot of the Michelin Tyre Co. Before starting woodturning get about 300mm of 2mm bungee, 100mm of soft 3mm string and a 50 x 40mm piece of 1mm thick felt. The beads may be made on the lathe or purchased. Wood sizes are detailed further into this plan.



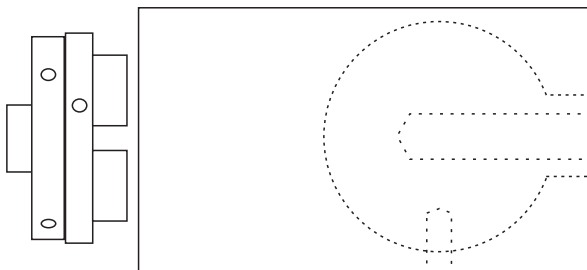
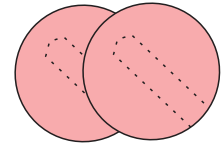
To make beads for the vertebrae of the doll start with wood 15mm square and 80mm long. Make four 12mm diameter beads with a central 5mm hole though each. Or big enough for two thicknesses of the bungee to move freely through.



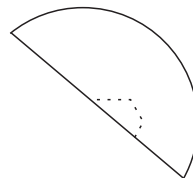
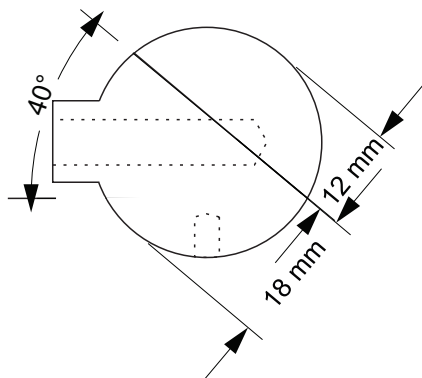
From the stub of the bead-making wood turn a nose for the doll. 5mm diameter with a 3mm diameter stem.



To make beads for the hands start with wood 20mm square and 70mm long. Make two 18mm beads with a central 3mm hole (or big enough for the soft string listed above) that does not go completely through.

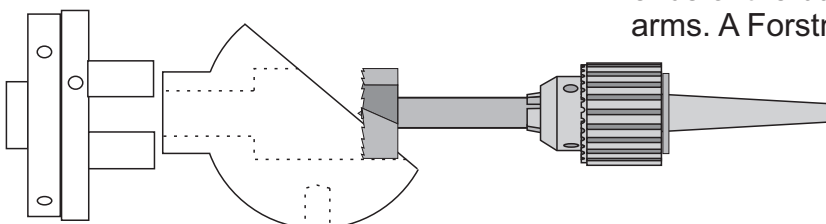


To make the head, start with wood 35mm square and 60mm long. Drill a 6mm hole 25mm into the head. Turn the neck to 11mm diameter and 6mm long. Turn the head to be a 30mm sphere. Check the grain around the head and then drill a 3mm hole for the nose at the best place to suit the grain pattern.

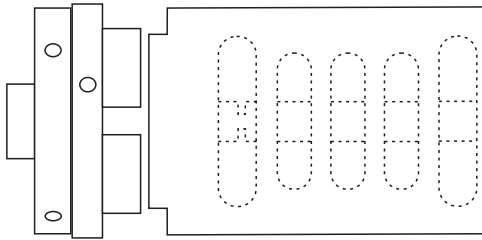


Use a thin saw to cut the top $\frac{3}{5}$ ^{ths} off the head at an angle of about 40° from horizontal. Set the top of the head aside.

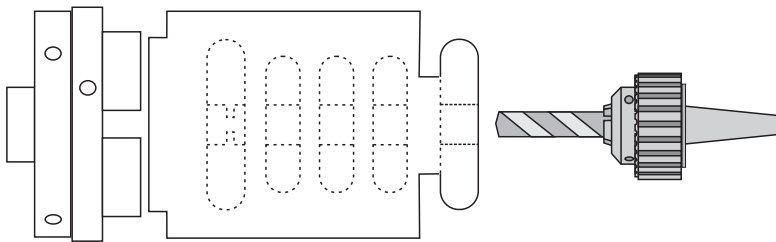
Hold the head in a chuck. Drill an 11 or 12mm dia cavity to accommodate the ends of the bungy cord and string for the arms. A Forstner bit is recommended.



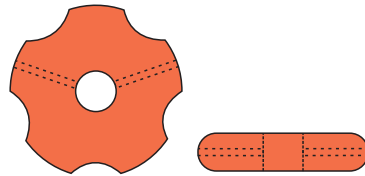
Michelin Doll p2



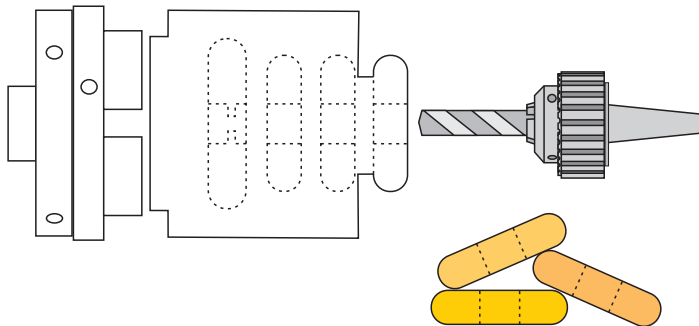
For the body of the doll start with wood that is 60mm square and 90mm long. Mount this in a chuck and turn it round.



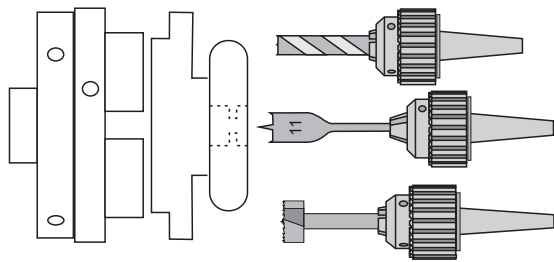
Drill an 11mm hole at least 14mm into the end of the wood. Turn the wood to make a disk 10mm thick and 45mm diameter. Sand all surfaces, including the edge of the drilled hole.



While it is still part of the block of wood give the disk some shape. Drill two 3mm holes through to the centre hole for the arms. Sand all of this and then part it off. Hand sand the other side, including the edge of the drilled central hole.



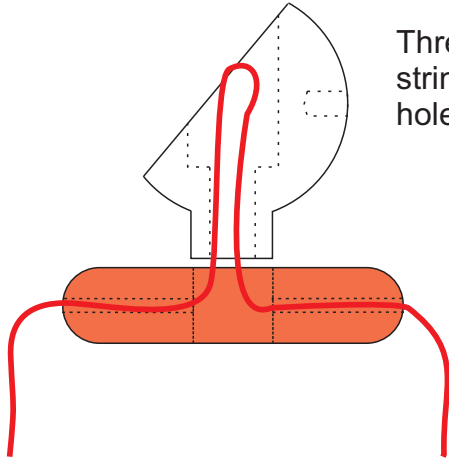
Drill an 11mm hole at least 14mm into the end of the wood. Turn the wood to make a disk 9mm thick and 36mm diameter. Sand this, including the edge of the drilled hole, and then part it off. Hand sand the other side, including the edge of the drilled hole. Repeat this process to make two more disks of this size.



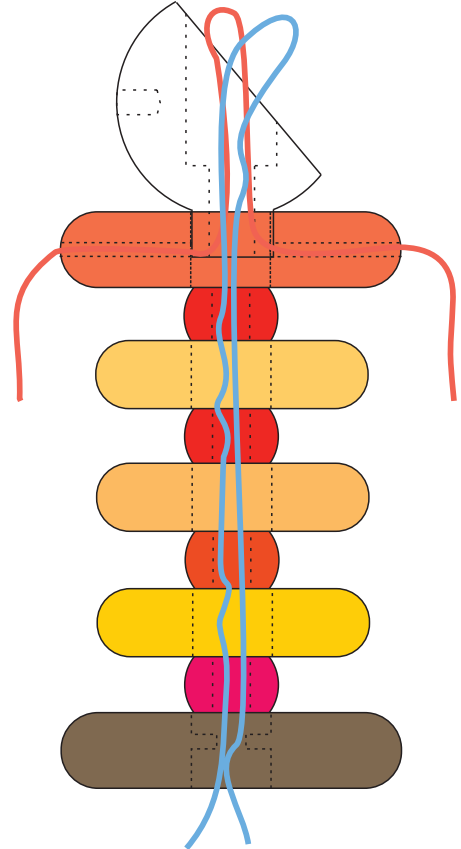
Dress the end of the wood and then drill a flat-bottomed 11mm hole just 4mm into the wood. A Brad Point or Spade bit or Forstner bit is recommended. Drill a 6mm dia hole a further 20mm into the centre of the wood. Turn the end disk to 53mm diameter and 17mm thick. Sand and part off. On the other side of this disk drill a flat-bottomed 11 or 12mm dia hole about 10mm into the wood.

Michelin Doll p3

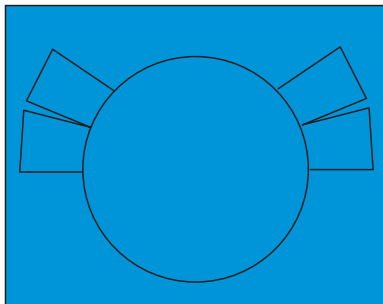
Paint the parts colours of your choice. The head should be a loose fit into the collar. Cut two pieces of stiff wire or small nail to 10mm long.



Thread the soft 3mm string through the arm holes and into the head.



Check that all the body parts fit together nicely. Fold the bungee in half and feed it up through the central hole. At the top put one piece of wire through the bungee and arm string loop. Pull both firmly down into the head. Pull the bungee some distance out from the bottom and tie each piece around the second piece of wire close to the base of the doll. Pull the bottom piece down a few times to equal up the tension on the two sides of the bungee. You may have to retie the bungee to get it right. Now make a small wooden plug to cover the knotted end of the bungee.



Cut the felt square to the diameter of the doll's head plus two pieces each side as the doll's hair. Glue this felt to the flat cut on the head then glue the head part to that. Glue the hand spheres to the ends of the hand string. Glue the nose in place. Paint on eyes and a mouth.

