

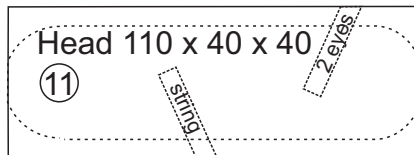
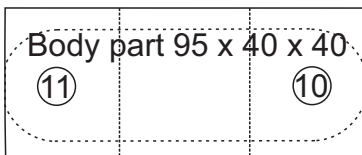
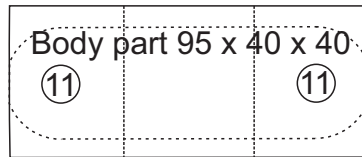
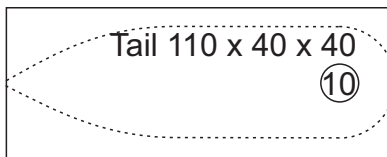
Inchworm Toy

A toy to be drawn along with a string. The offset mounting of the wheel makes the body move like an inchworm. Start with a 450mm length of 40 x 40 wood for the head, body and tail; a piece 100 x 20 x 20 for the eyes; a piece 110 x 220 x 20 to make the wheels; and a 130mm length of 10mm dowel.



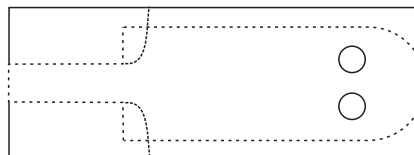
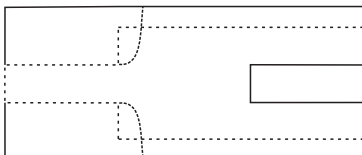
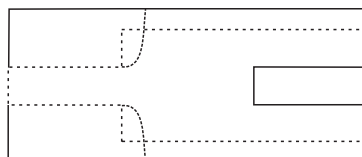
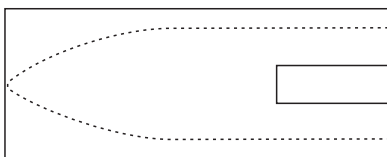
Hold the wood for the eyes in a small chuck. Turn each eye to a diameter of 14mm on a stem at least 20mm long and 7 mm diameter.

Side View

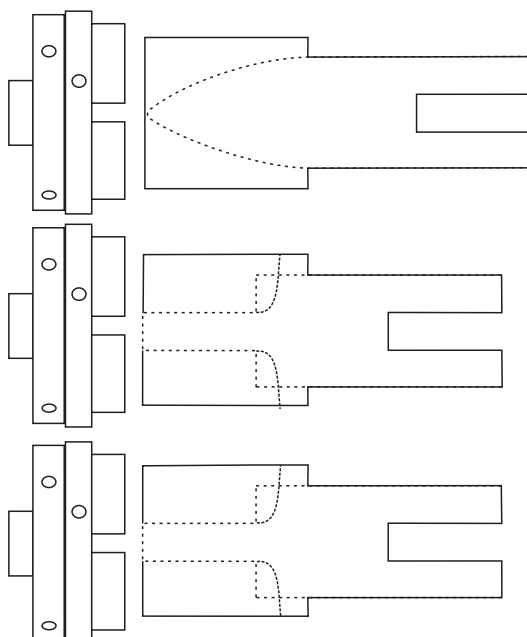
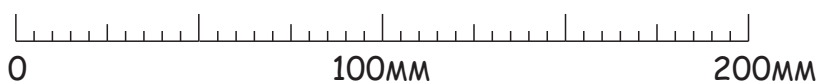


From one side of the body wood drill completely through the wood a 10mm hole where there is to be a slot, an 11mm hole where there is to be a protrusion and an 11mm hole for the wheel axle. All to be central to the width of the wood and centred 14mm from the ends. Drill two holes at an angle from the top side for the eyes and one for the pulling string.

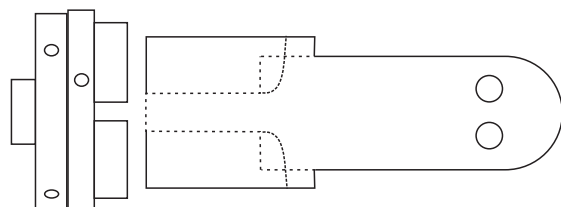
Plan View



Cut the slots, but not the protrusions.

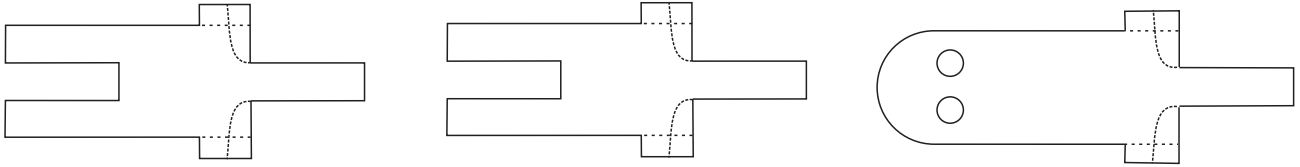


Hold each of the four body parts in a small chuck by the end that will become small later and turn the protruding end to 30mm diameter and curve the end as is appropriate to the part (As shown in the side view diagram above). Leave the centre and chuck-gripped end square. Sand the exposed end to a good finish.

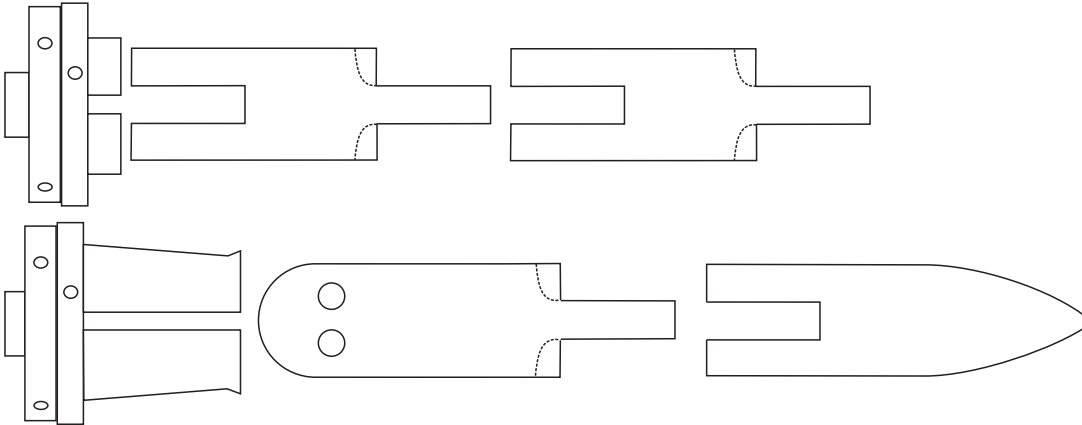


Inchworm Toy P2

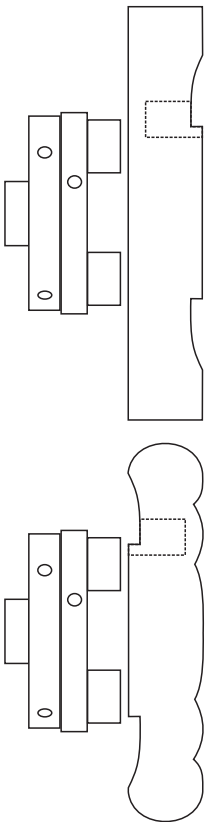
Cut the protrusions on the bandsaw. If you have a scrollsaw, cut the protrusions as curves.



Use a small chuck or deep jawed chuck or make a 30mm jam chuck to hold each of the four body parts by the turned end. Turn and sand the exposed ends of these parts.



Take the 110 x 220 x 20 piece of wood and cut it to two 110mm square pieces. Mark the centre on the side of each piece that is to be the inside face of the wheel. At a point 25mm away from the centre drill a 10mm hole 15mm into the wood. Then process each piece as follows to make the two inchworm wheels.



Mount the wood using a live centre at the centre mark on the wood and the tailstock to press it firmly against a chuck. Cut a 2mm deep spigot to hold the wood on a 50mm chuck.

Turn the wood over and grip it in a chuck. Turn the wood to 100mm diameter and then shape the rim to a nice tyre shape. Shape the face of the wood to look like a wheel but avoid cutting any wood away from the area where the 10mm hole is drilled on the inside.

Cut the 10mm dowel to be two 30mm and one 65mm piece. Join the head to one body piece and the tail to the other body piece. Glue the dowel where it is in the 10mm holes. When the glue is set, sand the protruding ends flush with the body parts.

Glue the 65mm length of dowel into one wheel. Pass the dowel through the 10mm holes in the central body parts and glue the end into the other wheel. Ensure that both wheels are in the same orientation. Glue in the eyes and pull-along string. Decorate as you please.

