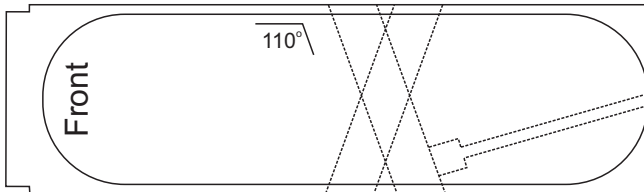


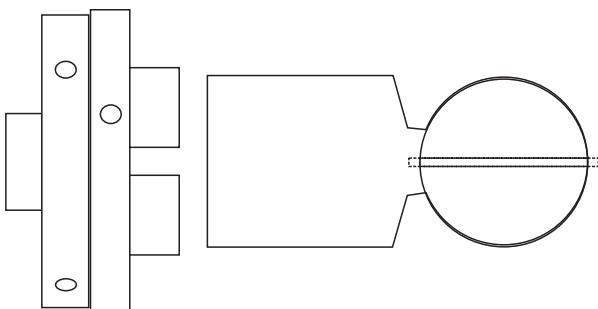
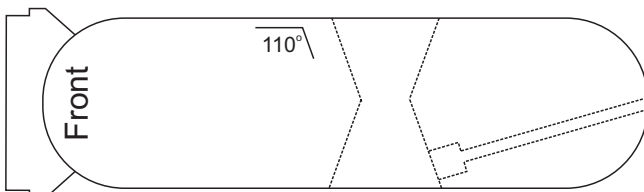
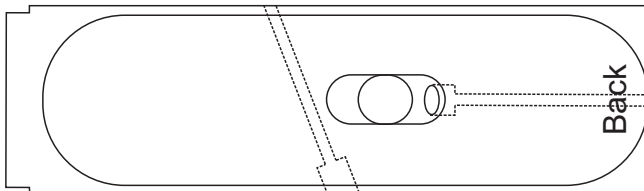
## Toy Lizard

This toy is built to replicate the sprawling gait of a lizard. The wheels are made to push the body from side to side and thus wag the tail as the lizard is pulled along.

Plan View



Side View



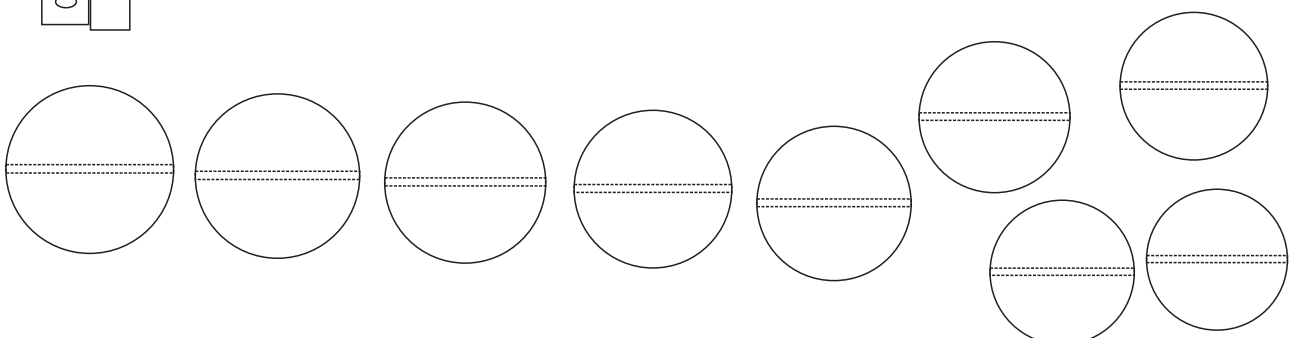
Start with wood that is 170 long and 50mm square. While the wood is square drill the cross of 13mm holes shown and then join the holes by carving to make each side an oval hole at the edges of the wood but still circular at the centre.

Drill a hole with the correct diameter for your string to attach the tail from the centre of the back end to meet up with one of the diagonal holes. Drill a larger hole where it meets the diagonal hole to accommodate a knot at the end of the string.

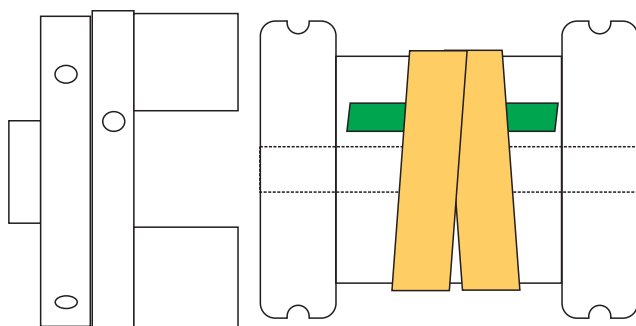
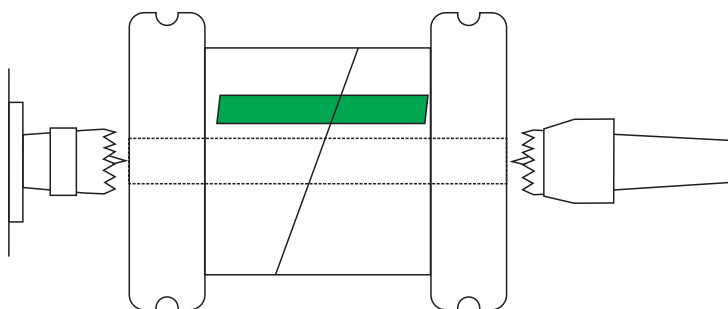
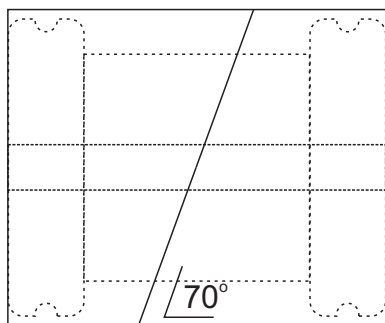
Drill a hole from just forward of centre on the top of the wood through to the underside. At the underside end of that hole drill a larger hole to accommodate a knot at the end of the string.

Mount the wood between centres. Round it off and cut a spigot on the front end. Mount it in a chuck and round it to be 45mm diameter and round off the back end of the body. If you want your lizard to have a larger head then you must keep the body at 45mm diameter for at least 40mm from the centre of the crossed holes towards the front end of the body. Part the wood off. Remount in a deep chuck to finish the front end.

Make 10 spheres for the lizard's tail. The first to be the same diameter as the body and others in diminishing sizes. Drill each one for the tail string to pass through.



## Wheels



## Toy Lizard P2

Start with a block that is 100 long and 85mm square. Drill a 12mm hole at the centre of the 85 square ends down the long axis. Cut the block in half with a diagonal cut at 70 degrees to the sides. As a temporary holder put a 100mm length of 12mm dowel in the central hole.

Use broad drive and tail centres to mount the wood on the lathe. Turn the wheels to shape and about 80mm diameter so that they can be held in 100mm jaws later. Note the groove for fitting a tyre which will make the lizard move better on smooth floors. Cut the axle between the wheels down to about 60mm diameter. Sand all these surfaces. If this wood does not have strong grain lines to assist later alignment, put a piece of tape on to show correct positioning.

To finish the outer surfaces of the wheels keep the temporary dowel in place and securely tape, or hot-melt glue, the diagonal cut. Hold the wheel block in a 100mm chuck. Sand the outer wheel surface. Reverse the block and sand that outer wheel surface. Remove the wrapping tape, glue, and temporary dowel, but not the alignment tape.

## Assembly

Paint and decorate all the parts the colours of your choice. Put the tail string through the hole from the back end of the body to the central cavity. Knot the end of the string and pull it firmly into the drilled hole. Secure it well with thick CA glue. Glue a 150mm length of 12mm dowel into one wheel and make it flush with the outer surface of the wheel. Put the body part onto the dowel. Put the other wheel onto the dowel and check that all is well. Allow a 2mm space each side of the body and glue the second wheel in place. Dress off the surplus dowel. Put the tail spheres onto the string, pull it tight and knot the end. Thread the pulling string through its hole, knot the end and pull it firmly back into the hole. Secure it well with thick CA glue.

