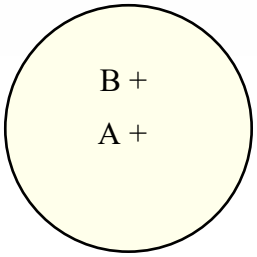
Make this

Toy Racing Car

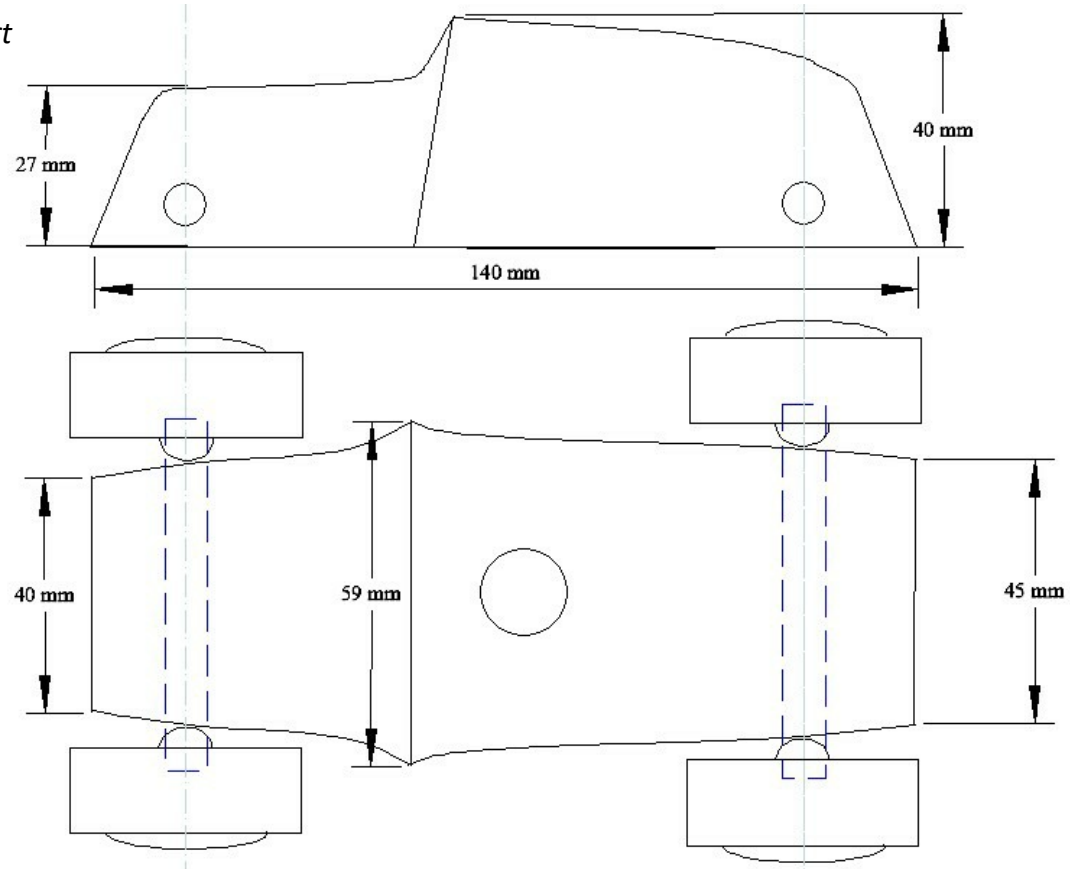
Despite the vast range of modern toys children seem to return again and again to wooden ones.
This design, which calls for some basic off centre turning, has proved very popular in our family.

Start with a piece of timber 150 mm long by 80 mm by 80 mm. Find the centre at each end and label each with the letter “A”.



At one end mark a second centre marked as ”B” 12 mm away from the first centre “A” . Now do exactly the same at the other end of the the wood. Mount the wood between centres using the centre “A’s” and turn the bonnet of the car to a cylinder. Now mount the wood using centre “B” and complete the turning.

At each end mark 2 centres 12 mm apart



John Hawkswell

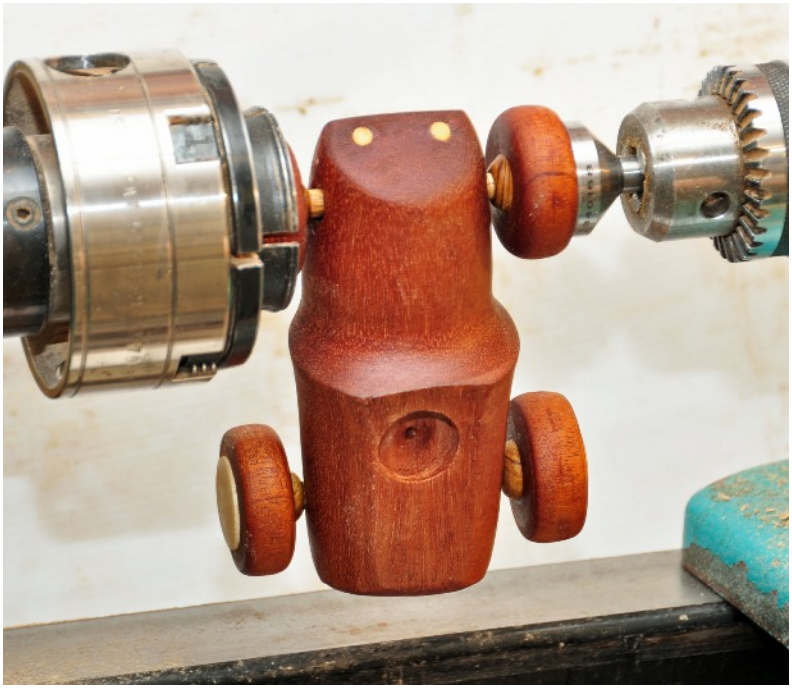
Now blend the bonnet with the rest of the car moving the timber between Centre A and B as necessary. Remove the work from the lathe and saw the wood lengthways so that the car has a flat bottom and a small flat area on the top surface of the car.

You may find it easier to make the lengthwise cut before doing any turning especially if you are using a spindle blank with a flat surface to run against the guide fence.

Drill 7 mm diameter holes through the car to take the axles and turn the axles in a suitable hardwood. Of course you can buy dowelling if preferred. Make sure the axles run freely in the car body.

The wheels are straightforward.

If you part them off from a single cylinder of wood there is a good chance of producing wheels of the exactly the same diameter (here 40 mm)without too much effort.



Drill a hole in each wheel to take the axle (5 mm diameter). This will enable you to incorporate a small shoulder on the ends of the axle so that the wheel naturally forms a right angle to the axle.

With the wheel in the chuck and using a forstner bit drill a 25 mm wide recess 4 mm deep in the wheel to take the decorative disc on the outside of the wheel.

Hardwood spacers between the wheel and the body prevent the wheels from rubbing. Sycamore "headlights" complete the front. The discs on the outside of the wheel are also in sycamore

Reverse the wheel in the chuck and form a shallow recess (2 or 3 mm deep) to take the spacers used between the wheel and car body.

Glue each wheel to the axle. Using the lathe to do this (see above) reduces the risk of wheel wobble in use.
(N.B. the lathe remains stationary during this operation)

The "driver's" spigot is a push fit in the pre-drilled hole.

It was not glued in place because my 3 year old Lewis Hamilton enjoys taking him/her in and out.

Sand and finish. Avoid finishes that have toxic chemicals. Boiled linseed oil and pure beeswax can be used successfully as here although any food safe finish could be used.