

Key spellings

- Material
- Straight
- Design
- Safety
- Goggles
- Recycled
- Colour
- Favourite
- Instructions
- Equipment
- Hole
- Apron
- Curved
- Technology
- Template

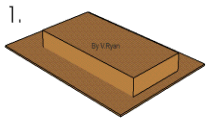


Can you spell these words and put them in a sentence?

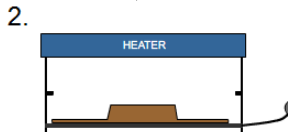
Manufacturing processes

Vacuum forming is a manufacturing process that shapes thermoplastics. This is what you are going to use to make your crazy car.

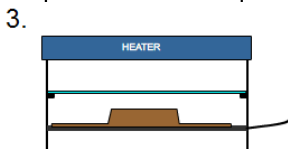
1, A mould is made.



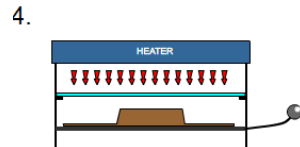
2, The mould is put in the vacuum former.



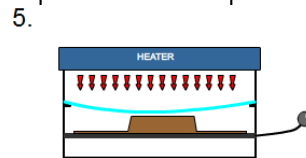
3, A sheet of plastic is clamped in place above the mould. (We are using HIPs)



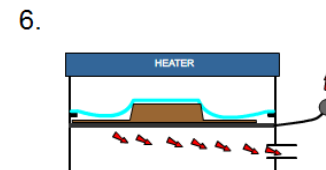
4, The heater is turned on which heats up the plastic sheet.



5, When the plastic is heated it becomes flexible.



6, When the plastic is ready the shelf that the mould is resting on is raised and the air in the vacuum former is pumped out. This makes the plastic take the shape of the mould.



Year 7 Design & Technology- Term 2

Natural wood - From trees!

Soft wood- These are **CONIFEROUS** they usually have needles instead of leaves and produce cones.

Pine



You are using pine strips to make the 'axel' of your crazy car.

These woods are usually cheaper and used for simple furniture as well as timber for building.

Hard wood- These are **DECIDUOUS** they usually have broad, flat leaves that change colour in the autumn.

Oak



These woods are usually more expensive and used for decorative furniture.

Woods

Manufactured boards

These are boards that are made from fibres /sheets of wood bonded together with adhesives (glue).

Medium-density fibre board (MDF)

This is made from wood fibres that are compressed (squashed) together with resin (glue) into a sheet.



Plywood

This is made from layers of wood (veneers) that are glued together at 90 degree angles.

You are using plywood to make the 'base' of your crazy car.



These types of wood are usually used to make flat-pack furniture (This is furniture that comes boxed and you put together yourself) as it is cheap and easy to work with.



What is the difference between natural wood and manmade board? Can you give examples of each?



What is vacuum forming? Can you explain the process?