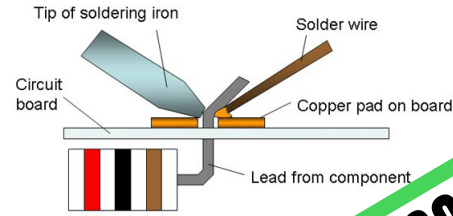


Knowledge Organiser

RESISTORS

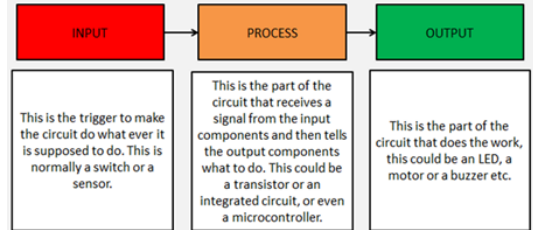
SOLDERING



CIRCUITS AND ELECTRONICS

Electronic Systems

When designing electronic systems, electrical engineers start with a block diagram called a systems diagram. Systems diagrams help the designers to work out how the electronic system will work and which parts need to be connected together.

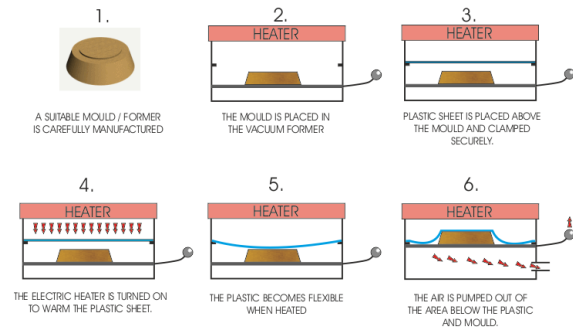


Locker Alarm Project

POLYMERS

H.I.P.S. stands for High Impact Polystyrene. It is a flexible plastic we use mainly for vacuum forming. **ACRYLIC** is much more brittle - in D&T we tend to use it much more for Laser cutting and making 3D products from flat pieces.

VACUUM FORMING



Resistor Colour Codes

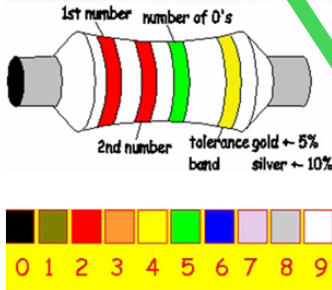
Step 1—turn the resistor so that the gold or silver tolerance band is at the right.

Step 2—Look at the first band, write down the number that the first band relates to. E.g. if its red, write down 2.

Step 3—Repeat step 2 for the second coloured band.

Step 4—Repeat step 2 for the third coloured band, except this time the band tells you the number of 0's to write down, E.g. For an orange band write 000.

Step 5—Calculate the maximum & minimum values for the resistor.



COMPONENTS And SYMBOLS

Name of component	Circuit symbol	Picture
Battery		
LED		
LDR		
Transistor		
Resistor		
Buzzer		