

1. Tools and equipment



Vice

Bench hook

Tenon saw



Plough plane

Try square

Mitre square



Solder iron

Strip heater

PVA



Pillar drill

Belt sander

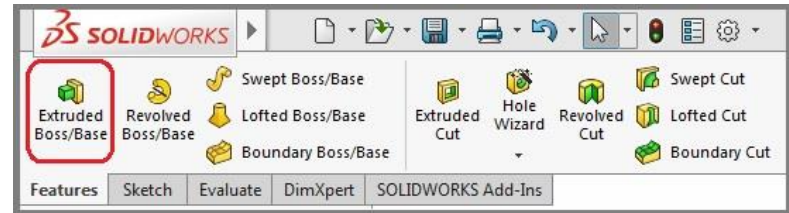
Vacuum former

2. Electronic components

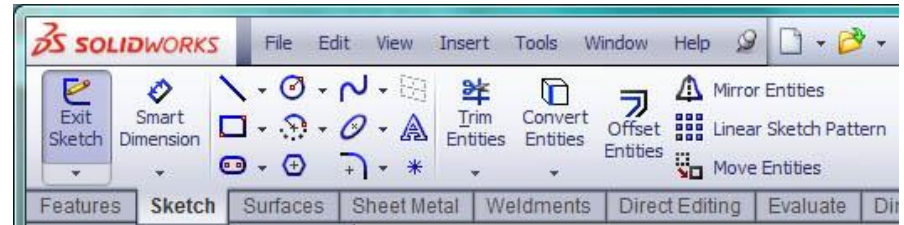
Keyword	Definition	Example
LED	Light emitting diode – Glows when electricity passes through (one direction)	Lighting
USB	Universal Serial Bus that connects a device to a 'main' computer	Cables for camera or scanner
Resistor	Restricts or limits the flow of current in a circuit	Between USB power source and LEDs
Solder	An alloy used to join electronic components on a circuit board	Joining LED to resistor

3. Solid works tools

Features tool bar



Sketch tool bar



How can I remember this information?

1. Get someone to quiz you
2. Write out 5 questions using this sheet and then answer them next day to see if you can remember them
3. Cover the keyword and guess the picture or definition

### 5. Classification of plastics

#### Thermoplastics

- Can be heated and shaped repeatedly into different products.
- Can be recycled

Acrylic, PVC, polythene, nylon, polypropylene

#### Thermosetting

- Can only be heated and shaped once into a product.
- Not recyclable

Epoxy resin, polyester resin, urea formaldehyde

### 6. Material properties

Property	Definition
Durable	To be long lasting
Malleable	To be bend and shaped
Strength	To withstand forces and breaking
Toughness	To not break or snap
Hardness	To withstand scratching or denting
Thermal	To be able to conduct or insulate heat
Electrical	To be able to conduct or insulate electricity
Ductile	To be drawn into a wire (stretched)
Density	A measure of mass per unit volume
Absorbency	The ability to take in moisture



### 7. Computer Aided Design

Advantages of CAD	Disadvantages of CAD
Range of tools available	Software can be expensive to set up
Accuracy of drawing can be improved due to the measurement tools	Training is required that can cost money and take time
Easier to modify drawing	Work can be lost if not backed up
Saves electronically so no need to physical storage	Specialist technicians may be required if there are technical problems
Can be sent to clients immediately via email	

### Facts about plastic

Plastic is made from crude oil

Plastic is not renewable meaning when oil runs out, so will plastic

Plastic comes in different stock form including granules, sheets and rods