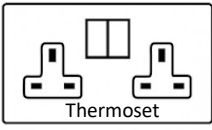
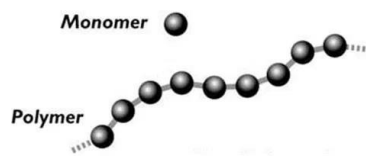


Thermosets	
Melamine Formaldehyde	
Urea Formaldehyde	
Epoxy Resin	
Polyester Resin	



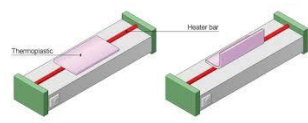
Degrades with UV



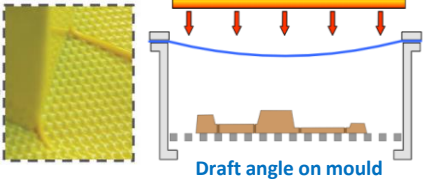
Self Finishing



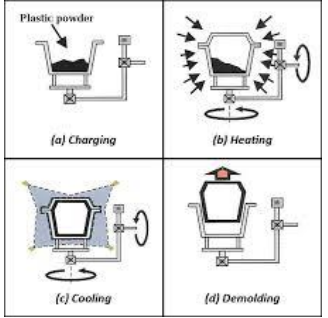
Line Bending



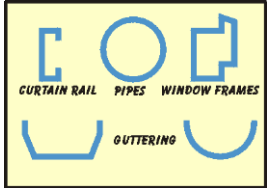
Vacuum Forming



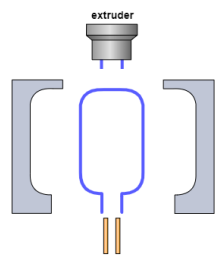
Rotational Moulding



Extrusion

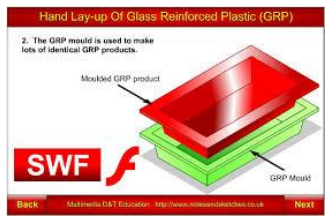


Blow Moulding

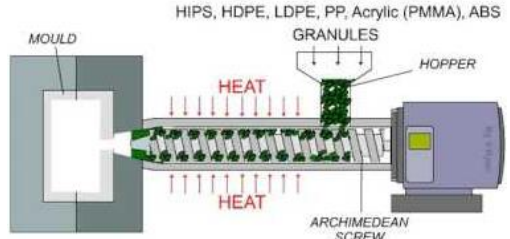


The mould is opened so the moulding can be removed.

GRP/Fibreglass



Injection Moulding

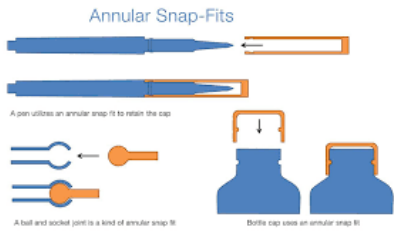


Plastics

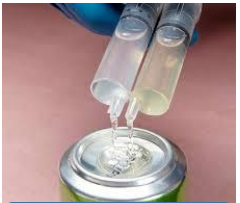
Knowledge Organiser

WJEC ENGINEERING

Plastic Joins

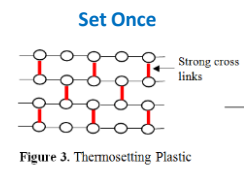


Adhesives



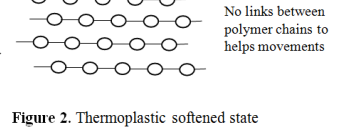
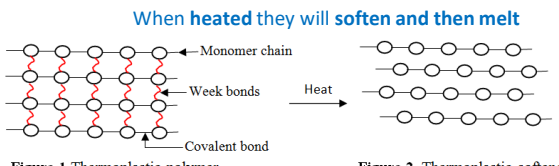
Epoxy (thermoset)

Cements (welds)



Thermoplastics

ABS	Lego / hard hats
Polythene (LDPE)	Washing-up bottles
PET	Water bottles
Acrylic	Glass substitute
Expanded Polystyrene	Protective Packaging



Thermoplastics

What do all thermoplastics have in common

Name five thermoplastics:

Name a product for each thermoplastic:

Thermosets

What do all thermosets have in common

Name four thermosets:

Name a product for each thermoset:

Joining Plastics

Can plastics be joined by both adhesives and cements?

Name a plastics adhesive

Name a plastic cement

What are the H+S hazards of this?

Blister packs are often joined by ultrasonic welding. Does this melt/fuse the two layers together or glue them?

Can pop rivets be used to join plastic sheets?

Two mark questions

What are water bottles made out of and why?

What are hard-hats made out of and why?

Why are snap fittings are so suited to injection moulded products?

Why does vacuum forming sometimes web?

Two mark questions

What are plug sockets made out of and why?

What are plastic laminated work surfaces made out of and why?

What is protective packaging made out of and why?

Knowledge Organiser

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Plastics Processes

Name seven plastics processes and a product for each:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

List the steps for injection moulding

List the steps for vacuum forming

List the steps for line bending

What is the stock form for:

Injection moulding

Vacuum forming

Rotational Moulding

What plastic is used in GRP or carbon fibre to set the mat in and why?(3)

What does self finishing mean?