THERMOSETTING PLASTICS

These are plastics that once heated and moulded, cannot be reheated and remoulded. The molecules of these plastics are cross linked in three dimensions and this is why they cannot be reshaped or recycled. The bond between the molecules is very strong.

- Urea formaldehyde
- Polyurethane
- Bakelite
- Some adhesives (glues)
- Polyvinyl chloride (PVC)
- Polyester resins
- Melamine formaldehyde duroplast
- Polypropylene (PP)
- Nylon
- Acrylic (known also as Perspex)
- Low density polythene (LDPE)
- Polystyrene (HIPS)
- Teflon

THERMOPLASTICS

These plastics can be re-heated and re-shaped in various ways. They become mouldable after reheating as they do not undergo significant chemical change. Reheating and shaping can be repeated. The bond between the molecules is weak and becomes weaker when reheated, allowing reshaping. These types of plastics can be recycled.

- Polyethylene
- Polyethylene terephthalate (PET)
- Epoxy resins
- Silicone
- Urea resin
- Silicone resins

For detailed information and worksheets on plastics go to:
http://www.technologystudent.com/despro_flsh/materials_main1.html
OR
http://www.technologystudent.com/joints/joinindex.htm