|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Where do plastics come from? There are two sources:   * ----------------------------------------------------------------------------- * ----------------------------------------------------------------------------- | | | Plastics are made by the process called ------------------------------------------------  There are two “types” of plastics.  ---------------------------------- or ------------------------------------------ | | |
| **Thermosetting** | | **Thermoforming** | | | |
| Plastics **------------------------------------------------------------------------------------**  due to a chemical reaction that occurs when they are first manufactured.     * Initially ------------------------- * Cannot be ------------------------------- * Extremely ------------------------------------ * -------------------- be recycled | | Plastics **------------------------------------** and therefore **-----------------------------------**   * ------------------------- when heated * Can be ---------------------------- * More commonly used ---------------------  * **---------------------** be recycled | | | |
| Uses of plastics- Thermo setting | | | | | |
| Names | Uses | | | Pictures |
| **Urea**  **Formaldehyde (UF** |  | | | electric socket2 |
| **Melamine formaldehyde (MF)** |  | | | http://www.beka-cookware.com/assets/products/images/20205928_Gourmet_Fry_pan_handle.jpg |
| **(ER) Epoxy resin** |  | | |  |
| **PR Polyester resin** |  | | |  |
| Properties of thermo setting plastics | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Uses of plastics- Thermoforming | | | |
| Names | Uses | Pictures | |
| **Polythene** |  | Image result for polythene plastic bag | |
| **High impact Polystyrene (HIPS)** |  | Image result for hips plastic cutlery | |
| **Polypropylene** |  | ECOPOLYCHAIR.jpg | |
| **PVC**  **(** **polyvinyl chloride)** |  | Image result for pvc window frame | |
| Properties of thermoforming plastics | | | |
| Properties and their meanings | | | |
| Hardness | Is the ability of a --- | | Some are harder than others- -------------------------------. |
| Elasticity | Ability for a material to | Good elasticity- -------------------------------------------- | |
| Conductivity | Conductivity- ability for | They have ---------------------------------------------- –so are electrical insulators | |
| Toughness | Is the ability of a material to | Some are ------------------------------------------------ | |
| Strength | Is the ability of a material to withstand a | Some are, some are not- -------------------- material can -------------------------this. | |