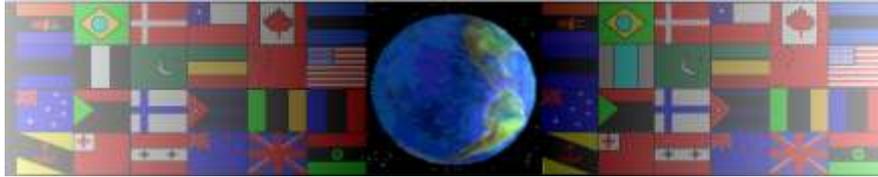


# EXAMINATION PREPARATION

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On behalf of The World Association of Technology Teachers

# W.A.T.T.



World Association of Technology Teachers

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# HIGH DENSITY POLYETHYLENE (HDPE)

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High Density Polyethylene (HDPE). HDPE is used to make bottles for fruit juice, milk, water, kitchen cleansing products and even furniture. It has been used in recent years for garden furniture and recycling bins as it resists the weather and can be cleaned very easily. It is lightweight which means bins made from this material can be handled and transported very easily. It is an ideal material for the injection moulding process making it suitable for batch and continuous production. It has the following properties:

Stiffness, strength, toughness, resistance to chemicals and moisture, permeability to gas, ease of processing, and ease of forming.

## KEY WORDS

CHEAP

LIGHTWEIGHT

RECYCLABLE

PIGMENTED

TOUGH

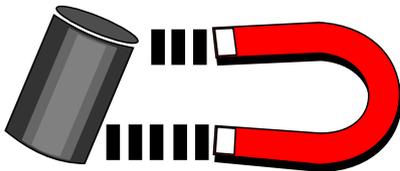
STRONG

RESISTANT

CLEANING

Look at the HDPE recycling bin seen on the previous page. Why is High Density Polyethylene suitable for the manufacture of outdoor recycling bins? Write a couple of sentences on HDPE using each of the keywords listed above.

## MILD STEEL



RECYCLABLE STEEL

A common steel used widely in school workshops and in the construction and manufacturing industries. Relatively easy to form and shape. Tends to rust if not galvanised or coated with paint.

Smaller sections can be shaped by hand tools and formed by 'hand' pressure. Larger sections require machines such as centre lathes and milling machines for shaping and heating to red heat when forming into shapes and forging.

## KEY WORDS

CHEAP

RUST

HARD WARING

RECYCLABLE

GREY

TOUGH

STRONG

RESISTANT

Look at the mild steel mechanism seen on the previous page. Why is mild steel suitable for the manufacture of this mechanism? Write a couple of sentences on mild steel using each of the keywords listed above.