

## Flat Packed Charity Collection Boxes.

GCSE Product Design Maximising exam success.

Manufacturing – Tessellation & die cutting.

## **TESSALATION AND DIE CUTTING**

Industry aims to reduce waste and keep costs low. Most high-speed production lines cut out the nets using a process called 'die cutting'. This is computer-aided manufacture (CAM).

To do this, each net is positioned to fit as closely as possible to the next. There is just a small gap to allow for the width of the cutting blades. This process is called tessellation.

Less wasted card reduces the environmental impact and keeps raw material costs to the bare minimum.



Die cutting is similar to high-tech pastry cutting. Blades are arranged to cut the outline and as they are pressed down, other, less sharp blades will either lightly score or compress the fibres on the fold lines. In this way, the outline is cut through completely and the folds are scored for easy assembly.

