

Year 7

Year 7 Puzzle Knowledge Organiser - KS3

Knowledge you will gain

The safe use of craft knives

Key properties, attributes examples of **card**.

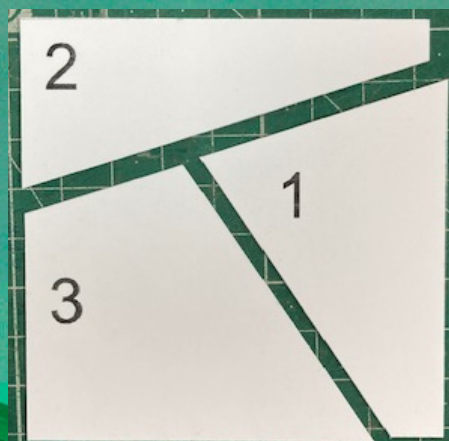
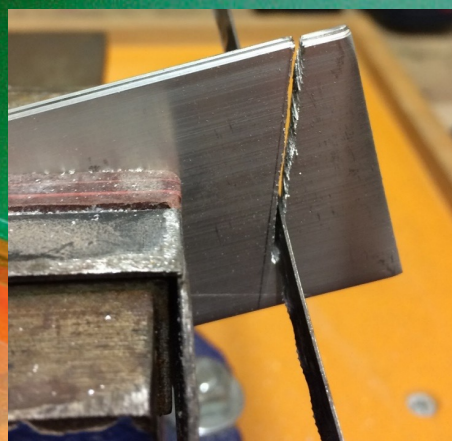
Key properties, attributes examples of **polymers, Aluminium and Plywood**.

Students to learn how to **mark out, cut, shape and polish Acrylic, Aluminium and Plywood**.

Students to design and make a piece of packaging, learn what a 'net' is, that will hold their puzzle pieces.

Tools you will be introduced to, to build your Schema and Knowledge.

- Craft knife
- Junior hacksaw
- Hand file
- Sanding block
- Polish
- Wet and dry sandpaper



Vocabulary

| | |
|--------------------|--------------------------------------------------------------------------------------------------------------------|
| Cutting | Junior hacksaws are the small variant of mechanical normal sized hacksaws and are used to cut small working pieces |
| Filing | A small particle rubbed off by a file when smoothing or shaping something |
| Acrylic | made from polymers of acrylic acid or acrylates: |
| Aluminium | A light silvery-grey soft metal |
| Plywood | A manufactured board made from layers of ply |
| Wet and Dry | Using Wet and Dry Paper wet will prolong its life and makes for a better finish. |

Things to look for in your Puzzle project. Ensure all edges are straight, make sure you check them against your template, ensure there are no saw marks.

Brief description of the project:

To create a 3-piece puzzle consisting of timber, metal, polymer predetermined geometric shapes. Card box packaging will complete the product. Materials theory will be weaved between practical tasks.

To know about:

To understand how to work in a workshop.

Select from and use specialist tools, techniques, processes and machinery precisely.

To select from and use specialist tools, techniques, processes precisely.

Techniques

Precision and accuracy- Craft knife cutting

Cutting with Junior hacksaw

Filing with hand file

Wet and Dry sandpaper

Polish with steel wool and Brasso

