



St Andrew's C of E Maghull

Knowledge Organiser

Year 3 - Autumn 2 - DT - Shell Structures



Knowledge:

- A Shell structure is a hollow structure with a thin outer covering.
- Scoring is cutting a line or mark into sheet material to make it easier to fold.
- A font is a printer's term meaning the style of lettering being used.
- There are different types of nets.
- By gluing layers of card together it will strengthen the overall product.
- Know and use technical vocabulary relevant to the project.

Vocabulary:

- Shell structure - a hollow structure made from a thin outer layer.
- Three-dimensional (3-D) - shapes with 3 dimensions (height, width and depth).
- Shape - The form of an object or its outline.
- Material - What something is made from.
- Strong - has lots of strength.
- Reduce - use less of.
- Reuse - using something again.
- Recycle - Putting a material through a process so it can be used again.
- Lettering - the text used on something.
- Text - a passage of words.
- Graphics - what pictures/ designs you see on something.
- Design - how something is possibly going to look.
- Evaluating - judging how something has gone.
- Innovative - A new idea/method.

Lesson Sequence:

Lesson 1: I can explore and evaluate existing packed lunch boxes.

Lesson 2: I can establish the design criteria for the end product.

Lesson 3: I can generate my own ideas for my design based on the design criteria.

Lesson 4: I can plan the making stage and finalise my design and plan the process to make it.

Lesson 5: I can use a variety of materials to create my own design based on my plan.

Lesson 6: I can evaluate my end product against design criteria.