

Year 3 – Structures

What it looks like in year 5:

- To discuss and investigate a range of portable and permanent frame structures.
- Demonstrate the accurate use of tools and equipment.
- Develop a design brief for a specific purpose and intended user.
- To produce annotated sketches to model ideas and write step-by-step plans and lists of tools and equipment needed.
- Produce prototypes of their chosen product.
- Make and assemble a bus stop or shelter following previous planning.
- Evaluate the bus stop or shelter against the design criteria previously agreed.

Vocabulary (definitions)

- Scoring – scribing or partly cutting through the material along the line to be bent or folded.
- Graphics – the use of diagrams or pictures.
- Capacity – the amount something can produce and/or contain.
- Prototypes – a first version of a product, usually scaled down.
- Assembling – fit together the separate components parts of a product.

Sequence of Learning Design, Make, Evaluate

1. To discuss and investigate different examples of different shell structures including packaging.
2. To construct nets with flat faces to create 3D shapes. Develop scoring, cutting and assembling techniques.
3. Develop a design brief for a specific purpose and intended user.
4. To produce annotated sketches to model ideas and plan the main stages of making.
5. Produce prototypes of their chosen product.
6. Make and assemble a lunch box following previous planning.
7. Evaluate the lunch box against the design criteria previously agreed.



Cross-Curricular Links and Cultural Capital:

- Mathematics – use a ruler to measure to the nearest cm, half cm or mm. Draw 2-D shapes and make 3-D shapes using modelling materials.
- Computing – design and create digital content on screen, creating nets for their products and combining text with graphics.
- Spoken language – ask relevant questions to extend knowledge and understanding. Build technical vocabulary.
- Art and design – use and develop drawing skills.
- Writing – write for real purposes and audiences.
- Science – discuss the properties and suitability of materials for particular purposes.