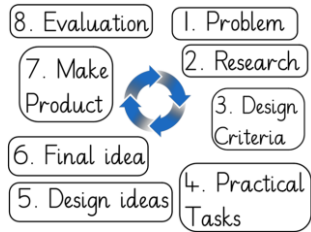


Design process



Y3 – Shell Structures

Designing and making 3D structures using computer-aided-design (CAD)

Outcomes

To design and make a cardboard container to hold a food item.

To use CAD software to design a packaging to hold a food item.

Design Criteria:

It must:

- securely hold a salad
- have a lid
- be to the correct size
- have an attractive label



Vocabulary

CAD (computer-aided-design): is the use of computer-based software to aid in design processes.

2D: two-dimensional.

3D: three-dimensional.

Packaging: materials used to wrap or protect goods.

Prototype: a first full-scale and usually functional form of a new product.

Key knowledge and skills

We are starting to understand how computers can be used to design a product.

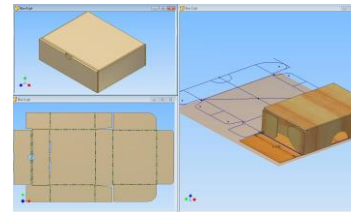
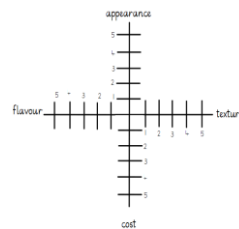
We can generate, develop, model and communicate ideas through computer-aided design.

We can use our designs to make a prototype of a final product.

We can use our understanding of measurements to accurately measure and make a product to hold a food item.

Health and safety

We can use scissors carefully to cut around our design.



Links to other subjects

Theme: Roman Britain

Maths: measurement – 2D and 3D shapes/measuring in cm and mm:



Equipment used

Scissors, ruler, computer, CAD software, card



Links to prior learning and next steps:

Y1 – Freestanding structures
Y5 – Structures