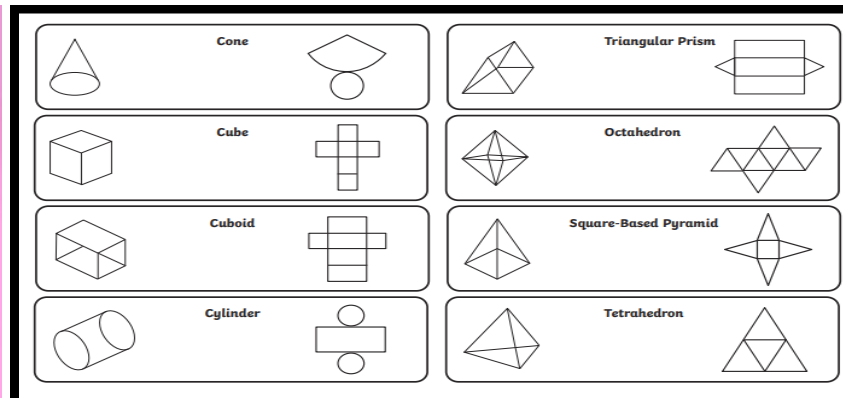




Design Technology; Y3 and Y4 cycle B autumn Knowledge Organiser

Shell structures

*We are
designers, makers
and evaluators*



Key skills

Generate realistic ideas focusing on the **needs of the user** and **purpose of the product**.

Develop ideas through the **analysis** of existing products and use **annotated sketches** and **prototypes** to model and communicate ideas.

Order the main stages of making.

Select and use appropriate tools to **measure, mark out, cut, score, shape and assemble** with some **accuracy**.

Explain our choice of materials according to functional **properties** and **aesthetic qualities**.

Sticky Knowledge

That successful design is rooted in the needs of the user.

Shell structures protect from the outside and contain.

Successful shell structures need to be strong enough to protect and contain.

Analysing existing products best supports generating ideas.

Choice of materials impacts on functional properties and aesthetic qualities.

Key Vocabulary

Shell structure protects from the outside and acts as a container

Net what a 3d shape looks like when flat

Assemble fit together to build

Laminating layers to strengthen

Innovative a new inventive idea

Prototype the model something is based on