

**Real life examples**

• Structures can be natural or man-made and are all around us. Man made structures are things that are built for a purpose. They can be large like buildings and bridges or smaller like chairs, money boxes or cereal boxes.

• There are three basic types of structure: shell structures, frame structures and solid structures .

• Shell structures can be natural or man made. They are a hollow structure with a thin outer covering. Some examples are:



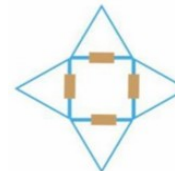
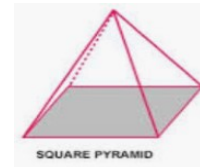
**Vocabulary:**

edge	where two surfaces meet at an angle
face	a surface of a geometric shape
finishing techniques	include decorating , painting, embossing. They are the final things done to make sure a product is durable ,looks nice and is fit for the purpose.
join	to connect two or more things together
net	the flat or opened-out shape of an object such as a box.
rigid	hard, not able to bend or shape it
scoring	cutting a line or mark into sheet material to make it easier to fold.
shell structure	a hollow structure with a thin outer covering.
surface	the outside of something
vertex	the corners of a solid geometric shape, where edges meet.

**Steps to Success**

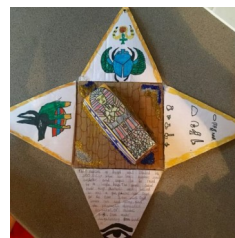
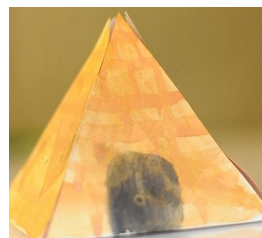
**Designing:**

- Who and what is the shell structure for?
- What net will you use? What size will it be?
- What materials would be the best?
- How are you going to join it together?
- What equipment will you need? What order will you work in?
- How will the product appeal to the user?



**Making:**

- Are you following your plan?
- What types of skills are you going to use?
- How will you use the tools safely?
- Have you joined your parts together?
- How will you finish your structure?



**Evaluating:**

- How well does your structure function?
- Is it suitable for your user?
- What would you do differently next time?

**Golden Threads**

User	who the product is for
Purpose	the job your product is supposed to do
Design Decisions	making choices about your design
Functionality	to do the job (purpose) it is meant to do