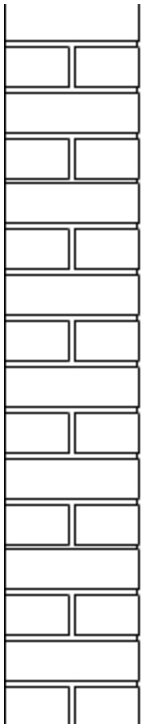
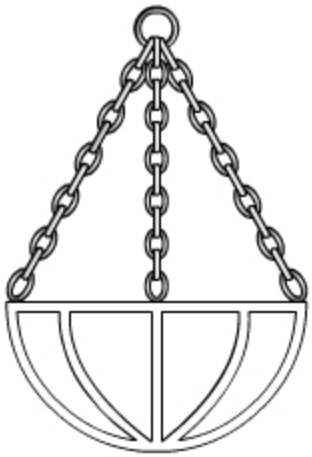
Structures Problem





Designing a bracket that will support a hanging basket full of trailing geraniums.

Problem 1.
How to make a bracket that will support the hanging basket, the soil and the geraniums.

Problem 2.
How to fix the bracket to the wall.

The hanging basket is hemispherical and has a diameter of 350mm. The top chain connecting ring should hook onto the bracket 400mm away from the wall.

Problem 1.

Use notes and sketches to illustrate designs for brackets that could support the hanging basket. Develop your best design, describing

- the material(s) that will be used to make the bracket
- how the various parts will be fixed together (that is, if the bracket has more than one part)
- the forces acting on each part of the bracket structure
- the “finish” that will be applied to the bracket, giving reasons for your choice.

Problem 2.

Use notes and sketches to illustrate how the bracket can be fixed securely to a wall.

Extension work

1. Use notes and sketches to describe how the basket could be made.
2. Use notes and sketches to describe how the chain could be fixed to the basket.
3. Make the bracket.
4. Make the basket.