

Teacher Notes

Unit Intermediate Level, Solving problems in shape and space

Skills used in this activity:

- identifying objects from plans and elevations (using photographs and sketches)
- drawing three dimensional sketches (showing external surfaces only)
- drawing plans and elevations of objects, using dotted lines for hidden edges.

Preparation

Students will need to know how to draw 3D sketches of objects.
(Note that in this activity only external surfaces are shown in the 3D sketches.)

Notes

This activity can be used at the beginning of the course to introduce the idea of representing objects using plans and elevations. Students could attempt Part 1 immediately. Discussion of plans and elevations, including the use of dotted lines for unseen edges, is advisable before students try Part 2. Part 3 can be done immediately after Part 2 or left until a later date if you wish.

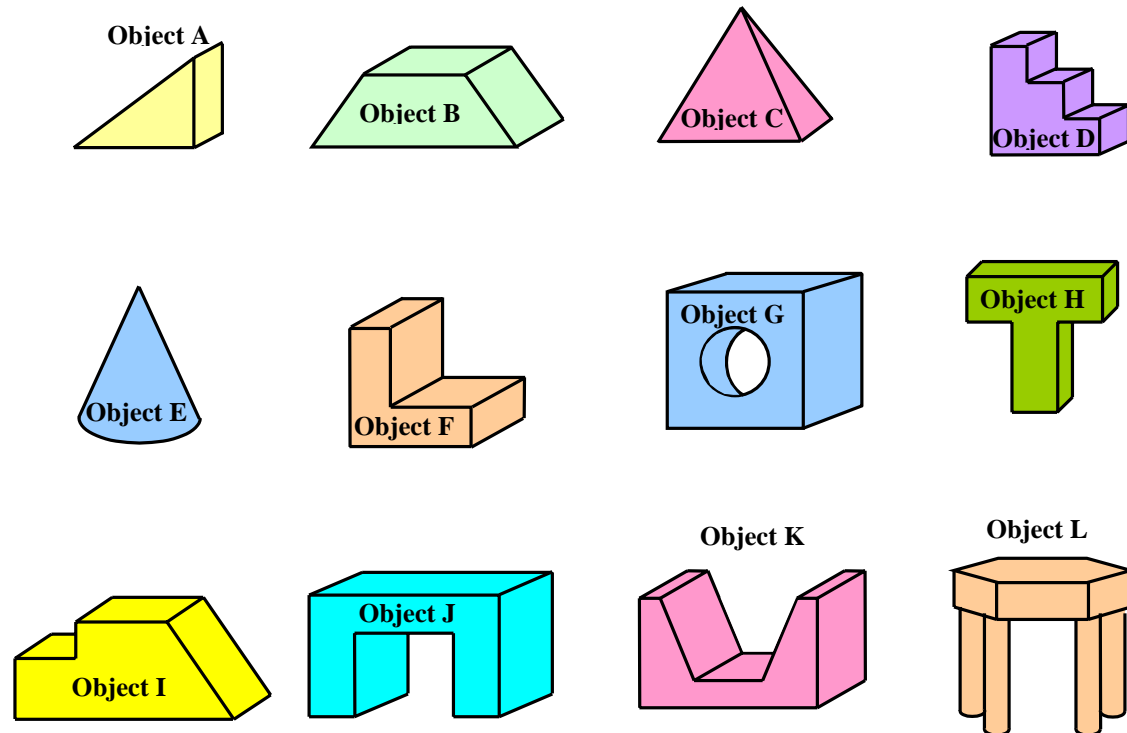
Note that only rough sketches are requested in this activity rather than accurate scale drawings and the answers given below are not exact. Although the plans and elevations given in Part 2 and the answers are presented as third angle orthogonal projections, it is not intended that this should be done formally.

Answers

Part 1

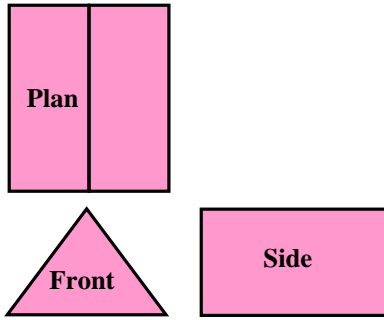
- | | | | | |
|--------------|----------|--------------|----------------|--------------|
| A Teapot | B Fork | C Can Opener | D Hole Punch | E Nail Brush |
| F Toast Rack | G Kettle | H Plant Pot | I Crash Helmet | J Shoe |
| K Wine Glass | L Lamp | | | |

Part 2

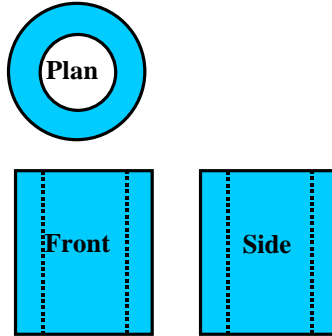


Part 3

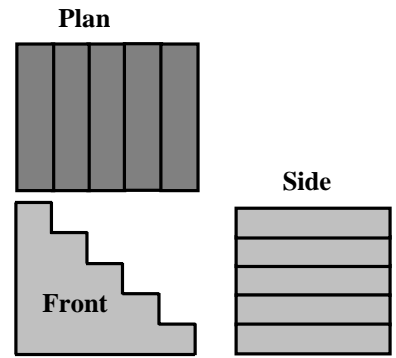
Object A



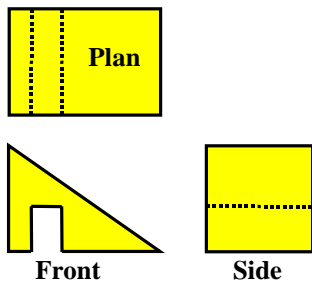
Object B



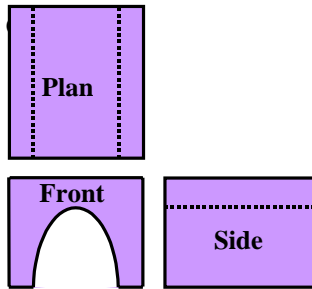
Object C



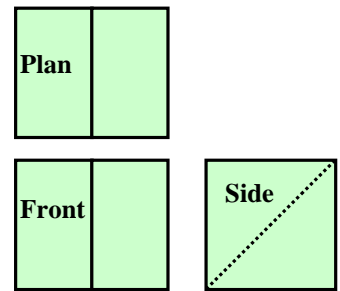
Object D



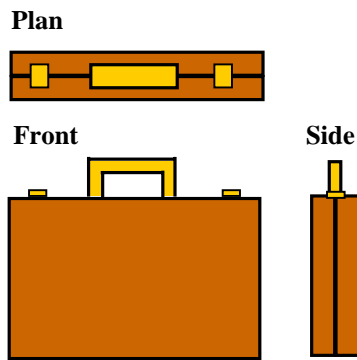
Object E



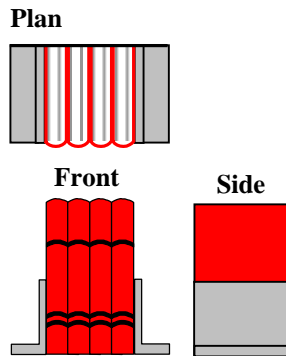
Object F



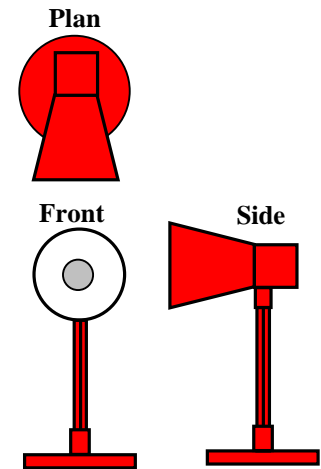
Object G



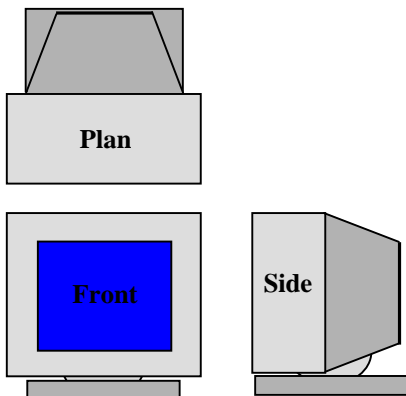
Object H



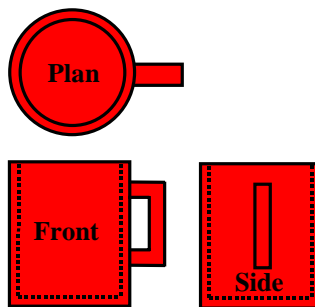
Object I



Object J



Object K



Object L

