



## Lesson 6: Plan, Elevation and Section

This lesson explores how different views of houses can reveal their internal and external structures.

Support material: Drawing Guidelines, Surveying Guidelines.



### Spotlight

Drawing sections



### Key Concepts

Plan. Elevation. Section.

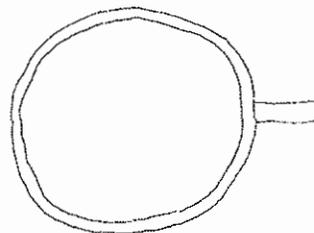
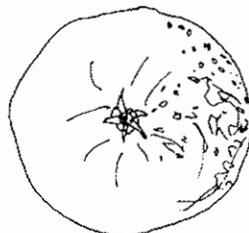
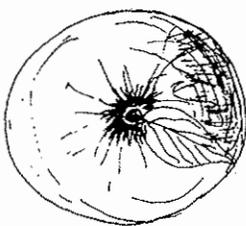
### Review of work

Discuss homework from Lesson 5. As students will have chosen either B or C, ask volunteers to present their work and discuss it with the class. What additional features, materials and textures did students have to add to their memory drawings?

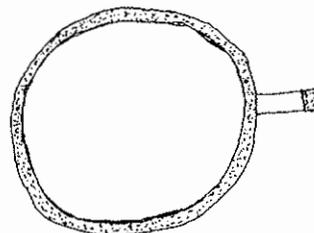
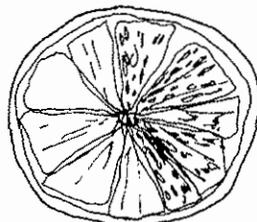
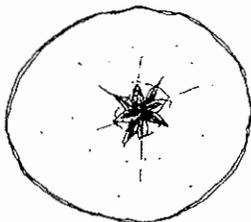
### Teacher demonstration

Having completed a floor plan and an elevation, students are now introduced to drawing a section, which looks at an object as if the side had been cut away.

Select a number of simple objects, e.g. apple, orange, mug. On the board, demonstrate the ways of representing each one as a **plan**, **elevation** and **section**.

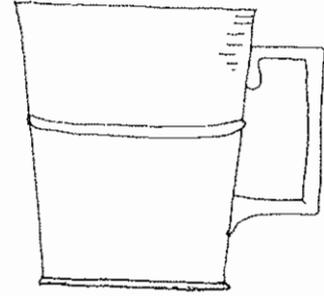
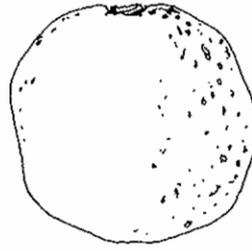


#### Plans (viewed from above)



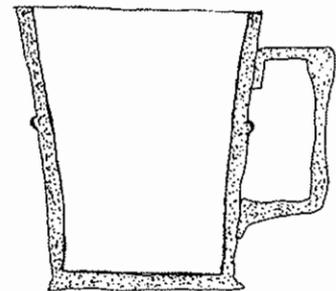
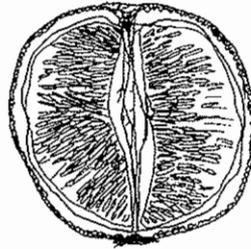
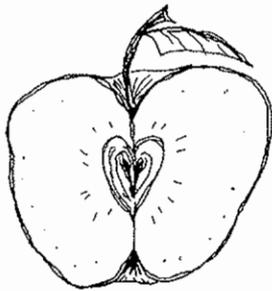
#### Plans (cut horizontally and tops lifted off)

**Plan** — This looks at a building from **above**, as if you were flying over it *or* had sliced off the top so you could see inside.



### Elevation

**Elevation** — This looks at one side of the building from the outside.



### Section

**Section** — This looks at the building as if one side had been completely cut away, letting you see inside.



### Activity — Drawing sections

1. Ask the students to make a large section drawing of a “Big Mac” or of an object chosen from their school bag or in the classroom.
2. Show the class the house plans, sections and elevations in “Drawing Guidelines”. Examine these with the students and discuss their contents.
3. Take the class on a walk around the school building, both inside and outside. Discuss drawing a section of it.
4. Choose the best place to “cut” the building. Take some vertical measurements. Get the students to think about what they would see if they made this cut.
5. Each student now draws a section of the school building based on the discussions. Label the drawings.

### Homework

1. Each student draws a section of his/her own home.
2. Students add more material to the various sections in their **Scrapbooks**.
3. Students update **Vocabulary File**.



## Advance preparation for Lesson 7

Start collecting samples of materials which will be used in Lesson 7. The teacher may wish to assign this task to individuals/groups.

wood	plastic	steel
concrete	stone	rubber
glass	marble	aluminium
brick	tile	

## Cross-Curricular Connections

1. Model-making/Construction Studies — Make a scale model of your house. See “Model-making Guidelines” for instructions.
2. History — Visit your local library or historical society to examine the plans of buildings from the past. Choose a plan which interests you and make a more thorough study of it. Try to find out about the people who lived in or used this building.
3. History — Arrange to visit the Georgian House at No. 29 Lower Fitzwilliam Street, Dublin 2. A detailed and fascinating visitor’s pack is available for No. 29. Contact The Manager at (01) 702-6165.
4. Career Guidance — Invite an architect to visit your class and speak about house design.
5. Music Appreciation/English/Poetry — Listen to the song “My House” by Madness. Write the lyrics for a song about your own house. Write your own music, if you can!
6. English — Collect poems or passages from literature which describe houses. Suggested starting point: the writings of Charles Dickens.
7. Computer Studies — Use computer graphics to draw a section of your own house, or a house of your own design.
8. Media Studies/Construction Studies — Make a video recording of “My House” or similar programme on television. Study one of the construction techniques described in the programme.