



Lesson 4: Layouts and Floor Plans

This lesson explores floor plans and layouts by examining the position of rooms in a house and the ways in which they are associated according to their use.

Support material: Information Sheet 2 “Architectural Symbols”, Worksheet A2, Surveying Guidelines, Drawing Guidelines.



Spotlight

Floor plans



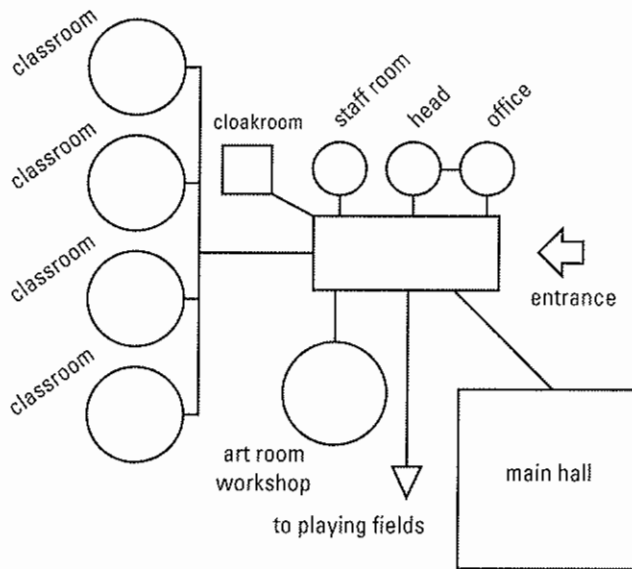
Key Concepts

Layout. Plan. Location of rooms. Convenience. Accessibility. Noises. Smells.

Review of work

Discuss the drawings students did for homework in Lesson 3. Ask volunteers to show their drawings to the class. Discuss the layout of the room, the use of space, natural light, colour, texture and pattern.

Teacher demonstration



Bubble diagram of a school

We can draw a very simple layout of a building using a **bubble diagram**. This does not show shape, dimensions or position — just how rooms are connected to each other by their uses.

For example, almost every room in a school is connected to a corridor. The head's room is usually near the school office because the head and the staff need to work together. What other rooms can the students think of which are connected in a similar way? Are there any

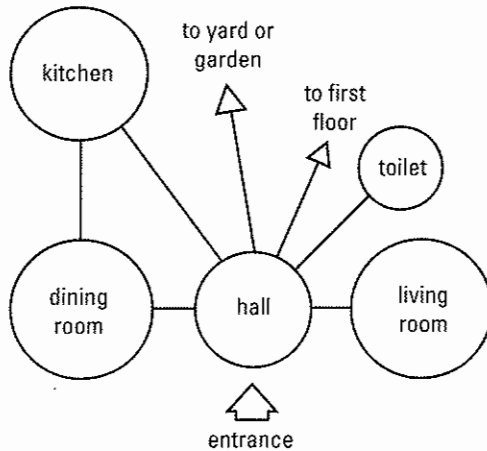
rooms which should not be connected or close to each other?

On the board, teacher copies the bubble diagram of the school illustrated here or draws a similar one of his/her own school. Students then discuss what they see and the ways in which rooms are related, especially by use.



Activity 1 — Drawing a bubble diagram

Students draw bubble diagrams of their own houses. They should not worry about size or shape, just the way in which each room is related to the others.



Bubble diagram of ground floor of a house

1. Draw lines to show which rooms are connected with others.
2. Make a separate bubble diagram for each storey (if most students' homes have more than one).
3. Label each room.

Review of work

Compare completed drawings and discuss what students have discovered. Ask questions such as the following.

- Do most of the drawings have anything in common — eg where is the kitchen in relation to dining area; bedrooms in relation to bathroom?
- Why do you think the layouts were planned as they are?
- Where is the storage space, if any?



Activity 2 — Drawing a floor plan

A **floor plan** is like a map, giving a bird's eye view of a floor/storey. In a floor plan, everything is the right size and shape, and in exactly the same position as in the actual building.

1. Review Information Sheet 2 "Architectural Symbols". Study the plans and discuss the layouts shown. Study the symbols and learn to recognise what they represent.
2. Distribute copies of Worksheet A2. Discuss the worksheet and complete it in class.
3. Students sketch the ground floor plan of their own home **from memory**. This is in preparation for the homework assignment noted on Worksheet A2.



Homework

Materials: Students will need copies of “Surveying Guidelines” and “Drawing Guidelines”, as well as any necessary drawing equipment.

1. Discuss homework requirements on Worksheet A2.
2. Remind them to check the **Scrapbook** and **Vocabulary File** requirements on Worksheet A2.

Cross-Curricular Connections

1. Home Economics — Is there enough space in your home to meet your family’s present needs? Investigate both the living space and the storage space.
2. Home Economics — Study the layout of your kitchen. Find out about the recommended “work triangle” and investigate its use in your own home. How are the storage needs of the kitchen met? Collect kitchen designs and refer to them in re-designing your own kitchen.
3. Design/Construction Studies — Plan an extension to your house to cater for its future needs. Find out what those needs may be — growing children, new interests, new babies. Design the extension with these needs in mind, remembering the relevant Key Concepts.
4. Leisure Studies/Horticulture — Redesign your garden space. Add the garden space to the scale plan of your house. The symbols on Information Sheet 3 “Landscape and Services Symbols” will help you complete your drawing. Contact organisations such as BirdWatch Ireland or Earthwatch to find out how you can incorporate the needs of wildlife in your design.
5. Design/Social Studies — Investigate the ways in which a nomadic society approaches its storage needs. Consider the differences between such a society and a settled community and the ways in which their storage needs, as well as the things they store, would be different.
6. Social and Environmental Studies — Contact a group which deals with people who have special needs — eg the elderly (ALONE, National Council for the Aged) or the physically disabled (Fast Friends, National Council for the Blind, National Rehabilitation Board). Investigate the ways in which you could design a room with one of these special needs in mind.