*The aims of these sheets are to:*
- *show the extensive use of wood in modern buildings*
- *highlight the range and use of alternative materials in building*

**The activity on 7A asks the children to name parts of the building. The answers are:**

| | |
|---|---|
| BATTEN | Strips of wood nailed to the rafters. The tiles or slates are nailed to the battens. |
| DORMER | A window built out from a sloping roof. Most attic rooms have dormer windows. |
| WALL-PLATE | A strong wooden beam laid along the top walls of the house. The joists and rafters rest on the wall-plates. |
| DOOR | Entrance/exit into/out of the house. |
| LINTEL | The beam placed across the top of the window to support the weight of the wall. |
| JOIST | A wooden beam laid across from one wall to another. The floor boards are laid over the joists. |
| WINDOW FRAME | A structure to support the window |
| COLLARBEAM | Beam between the rafters. |
| DOOR-FRAME | A structure to support the door |
| RAFTER | A sloping beam making part of the framework of the roof. The battens are attached to this. |
| WINDOW | An opening in the wall to let in light |
| MULLION | A vertical bar dividing lights in the window |

## ACTIVITY 1 : WOOD RUBBINGS

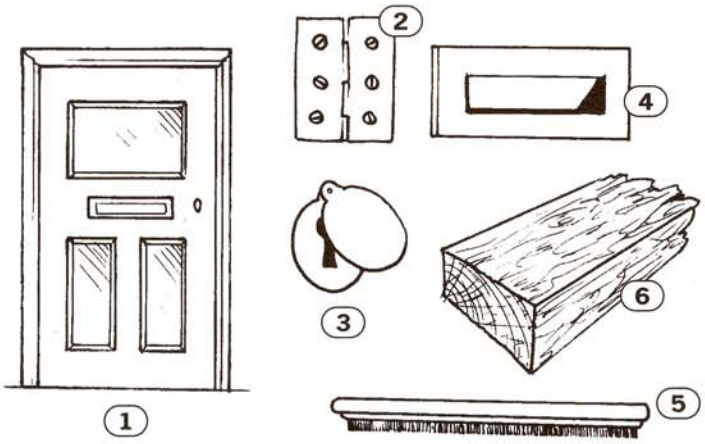
**Wood is chosen as a building material partly for its attractive smell and grain as well as for more scientific reasons. Using planks of wood with varied and interesting grains, show the children how to make careful rubbings using even, strong, parallel strokes with the crayon held horizontally. To highlight the pattern of the grain, they could flood the rubbing with ink of a contrasting colour (e.g. candle wax rubbing flooded with black ink).**

## ACTIVITY 2 : DOORS AND DRAUGHTS

**Doors are made to fill an opening, but where they are ill-fitting air whistles through! The best fit occurs where the same materials meet, e.g. wooden door and frame, but the children will have some idea from their previous work of the effect of damp and heat on wood. Ask them to predict where the draughts might be and devise a means to test this (crêpe paper streamers, a feather on a fine thread) on their classroom door or playground door. Consideration should be given to why it is important to eliminate draughts. The Department of the Environment has some useful literature. See *Useful Addresses*.**

## ACTIVITY 3

**Ask the children to focus on stone, wood, metal and plastic materials. Find out what they know about their properties. Doors are often made using all four materials. What qualities/properties of each material make them suitable for use for the particular part of the door?**




1. GLASS PANELS
2. METAL HINGE
3. METAL KEYHOLE COVER
4. METAL LETTER BOX
5. PLASTIC DRAUGHT EXCLUDER
6. WOOD FRAME OF DOOR

To reinforce their awareness of this variety, the children might use balsa wood, cellophane, plastic and gold card to make a model of a front door of their own design.

## ACTIVITY 4

**Choose a road in the locality, ideally where there is a mixture of housing or where 'home improvements' such as double-glazing have been made.**

**Split the children into groups; each will need a clipboard and pencil.**

**Give each group a specific part of a building to observe, e.g. doors, windows, walls, roof, fencing etc.**

**Do a survey of the chosen street to collect information on the variety of materials used.**

**Results could be shown as tallycharts, graphs, maps, pictograms etc.**

**The children could be asked why there was/was not a variety of materials. What would they predict for other areas?**