

## Plastic

### 6 Read the text and then choose the correct option.

Plastic products offer a number of ecological advantages: they save resources, have a low maintenance cost and can be recycled. Furthermore they contribute to save energy (plastic foams are used for thermal insulation in many applications). Plastic is also useful for noise protection and insulation.

The main fields of application of these materials are pipes, insulation, wall covering, flooring (both in houses and in public areas) and, quite recently, window frames (made of PVC). PVC stands for Polyvinyl Chloride and it is the plastic which has seen the most rapid growth in recent times in industry. PVC is often used in piping systems because of its good chemical resistance to corrosive fluids. PVC pipes are used for a great number of applications: to drain waste, for natural gas distribution, for electrical and communications wiring, for municipal water. As it is the newest primary construction material and entirely man-made, plastic is extremely versatile. Improvements made through research have increased its acceptance among designers, contractors and building code officials.

- 1 Plastic products save...
  - A industry.
  - B materials.
  - C resources.
- 2 Plastic insulation is also useful for ... protection.
  - A recycled
  - B resources
  - C noise
- 3 PVC is the plastic whose use has grown more...
  - A recently.
  - B slowly.
  - C primary.
- 4 The ... fields of application of these materials are in flooring.
  - A alternative
  - B main
  - C useful
- 5 PVC has good ... resistance to corrosive fluids.
  - A physical
  - B public
  - C chemical
- 6 PVC pipes are used for ... gas distribution.
  - A natural
  - B chemical
  - C piping

### 7 Read the text again and answer the questions.

- 1 What are the advantages offered by plastic products?
- 2 How can plastic save energy?
- 3 What is plastic insulation useful for?
- 4 What are the main fields of application of plastic?
- 5 What does PVC stand for?
- 6 What are PVC pipes used for?

### 8 Make a list of advantages and disadvantages of each material.

	Steel	Glass and Metals	Plastic
Advantages			
Disadvantages			



## Sustainable materials

### 9 Read the text and answer the questions below.

Due to the rise in global population and prosperity over the last few decades, one of the consequences of this phenomenon has been the increase in volume and variety of the materials used (such as raw materials, food, manufactured products and waste) with a consequent increase in the transport distances. This has created a series of negative effects on the environment, especially different kinds of pollution, leading to an ecological emergency and growing preoccupation about health. This is why the aim of eco-design is to create buildings with low ecological impact, where people can live in a comfortable, healthy way.

This is possible by using building materials that are traditionally considered eco-friendly and sustainable: timber from forests that have been certified; quickly renewable plant materials (such as straw or bamboo); some typical traditional materials such as brick, stone, clay and cork; non-toxic, renewable and recyclable materials (natural paints, waxes and varnishes). Waste materials can also be reused as a resource for construction purposes.



- 1 What has happened to population and wealth in the last few decades?
- 2 What has been one of the results of this?
- 3 What is the aim of eco-design?
- 4 Can you name some eco-friendly and sustainable materials you have found in the text?

### 10 Work in pairs: what is your opinion of modern building materials? Which would you use if you could build your own house? Tell your partner about it using the information given in this unit.

#### MY GLOSSARY

alloy /'æloɪ/ \_\_\_\_\_  
 beam /bi:m/ \_\_\_\_\_  
 brittleness /'britlnes/ \_\_\_\_\_  
 coated /kəʊtɪd/ \_\_\_\_\_  
 customise /'kʌstəmaɪz/ \_\_\_\_\_  
 to drain waste /tə drem weɪst/ \_\_\_\_\_  
 durability /dʒʊərə'bɪlɪti/ \_\_\_\_\_  
 endurance /ɪn'dʒʊərəns/ \_\_\_\_\_  
 hot dip galvanised /hɒt dɪp 'gælvənaɪzd/ \_\_\_\_\_  
 iron /aɪən/ \_\_\_\_\_  
 layout /leɪaʊt/ \_\_\_\_\_

outermost /'aʊtəməʊst/ \_\_\_\_\_  
 outwards /aʊt'wɜːdz/ \_\_\_\_\_  
 overlapping /əʊvə'læpɪŋ/ \_\_\_\_\_  
 pane /peɪn/ \_\_\_\_\_  
 pipe /paɪp/ \_\_\_\_\_  
 rust /rʌst/ \_\_\_\_\_  
 to span /tə spæn/ \_\_\_\_\_  
 stainless steel /'steɪnləs 'sti:l/ \_\_\_\_\_  
 straw /strɔː/ \_\_\_\_\_  
 strength to weight ratio /streŋθ tə weɪt 'reɪʃəʊ/ \_\_\_\_\_  
 window frame /'wɪndəʊ freɪm/ \_\_\_\_\_