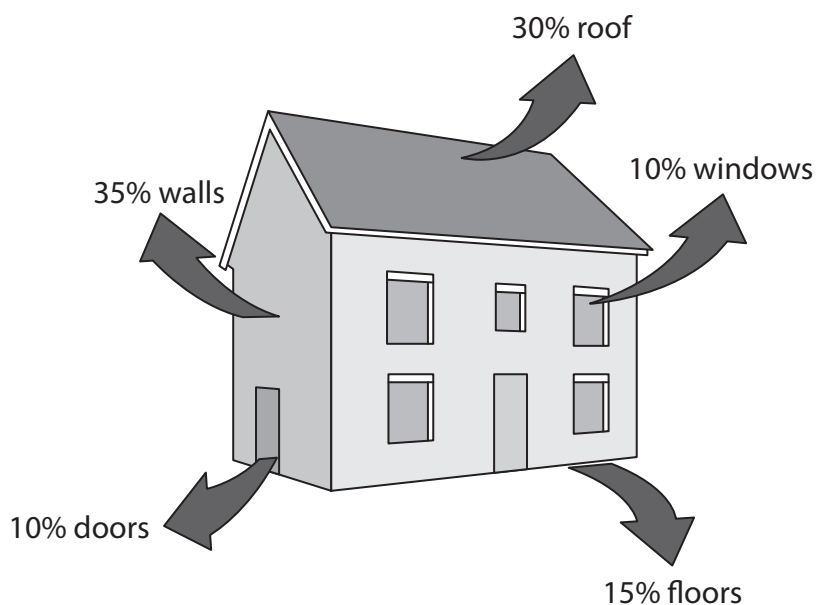


Answer ALL questions.

- 1 The diagram shows typical values for the percentage energy losses from a house.



- (a) Most energy is lost through

(1)

- ☐ **A** the floors
- ☐ **B** the roof
- ☐ **C** the walls
- ☐ **D** the windows

- (b) The total percentage energy loss from the roof and the windows is

(1)

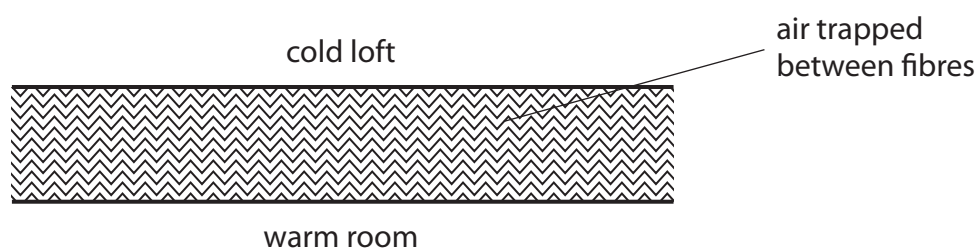
- ☐ **A** 10%
- ☐ **B** 20%
- ☐ **C** 30%
- ☐ **D** 40%



(c) Insulation is used to reduce energy losses from houses.

Insulating material often consists of fibres with air between them.

The diagram shows a section through some insulating material.



(i) Explain how this type of insulation reduces energy loss by **conduction**.

(2)

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(ii) Explain how this type of insulation reduces energy loss by **convection**.

(2)

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(Total for Question 1 = 6 marks)

