

MODERN CONSTRUCTION MATERIALS (Part 2)

Activity 1: Which are **NOT** considered modern construction materials?

plastic aluminum wood concrete steel iron glass carbon fiber

Activity 2: Read the text below and match each paragraph with a heading.

- A. Advantages and disadvantages of different kinds of materials.
- B. Transparent buildings: problems and possible solutions.
- C. An interesting experiment.

Glass and metals

1. _____

Glass is a fashionable material in contemporary architecture. Transparent buildings and structures are very popular. Structural glass components such as columns and beams are often required, but this material seems structurally unsafe because it is brittle. For this reason, a new construction technique has been developed using:

- very long overlapping glass segments to create glass beams.
- a small stainless steel profile has been added to the layout of the glass beam to reinforce it.



2. _____

To prove that glass structures can be safe, as concrete is, an experimental transparent pavilion has been designed. It combines a number of innovative ideas. Many different kinds of glass and glass systems have been used.

3. _____

Painted, stainless, weather-resistant steel and aluminum have been used for supporting structures. Aluminium has some advantages: it is light, resistant to corrosion, and easy to work but, it has low fire resistance. Stainless steel has good fire resistance and is easy to keep but its price is high. Painted steel is not expensive but difficult to work on site and not resistant to corrosion.

Activity 3: Read the text again and decide if the statements are true or false.

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|---|------|-------|
| 1. Glass is very popular in contemporary architecture. | TRUE | FALSE |
| 2. There is no way to create a glass structure that is as safe as concrete. | TRUE | FALSE |
| 3. A transparent pavilion has been designed as an experiment that uses some innovative ideas. | TRUE | FALSE |
| 4. There is only one type of glass in this pavilion. | TRUE | FALSE |
| 5. Glass has also been used for supporting structures. | TRUE | FALSE |