

WHAT MAKES IT STRONG?

Structures need to be strong and stable to last a long time. A strong structure would not break or change its shape. In other words, the object can withstand any force. The shape of a structure is important. Shapes of strong structures make use of arches, rectangles, and triangles. Some structures last longer because of the material used to make the structure.

Questions

1. Determine the strength and stability of these structures. Could it break or fall?

Would it break or fall?



Write: stable or not stable

This tent is .

Write: strong or not strong

This tent is .



These pyramids are .

These pyramids are .



This stool is .

The legs on this stool is .



This teepee is .

The material used to frame the teepee is .

Name _____

Date _____



The rope is .

The branch holding the swing is .

2. Consider the shape of the structure below. What is the **best reason** that this structure is strong and stable?



- This structure is tall.
- This structure is made of steel.
- This structure has a solid and heavy triangular base.
- The wind cannot move this structure.
- The structure was built by brilliant people.

3. Select a material and its advantage.

SORT ELEMENTS

Metal Glass Plastic Wood

Strong and tough; easy to shape and shiny.	
It is transparent and hard.	
It is light weight, a good insulator and waterproof.	
It is strong and durable; it can be shaped in almost any form.	

Name _____

Date _____

4. What type of material are they made of? Match the structure to the main material used to build it.

List: bamboo, bricks, buffalo skin, clay, mud, straw, wood

Structure



Main Material Used

_____ for the frame and _____ for the walls.

_____ on the roof and _____ for its walls.

_____ on the roof and _____ for its walls.

_____ for the walls.

_____ for the pot.

Name _____

Date _____

5. What type of material are they made of? Match the structure to the main material used to build it.

List: clay, metals, steel, straw, vine, wood

Structure



This bridge is made of _____ and _____.



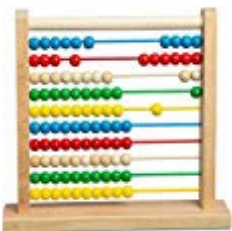
This adobe house is made of _____ mixed in with some
_____.



This lock is made of _____.



The railway tracks are made of _____.



This abacus is made of _____.