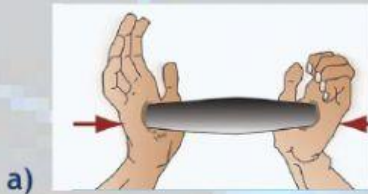
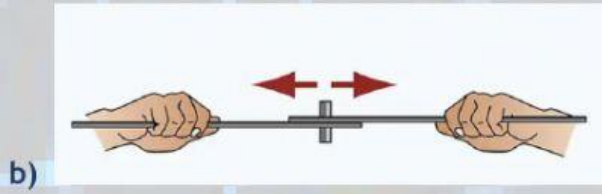


## STRUCTURES

1. Identify each type of stress.



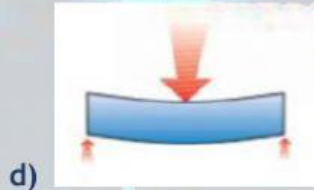
a)



b)



c)



d)



e)

2. What type of stress can you see in each of these images?

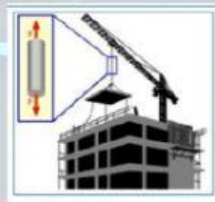
a)




b)




c)




d)




e)




f)




g)




h)



3. Translate the name of the following types of structures.

a. Massive structures.

b. Lintelled structures

c. Vaulted structures.

d. Laminated structures.

e. Geodesic structures.

f. Triangular structures.

g. Suspended structures.

h. Reinforced concrete structures

i. Pneumatic structures.

4. Complete the sentences with the different types of structures:

a. \_\_\_\_\_ are formed by arches and vaults using stones. Using these elements, builders could cover larger spaces and have bigger gaps in the structures.

b. \_\_\_\_\_. These are three-dimensional structures of bars, which combine the properties of vaults with triangulated structures to create curved shapes and cover large spaces.

c. \_\_\_\_\_ are made of large blocks of concrete or rock with materials stacked (apilado) together without any spaces between them.

d. \_\_\_\_\_. These are formed by laminates of metal, plastic, or composite material like reinforced concrete. Their curved shape and folds give them strength.

e. \_\_\_\_\_ are light and easy to transport, set up, and dismantle. We use them in light boats, children's rides and field hospitals.

f. \_\_\_\_\_ are made from bars, normally metal or wooden. The use triangular shapes means they are not easily deformed.

g. \_\_\_\_\_. This type of structure uses cables called suspenders, from which the structure hangs.

h. \_\_\_\_\_. Some structural elements are beams and columns, bars, or profiles. Buildings are a basic example of such structures.

5. What type of structure can you see?



A.



B.



C.



D.



E.



F.



G.



H.



I.

6. Join each part of the structure with its translation and later place them in the right place:

a. Cimientos

b. Viga

c. Pilar

d. Viguetas

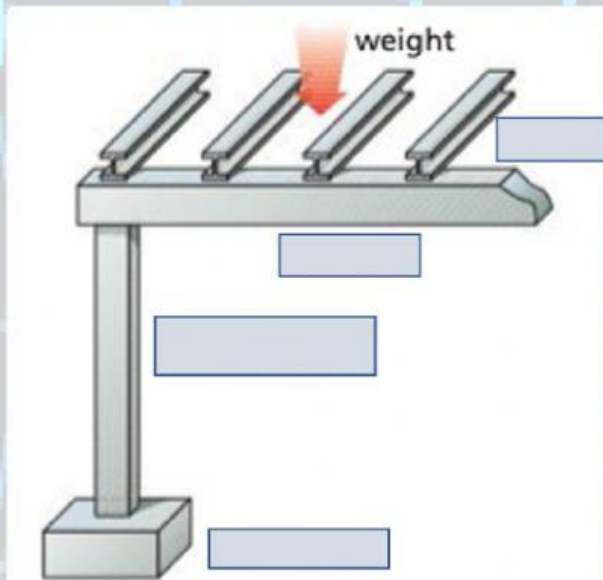
I. Beam

II. Foundations

III. Joists or secondary beams

IV. Pillar/Column

7. Place each part of the structure in the right place:



Beam

Joist

Column/pillar

Foundations