

DAY 6 – KPSI: MACHINES

Write "YES" or "NO" in every box to evaluate your knowledge.

	 I don't know	 I know a little	 I could explain it
Can you differentiate machines depending on the type of energy they use?			
Can you explain what a structure is, its parts and uses?			
Can you describe what a lever is, different parts and usage?			
Can you classify the different types of levers ?			
Can you describe what an inclined plane is and its usage?			
Can you explain what a pulley is and how it is used?			
Can you explain a relevant invention from the past ?			
Can you name the most important inventions nowadays ?			

ACTIVITIES 1: MACHINES AND STRUCTURES

1. Watch the video "[Structures](#)" and tick only the images where you can see structures.



___ chair



___ watch



___ table



___ bookcase



___ building



___ seesaw



___ pencil sharpener



___ helicopter



___ bridge



___ car



___ bench



___ dishwasher

2. Watch the video "[Simple and complex machines](#)" and complete the following questions.

2.1. What is a **machine**?

Machines are instruments that help us perform a job using _____ effort and doing it _____.

2.2. Tick the **simple machines**.

___ Wheel ___ Lever ___ Bicycle ___ Inclined plane

___ Clock ___ Tractor ___ Pulley ___ Washing machine

2.3. How does a **lever** work?

It helps _____, like a seesaw.

2.4. How does a **pulley** work?

It helps _____.

2.5. How does an **inclined plane** work?

It is a ramp which joins _____ each at different heights.

2.6. What are **complex machines**?

Complex machines consist of _____, some of which are _____.

2.7. Tick the **complex machines**.

___ Wheel ___ Lever ___ Bicycle ___ Inclined plane

___ Clock ___ Tractor ___ Pulley ___ Washing machine

2.8. What **type of energy** do these complex machines use?

- | | |
|-------------------|----------------------|
| Bicycle • | • Electrical machine |
| Washing machine • | • Thermal machine |
| Tractor • | • Manual machine |

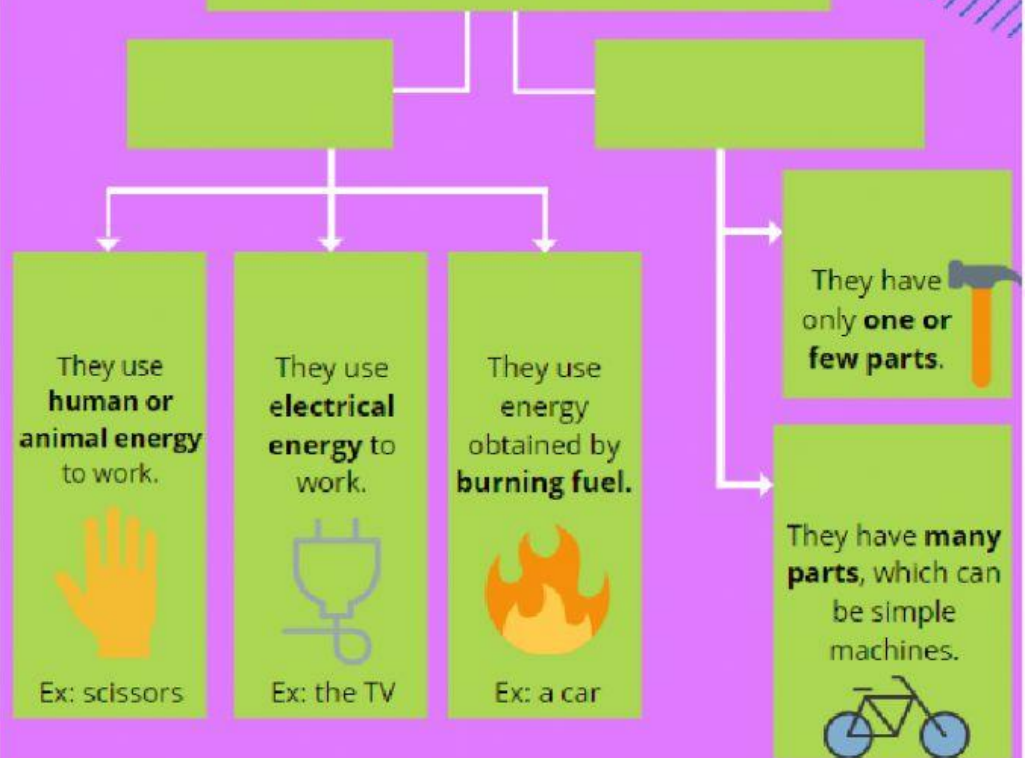
3. Complete the diagram by choosing the correct words.

STRUCTURES	SIMPLE MACHINES	THERMAL MACHINES	PARTS THEY ARE MADE OF
TYPE OF ENERGY	MANUAL MACHINES	machines	
MACHINES	structures	COMPLEX MACHINES	ELECTRICAL MACHINES

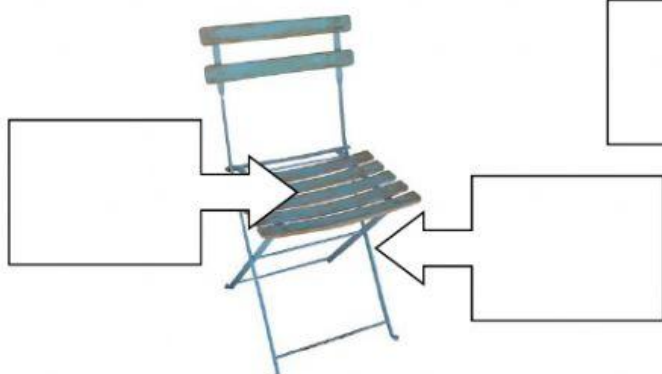
A _____ is a group of elements that can support weight or load.



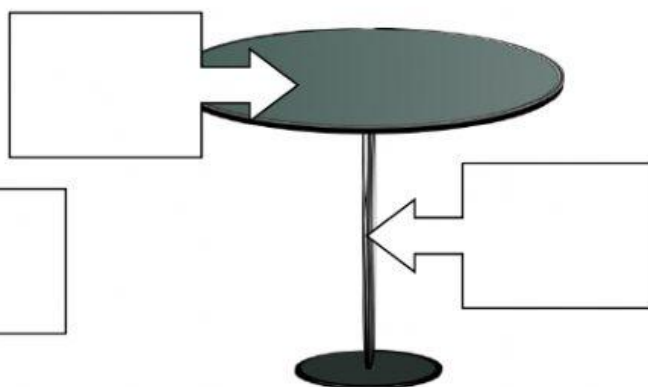
A _____ is a device made of different parts that help us complete tasks with less effort.



4. Label the following structures by writing: girder or pillar.



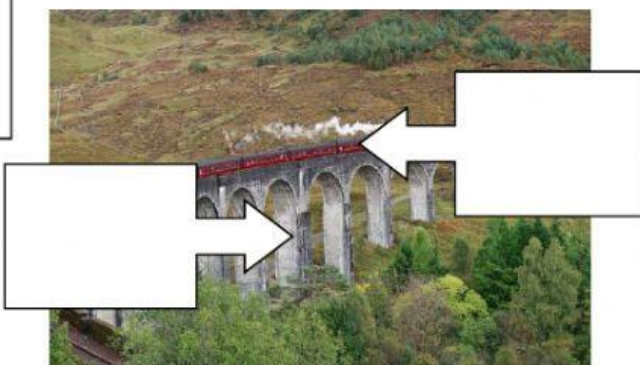
chair



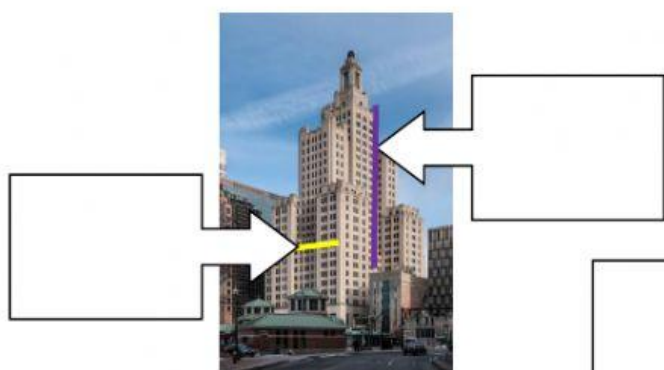
table



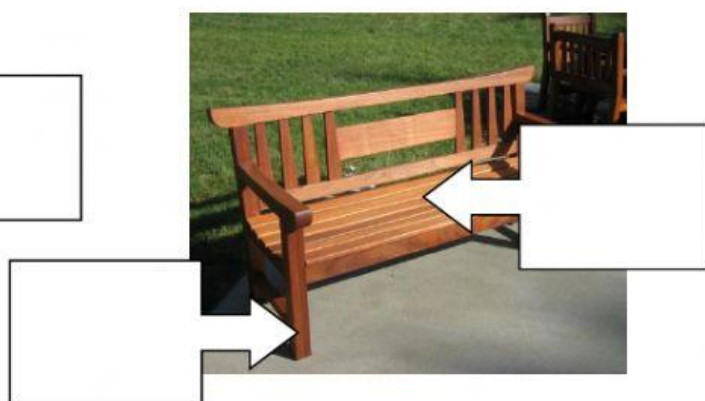
bookcase



bridge



building



bench

5. Classify the following machines as simple or complex.



Wheelbarrow



Crane



Well



Mower



Seesaw



Clock



Ramp



Mixer



Wheel

6. Classify the following machines depending on the energy they use: manual machine, electrical machine or thermal machine.



Scissors



Mixer



Car



Plane



Shovel



Lamp



Laptop



Ship



Hammer
