




## DAY 6 – KPSI: MACHINES

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

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

# 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**.

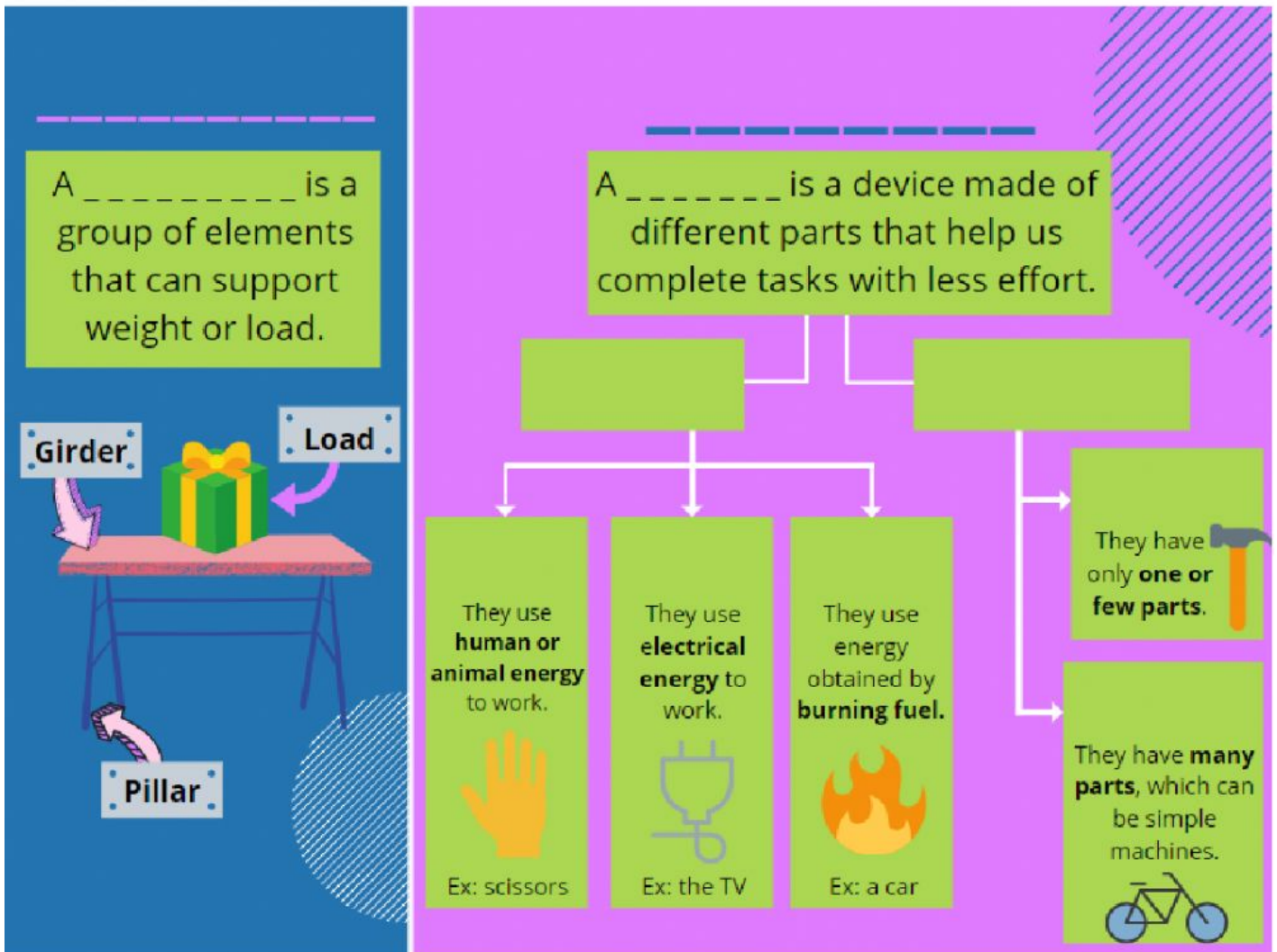
☐ Wheel      ☐ Lever      ☐ Bicycle      ☐ Inclined plane  
☐ Clock      ☐ Tractor      ☐ Pulley      ☐ Washing machine

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

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

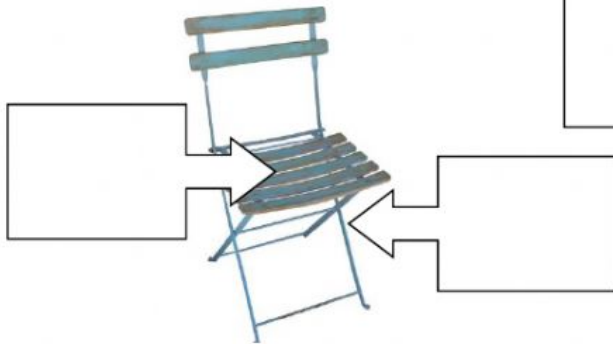
### 3. Complete the diagram by choosing the correct words.

|                   |                    |                     |                           |
|-------------------|--------------------|---------------------|---------------------------|
| STRUCTURES        | SIMPLE<br>MACHINES | THERMAL<br>MACHINES | PARTS THEY<br>ARE MADE OF |
| TYPE OF<br>ENERGY | MANUAL<br>MACHINES | machines            |                           |
| MACHINES          | structures         | COMPLEX<br>MACHINES | ELECTRICAL<br>MACHINES    |

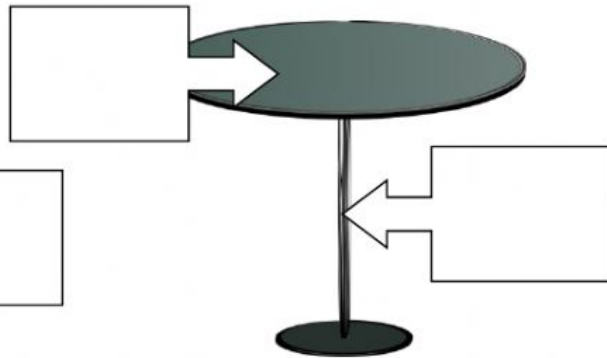




**4. Label the following structures by writing: girder or pillar.**



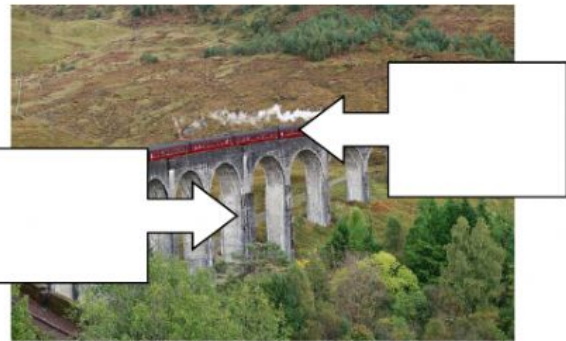
chair



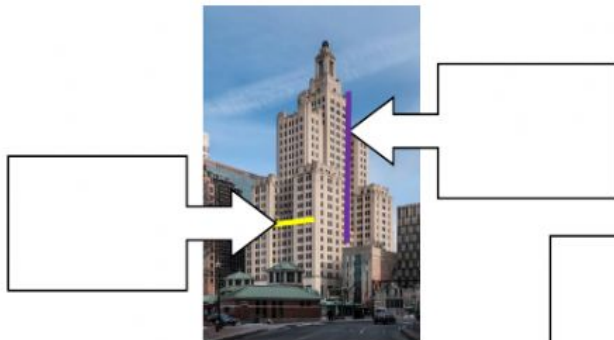
table



bookcase



bridge



building



bench

**5. Classify the following machines as simple or complex.**



Wheelbarrow

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Crane

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Well

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Mower

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Seesaw

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Clock

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Ramp

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Mixer

---



Wheel

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



Scissors

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Mixer

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Car

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Plane

---



Shovel

---



Lamp

---



Laptop

---



Ship

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Hammer

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