

## NATURAL SCIENCE TEST UNIT 6: MACHINES

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Number: \_\_\_\_\_ Class: 4º \_\_\_\_\_

**1** Label the photos with the words in the box.

pulley    screw    inclined-plane    wedge    wheel and axel



*inclined plane*



**2** Use the words from activity 1 to complete the sentences.

- a** A \_\_\_\_\_ can cut or hold objects in place.
- b** A \_\_\_\_\_ helps transport objects faster.
- c** A \_\_\_\_\_ lifts and lowers objects.
- d** A \_\_\_\_\_ joins two objects together.
- e** An \_\_\_\_\_ makes it easier to move objects to different levels.

**3** Tick (✓) the simple machines.

- a** screw ☒
- b** tennis racquet ☐
- c** bicycle ☐
- d** door handle ☐
- e** scissors ☐

4 Match to make true sentences.

A complex machine consists of

Complex machines use

Mechanical machines make

Thermal machines produce

Information processing machines make

• or remove heat.

• calculations or transform information.

• simple machines working together.

• different sources of energy.

• objects move.

5 Write the energy sources the machines use.

water    the Sun    oil



6 Complete the sentences with the words in the box. There are two extra words.

energy    power    electrical    force    heat    information    pollution    Sun    wind

a Many complex machines require \_\_\_\_\_ from a source other than a person.

b Mechanical machines apply \_\_\_\_\_ to make another object move.

c Thermal machines can produce or remove \_\_\_\_\_.

d \_\_\_\_\_ processing machines can make large calculations.

e Energy from coal or oil causes \_\_\_\_\_.

f Water can be used to generate \_\_\_\_\_ energy.

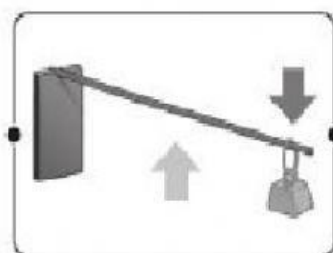
g Solar panels are used to obtain energy from the \_\_\_\_\_.



Match the information on levers to the pictures. Then match the pictures to the photos.

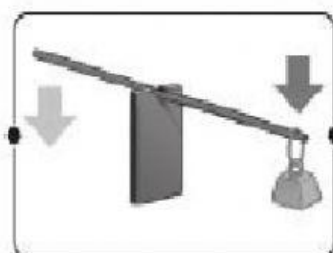
a

The fulcrum is between the effort and the load.



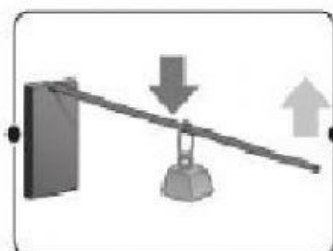
b

The effort is between the fulcrum and the load.



c

The load is between the effort and the fulcrum.



Classify the information on levers (a, b and c) from activity 2.

1 class 1 lever

☐

2 class 2 lever

☐

3 class 3 lever

☐

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