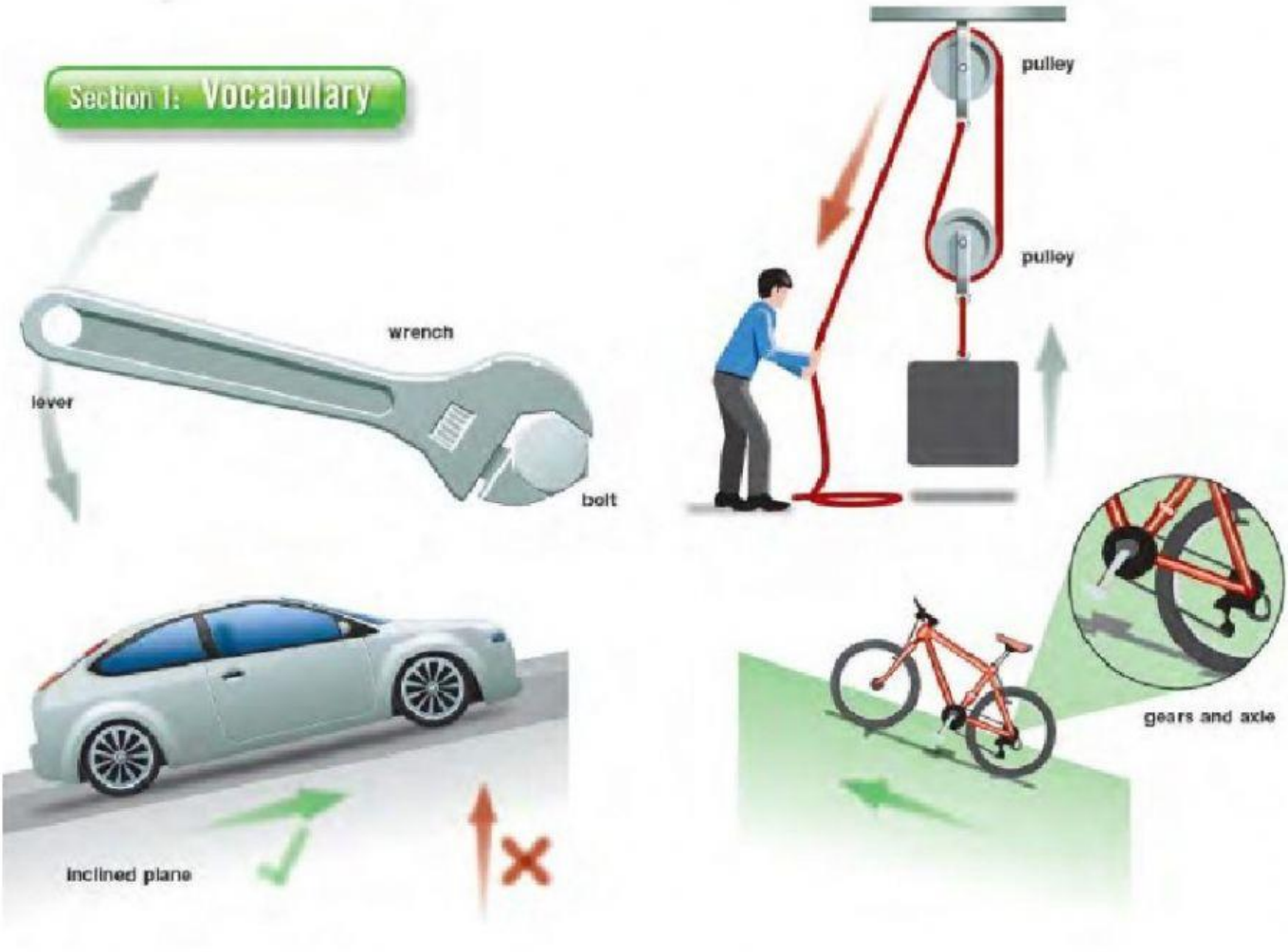
ESCUELA DE EDUCACIÓN TÉCNICA Nº 1
INGLÉS – 6°7 & 6°9

PROFESORA SOSA CECILIA

Forces, loads and tools

1) Qué crees que significan las 3 palabras del título de esta clase?



2) Estudia estas nuevas palabras y marca su significado en español. Qué tipo de fuerzas puedes ver que estén siendo empleadas?

LIVEWORKSHEETS

3)

Read the text and look at the pictures.

The human body has a lot of **energy** in it and it can **exert** a lot of **force** to move a **load** – to push things, to pull things, to lift things and to turn things. But sometimes the force required to do something is greater than the energy a human body can provide. When this happens we need to use a **tool** to move the load. A tool increases the distance between the force and the load. There is a simple rule of physics – if you increase the distance between the force and the load, you can reduce the force required to move it. To put it another way:

SMALL FORCE + LARGE DISTANCE = LARGE FORCE

For example, **wrenches** are used for tightening and loosening **bolts**. A wrench has a long **handle**. This increases the distance between the force (from a human hand) and the load (the bolt), so we can tighten a bolt with only human energy. This is an example of a **lever**. Other simple tools are:

- the **pulley** – this increases the length of a rope and so increases the force we can exert by pulling on it, so we can lift a heavy crate from a ship.
- the **inclined plane** – this increases the distance that the load has to travel and so decreases the force we need to exert to move it, so we can push a car up a ramp.
- the **gear wheel** and **axle** – the gear wheel turns through a greater distance than the axle but moves the axle with more force — so we can pull our own weight up a steep hill on a bicycle.

4) Busque el significado de estas palabras y también las del recuadro verbs/nouns

Exert:

Crate:

Steep:

Verbs	Nouns
put in	nails
take out	screws
hold	bolts
tighten	holes
loosen	things
make	

LIVEWORKSHEETS