

Name: _____ Section: _____
Date : _____ Score: _____

SIMPLE MACHINES

Simple machines are devices or tools that facilitate or make work easier. These machines can transform and transfer energy, multiply speed or force, and change the direction of the force to make work easier. The following are the kinds of simple machines: inclined plane, lever, wedge, screw, pulley, and wheel and axle.

The **inclined plane** is a simple machine that has a sloping flat surface with one end raised higher than the other end. It is used to lift heavy objects.

The **lever** is a rigid bar that is free to rotate about a point called fulcrum. Levers are used to push, lift, and pull things.

The **wedge** is a double inclined plane that is sharpened to an end. Wedges are usually used for cutting and piercing.

The **screw** is an inclined plane wound around a cylinder. With each turn of the screw, it moves a distance of one pitch. A pitch is the distance between two grooves.

The **pulley** is a grooved wheel that turns around an axle which is held in place by mounting bracket. This special type of wheel has a rope sliding on its groove. The groove prevents the rope from sliding. It is used to pull up heavy objects.

The **wheel and axle** has the same appearance with pulley, but it has a wheel attached to an axle, like the steering wheel of a car. When the axle turns the wheel also turns. The wheel and axle can change the direction of the force.

Activity 1

DIRECTIONS: Read the sentences carefully. Write the letter of the correct answer in a clean sheet of paper.

- The inclined plane makes our work easier and faster. Which of the following is an example of an inclined plane?
A. ax and blade C. bicycle, gears, and doorknob
B. ladder and stairs D. wheelbarrow and bottle opener
- Lito plans to go fishing. Which of the following tools should he bring with him?
A. fishing rod B. icepick C. nail D. wheelbarrow
- An inclined plane is widely used at home and workplace because
A. it moves heavy objects easily.
B. it gets over an obstacle with little effort.
C. it can be used in raising and lowering a load.
D. All of the above
- The Grade 6 pupils need to cut their materials to make a wooden table. Which of the following will they use?
A. saw B. wheelbarrow C. small knife D. can opener
- All of the following are examples of wheel and axle EXCEPT _____.
A. car steering B. doorknob C. fishing rod D. roller
- A cargo ship will unload big boxes at the pier. Which of these machines will the men use?
A. block and tacked pulley B. fixed pulley C. lever D. screw
- Which of the following makes use of the principle of the screw?
A. bulb B. can opener C. knife D. scissors
- Drill, bolt, light bulb and faucet are examples of _____.
A. lever B. screw C. wedge D. inclined plane
- On a construction site, how do workers transport mixed cement and hollow blocks from the ground floor to the 2nd floor?
A. by using a wedge B. by using a pulley C. by using a screw D. by using a wheel and axle
- Why are teeth an example of a wedge?
A. They can cut objects. C. They can pull down objects that have lesser force.
B. They can lift objects with lesser force D. They have a fulcrum, force arms, and work arms.

Activity 2

Directions: Identify the kind of simple machine. Write your answer on a separate sheet of paper.

