

INTERNATIONAL SCHOOL AWARD

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RECREATING TRADITIONAL SIMPLE MACHINES (Booklet for ISA Project No. 1)



GOLDEN GATE

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SIMPLE MACHINE

We use various types of machines in our daily life to perform our work efficiently. For example, we use scissor to cut paper, knife for chopping fruits and vegetables, nail cutter to trim our nails and bottle opener to open bottle. They are simple machines. A simple machine is a device, which is simple in

ADVANTAGES:

- ❖ It makes our work easier.
- ❖ It helps to gain the speed of work.
- ❖ It changes the direction of force.
- ❖ It transforms the force in a convenient point.

TYPES OF SIMPLE MACHINES

Basically there are six types of simple machines. They are given below:

- Lever
- Wheel and Axle
- Pulley
- Inclined Plane
- Screw
- Wedge

1. NAIL CUTTER:



Nail cutter belongs to first class lever. In this class lever, fulcrum lies in between load and effort. It is used to trim finger and toenails.

2. SCISSOR:



Scissor is an example of first class lever where fulcrum lies in between load and effort. It is used for cutting various thin materials like papers, cardboard, cloth, rope and wire.

3. BOTTLE OPENER



It belongs to second class lever. In this type of lever, load lies between the fulcrum and the effort. It enables the removal of metal bottle caps from bottle.

4. KHUKHURI



Khukuri is the most commonly used multipurpose tool in the fields and homes in Nepal. It is used for chopping firewood, digging, slaughtering animals for food, cutting meat and vegetables, skinning animals and opening cans.

5. SICKLE (हसिया)



Sickle is one of the important tools needed in agriculture. It is used to harvest crops like paddy, wheat, maize, millet and to cut grass, fodder, firewood, vegetables etc.

6. NAILS



A nail is a type of wedge, which is a simple machine. A wedge is often shaped like a triangle. They are used for putting constructional things together. Usually it is used to put wood together when constructing something.

7. BELANA AND CHAUKI (Rolling pin and Rolling board):



Belana is a cylindrical shaped wooden rod and Chauki is a circular shaped wooden board with smooth surface on its upper side. It is used to prepare *Roti* or *Chapattis* from wheat flour or *Maida*.

8. LEMON SQUEEZER



Lemon squeezer is second class lever. In a lemon squeezer, the lemon (load) is at the middle, the fulcrum of the squeezer is at one end and the push given by hand (effort) is at the other end. It is used to remove the juice from lemon and other citrus fruits.

9. BROOM



Broom is an example of a lever. It is a cleaning tool usually consisting of stiff fibers attached to, and roughly parallel to a cylindrical handle, the broomstick. It is used for sweeping the floors of home.

10. KNIFE



A knife is used to cut vegetables like cauliflower, cabbage, gourd, potato etc into pieces for cooking them to make vegetables ready to eat. Knife is made up of iron or steel with one side sharp and the other side blunt.



RECREATING SIMPLE MACHINES

BY UK SCHOOL

1. Cork screw (screw)



2. Water well



3. Wheelbarrow



4. Dhikki

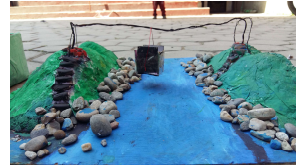


5. Draw bridge, pulley



BY GOLDEN GATE SCHOOL

1. Tuin



2. Water Well



3. Jaanto



4. Dhikki



5. Spade

