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CLASS- 5 SUBJECT- EVS

Based On NCERT

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Chapter - 11

Simple Machines

TYPES OF SIMPLE MACHINES

The main simple machines in our day-to-day life are lever, inclined plane, wedge, wheel and axle, pulley and screw.

Lever

A **lever** is a simple machine used to lift objects. It is a kind of a rod that can turn or move about a fixed point or support. It consists of three parts as explained below:

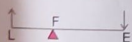
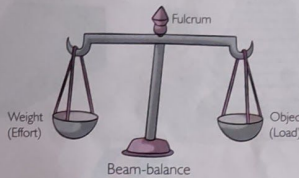
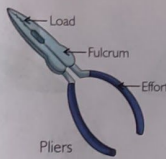
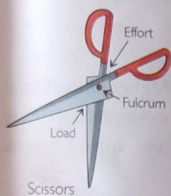
★ **Fulcrum:** The point on which a lever turns or is supported.

★ **Load:** The weight on which force is applied.

★ **Effort:** The force applied is the effort.

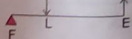
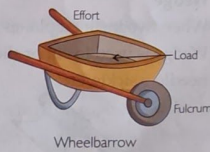
Lever can be classified into three types on the basis of the position of the load, the fulcrum and the effort.

First Class Lever: When the fulcrum is in between the load and the effort, it is called a **first class lever**, for example, scissors, pliers, seesaw, handpump, etc.

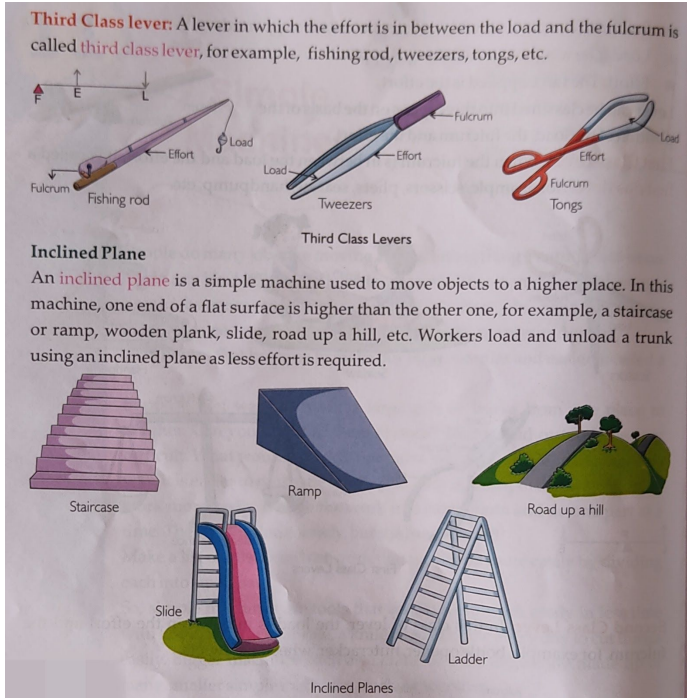


First Class Levers

Second Class Lever: In this class of lever, the load is in between the effort and the fulcrum, for example, bottle opener, nutcracker, wheelbarrow, etc.



Second Class Levers



A. Answer the following questions .

- 1. What is a ramp ? How is it built ? Why ?**
- 2. How does a lever work ?**

Jyoti