

CH-11 SIMPLE MACHINES

HARDWORDS :

1. Invented

7. Wrapped

2. Pliers

8. Hoisting

3. Fulcrum

9. Sewing machine

4. Crowbar

10. Mechanical

5. Labourers

11. Convenient

6. Grinding

Q1

What are simple machines? How do they help us?

Ans1

Simple machines are devices that have very few or no moving parts. They can help us by doing more work in less time and with less efforts.

Q2

What is the difference between simple machine and a big machine?

Ans2

Simple machine ~~is~~ is a device with few or no moving parts; whereas, big machine is a combination of multiple simple machines.

Simple machines make our work easier while big machine perform more difficult tasks than simple machines.

Q3

How do pulleys help us in our daily life?

Ans3

Pulleys help us to lift or pull the load upward by applying efforts downwards.

Example; Fixed Pulley - It helps to draw water from a well, to raise or lower flags and to draw curtains. Movable pulleys are also used in cable cars.

Q4 What is a screw? How is a screw better than a nail?

Ans 4 A screw is better than a nail because a screw is a simple machine. It can hold things together. It can join two things more tightly than a nail as it works for longer distance than its length. A nail can hold things through a short distance, that is its length.

Q6 Why do we say that a screw is an inclined plane?

Ans 6 A screw is an inclined plane wrapped around a bar or rod. It can be stated by an activity. Take a square piece of paper and cut it along the diagonal to get two triangles, when the large edge of it is wrapped around a pencil it appears like a screw. This shows

that a screw is an inclined plane wrapped around a rod or pole -

Q6 Give any three examples of the application of wheel and axle.

Ans 6 Three daily life applications of wheel and axle are in cars, cycles and sewing machines.

Q7 What is a pulley? what are two kinds of pulley?

Ans 7 A pulley is a small wheel. It has a groove around its rim to hold a rope. The pulley along with the rope is used to lift heavy loads more easily. Two kinds of pulley are:-

- 1) Fixed pulley
- 2) Movable pulley

Q8 What kind of a machine is used in the car studs which your mother wears?

Ans 8 A screw is used in the car studs of mother as it is used as

revolving tool -

Q9

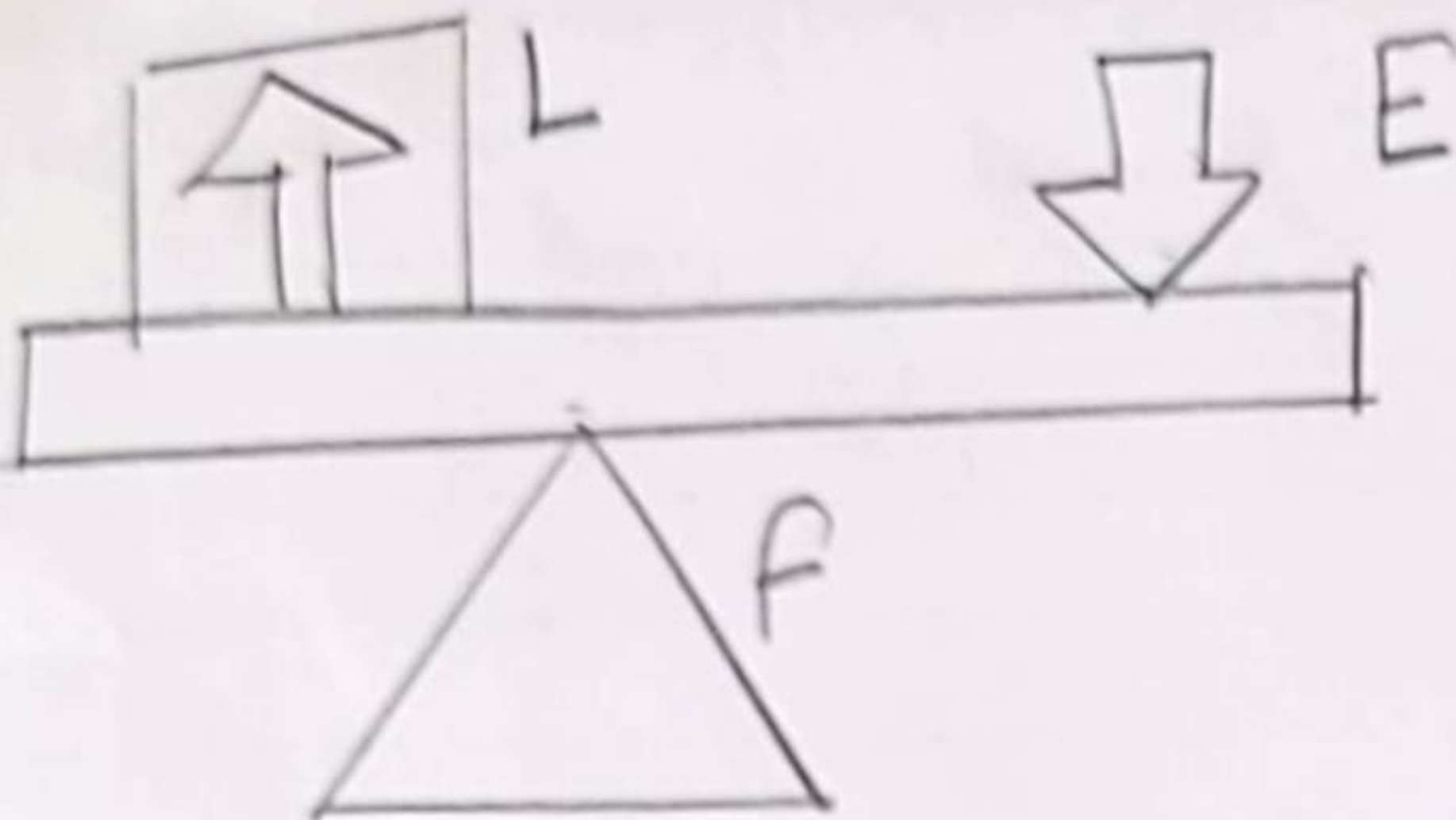
What is an inclined plane?
Give examples.

Ans 9

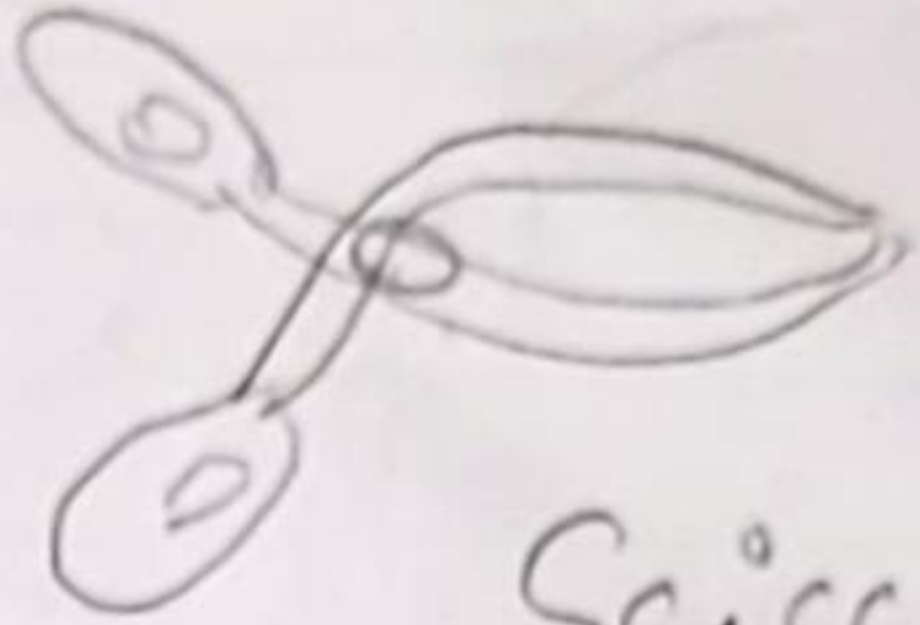
An inclined plane is a gentle slope which makes our work easier. For Eg: Labourers use a plank as an inclined plane to load goods on trucks.

Q10

Draw various kinds of levers. Label the fulcrum, load and effort in each one of them.



first class lever

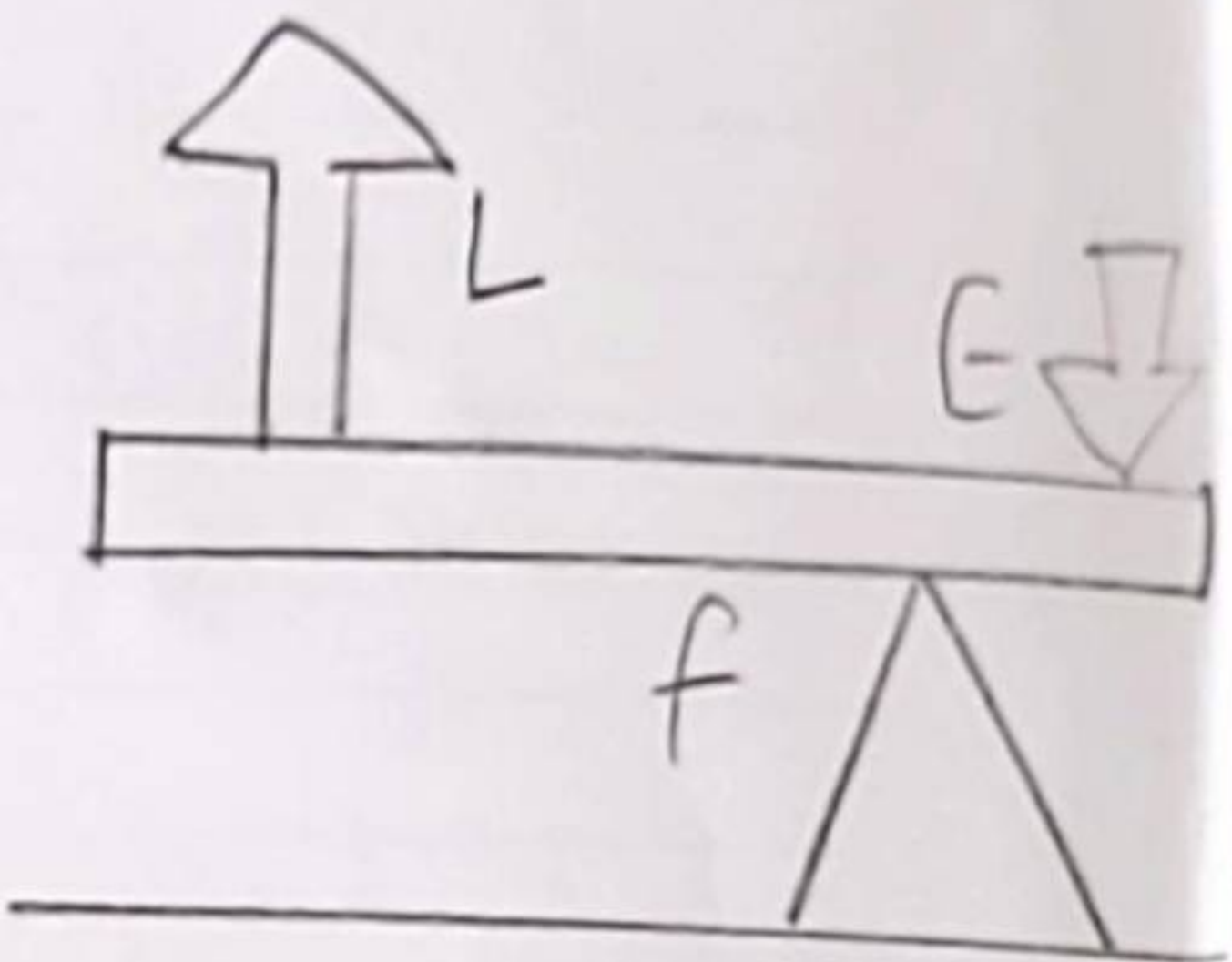


Scissors

Second Class lever



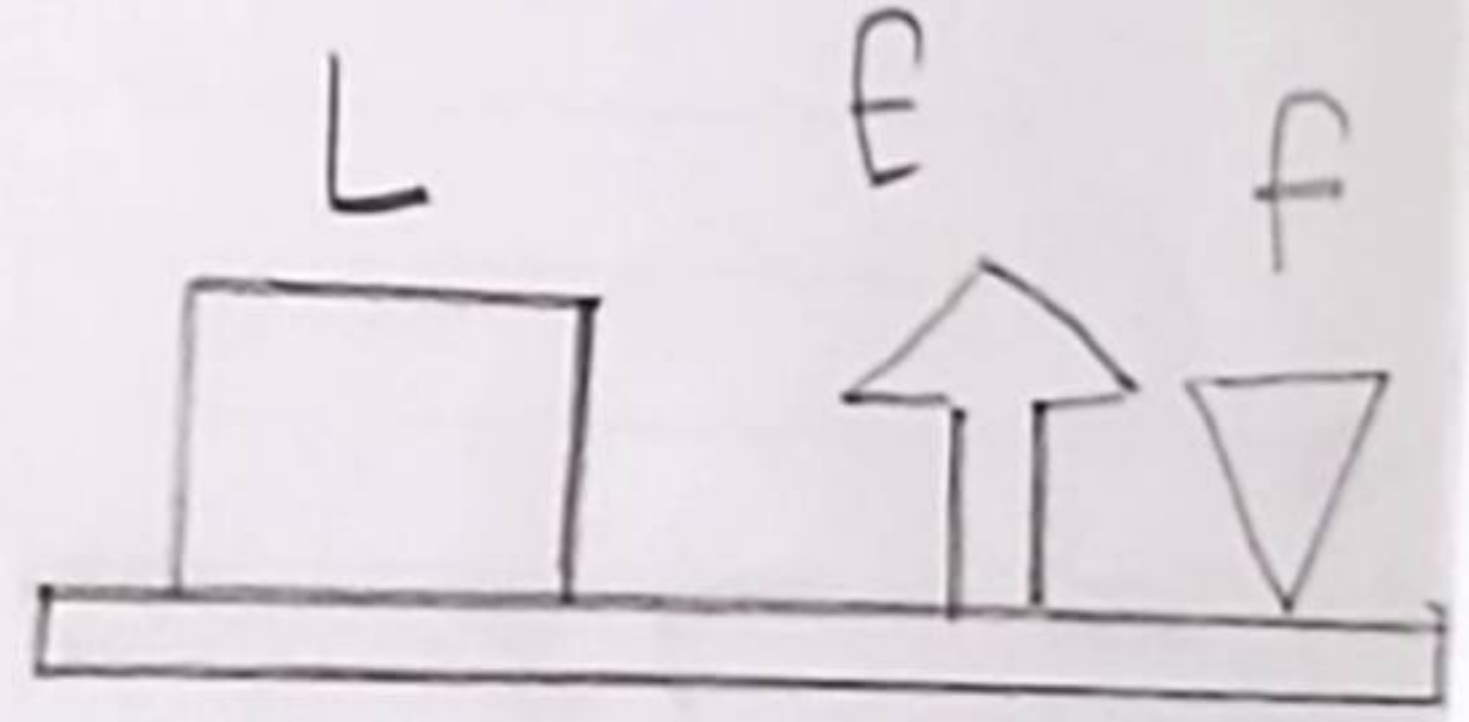
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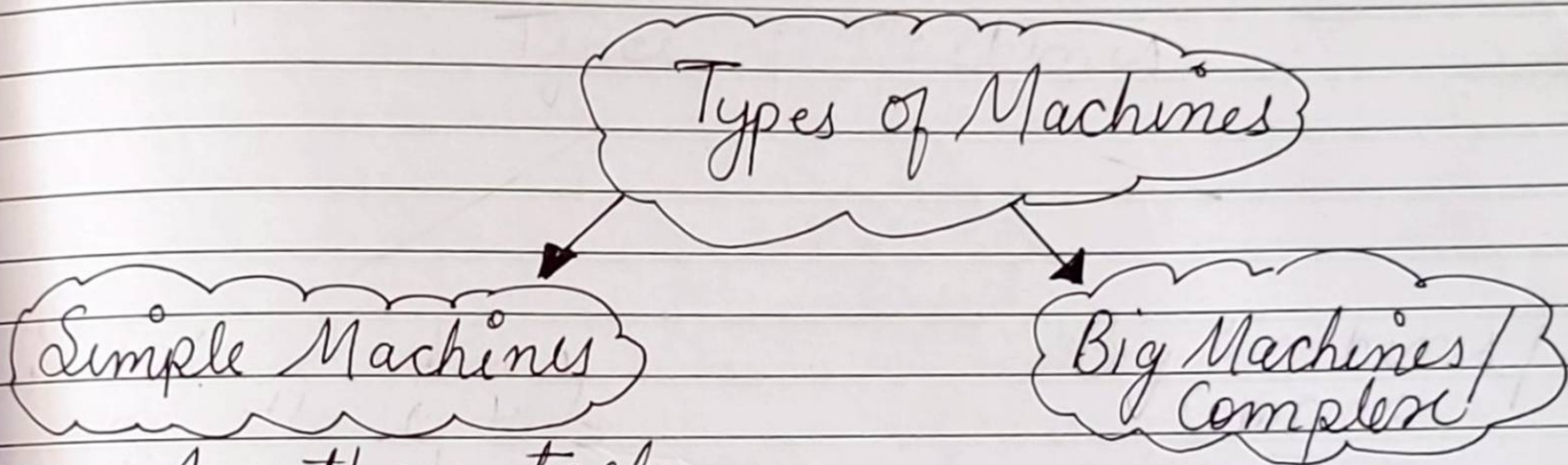
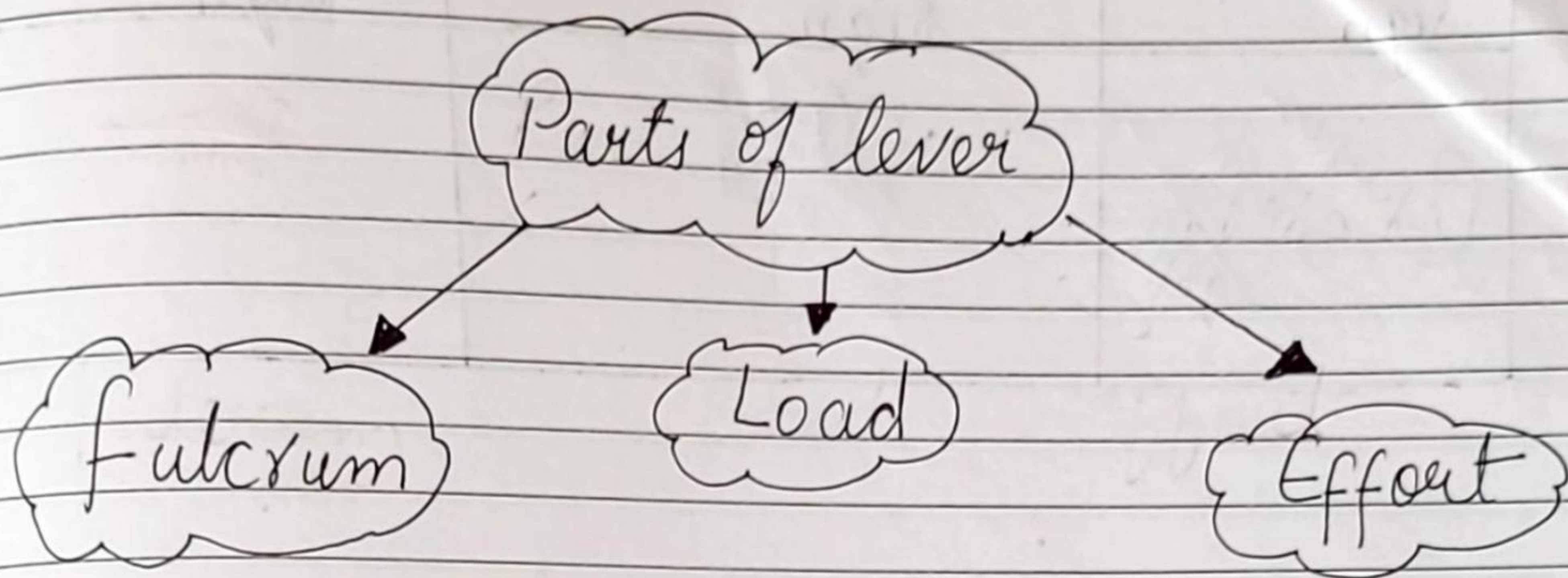
Third Class lever



fishing rod



* Mind Map



Are those tools which makes our work easier.
Eg Screw, Nule

Combination of various simple machines and are multifunctional.
Eg Washing Machine