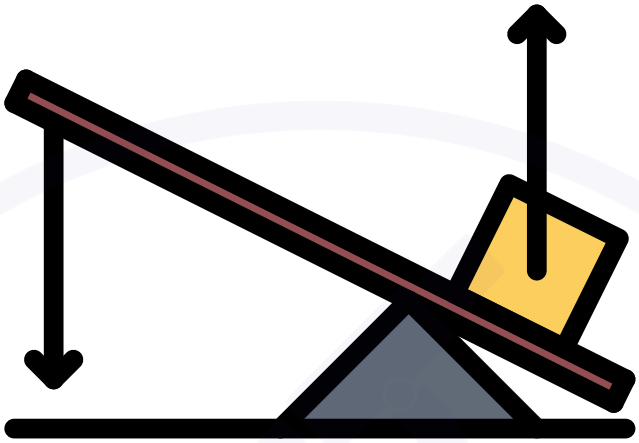
# MOMENTS AND LEVERS

## Key Concepts

- A moment is the turning effect of a force.
- Levers make it easier to lift or move heavy objects.



## Key Facts to Remember

- Moment = Force × Distance from pivot, measured in newton-meters (Nm).
- The pivot is the point around which the lever rotates.
- Levers multiply force, making tasks easier (mechanical advantage).
- Examples of levers include seesaws, scissors, and crowbars.
- There are three types of levers based on the positions of the load, effort, and pivot.
- Balanced moments occur when clockwise and anticlockwise moments are equal.
- Gears and pulleys also use moments to transfer and amplify force.
- Increasing the distance from the pivot increases the moment.

## Quick Questions

1. What is the formula for a moment?
2. What is the unit of a moment?
3. What is a pivot?
4. How do levers make work easier?
5. Name three examples of levers.
6. What happens when moments are balanced?
7. What increases a moment?
8. Name another system that uses moments to transfer force

### Fun Fact

**The ancient Egyptians used levers to build the pyramids, moving massive stones with simple tools!**