

## REVISION GUIDE

# Motion, Work, and Energy Revision Pack

A better revision pack for motion, work, energy, and power, with worked examples and rate-versus-quantity reminders.

**QUICK OVERVIEW**

**Category: physics**

Includes 3 related guide pages.

Links back to 7 calculator tools.

**FORMULA HIGHLIGHTS**

Distance

$$\text{distance} = \text{speed} \times \text{time}$$

Power

$$P = W / t$$

**MOTION BASICS**

Distance, speed, and time stay reliable when units are consistent and the interpretation of average speed is kept clear.

**WORK AND ENERGY**

Work describes transferred energy in simple aligned-force cases. Energy quantities describe stored or moving capacity for change.

**POWER AS RATE**

Power turns work or energy into a rate question. Without time, you do not yet have power.

**WORKED EXAMPLES**

Convert minutes to seconds before combining with m/s.

Compare how changing speed affects kinetic energy much more strongly than it affects momentum.

**COMMON MISTAKES**

- Mixing units across motion calculations.
- Confusing energy with power.
- Using average-rate formulas in settings that need a more detailed motion model.