



WORLD MATHS SCIENCE OLYMPIAD

PHYSICS

Class -11

Unit 1: Physical World and Measurement

- SI units, dimensional analysis, accuracy and errors.

Unit 2: Kinematics

- Motion in a straight line, motion in a plane, projectile motion.

Unit 3: Laws of Motion

- Newton's laws, friction, circular motion.

Unit 4: Work, Energy, and Power

- Work-energy theorem, conservation of energy.

Unit 5: Motion of System of Particles

- Center of mass, torque, angular momentum, rotational dynamics.

Unit 6: Gravitation

- Universal law of gravitation, acceleration due to gravity, satellites.

Unit 7: Properties of Bulk Matter

- Elasticity, pressure in fluids, viscosity, surface tension.

Unit 8: Thermodynamics

- Heat, temperature, work, first law of thermodynamics, heat engines.

Unit 9: Oscillations and Waves

- SHM, simple pendulum, damped & forced oscillations, sound waves, Doppler effect.