

## THE BRANCHES OF PHYSICS

Physics is the study of matter and energy and the interaction of the two through forces and motion

Branch	Examples
Mechanics and motion	Interaction between objects, falling objects, friction and weight
Thermodynamics	Melting and freezing, engines, refrigerators
Vibrations and waves	Springs, sound, pendulums
Optics	Light, mirrors, lenses, color, astronomy
Electromagnetism	Electrical charges, circuitry, magnets, electricity
Relativity	Particle collisions and accelerators, nuclear energy
Quantum mechanics	The atom and its parts, the behavior of submicroscopic particles