

Career Exploration

A2. identify and describe careers related to the fields of science under study,

Motion and Its Applications

B1. analyse selected technologies that are used to move objects or track their motion,

B2. investigate, in qualitative and quantitative terms, the linear uniform and non-uniform motion of objects, and solve related problems;

B3. demonstrate an understanding of different kinds of motion and the relationships between speed, acceleration, displacement, and distance.

Mechanical Systems

c1. analyse common mechanical systems that use friction and applied forces,

c2. investigate forces, torque, work, coefficients of friction, simple machines, and mechanical advantage, and interpret related data;

c3. demonstrate an understanding of concepts related to forces and mechanical advantage in relation to mechanical systems.

Energy Transformations

e2. investigate energy transformations and the law of conservation of energy, and solve related problems;

e3. demonstrate an understanding of diverse forms of energy, energy transformations, and efficiency.