

## **Force and Motion**

### **T.E.K. 4: The student knows concepts of force and motion evident in everyday life.**

The student is expected to:

- T.E.K. 4A: calculate speed, momentum, acceleration, work, and power in systems such as in the human body, moving toys, and machines.
- T.E.K. 4B: investigate and describe applications of Newton's Laws such as in vehicle restraints, sports activities, geological processes, and satellite orbits.
- T.E.K. 4C: analyze the effects caused by changing force or distance in simple machines as demonstrated in household devices, the human body, and vehicles.
- T.E.K. 4D: investigate and demonstrate mechanical advantage and efficiency of various machines such as levers, motors, wheels and axles, pulleys, and ramps.