

Newton's 2nd Law

The
Law of
Motion

If you're wearing a hat, you're going places. Vectors have direction.

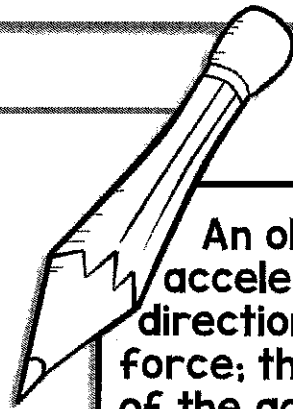
$$\vec{F}_{\text{net}} = m\vec{a}$$

The net force acting on an object is equal to the product of its mass and its acceleration.

equation

draw it

write it



An object will accelerate in the direction of the net force; the magnitude of the acceleration is proportional to the force and inversely proportional to the mass

use it

1. Find the force it would take to accelerate an 800-kg car at a rate of 5 m/s^2 .

2. What is the net force acting on a 0.15-kg hockey puck accelerating at a rate of 12 m/s^2 ?

