KINEMATICS

FORCES & MOTION

CONCEPT Kinematics is the science of motion. Some examples of kinematics are a giraffe moving in a straight line with no change in speed (constant velocity motion) or a pencil that falls off a desk (free fall motion). Kinematics explains the physics behind the position, velocity and acceleration of objects.

BACKGROUND

"Kinematics" comes from the Greek word "kinesis," which means "motion." Documentation shows kinematics was studied back in the 14th century. In the 17th century, Galileo used kinematics to study projectiles such as cannonballs.

REAL WORLD CONNECTIONS

A rocket propelling up after the initial thrust will give you vertical motion data. Kick a soccer ball and study the projectile motion. This basic information and idea of motion opens up a whole new world of physics.