

Activities Related to Tides

Concepts Related to California State Science Standards

Physics - Grades Nine Through Twelve - Motion and Forces

1. Newton's laws predict the motion of most objects. As a basis for understanding this concept:

e. *Students know* the relationship between the universal law of gravitation and the effect of gravity on an object at the surface of Earth.

Grade Eight - Focus on Physical Science - Forces

2. Unbalanced forces cause changes in velocity. As a basis for understanding this concept:

a. *Students know* a force has both direction and magnitude.

b. *Students know* when an object is subject to two or more forces at once, the result is the cumulative effect of all the forces.

g. *Students know* the role of gravity in forming and maintaining the shapes of planets, stars, and the solar system

All Grades - Investigation and Experimentation

Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations.