

## Science Curriculum by Grade

### Eighth Grade

#### *Life:*

- How asexual reproduction limits spread of detrimental characteristics through a species; genetic continuity
- Sexual reproduction, traits and survival
- How variations in structure, behavior, physiology relate to reproductive success and survival
- Evolution of species over time
- Adaptation and its relationship to survival, extinction

#### *Physical:*

- Change in position and its relationship to a reference point
- The relationship of change in position of an object as time, speed, and direction changes
- Waves and transfer of energy
- Vibration and the relationship to waves

#### *Earth/Space:*

- How objects in the solar system are in regular and predictable motions and the effect on various phenomena
- Gravitational force as a dominant force determining motion in the solar system
- Orbits and composition of comets, asteroids, Earth
- Effect of asteroids and meteoroids have when moving through space
- Universe consists of billions of galaxies, classified by shape
- Measurement of interstellar distances in light years
- Life cycle of a star
- Tools used to study the universe
- Interior structure of Earth and Earth's crust; tectonic plates
- Geographical events and their relationship to movement of tectonic plates