

For Physics, these general TEKS should be addressed:

- (2) Scientific processes. The student uses scientific methods during field and laboratory investigations. The student is expected to:
- (A) plan and implement experimental procedures including asking questions, formulating testable hypotheses, and selecting equipment and technology;
 - (B) make quantitative observations and measurements with precision;
 - (C) organize, analyze, evaluate, make inferences, and predict trends from data;
 - (D) communicate valid conclusions;
 - (E) graph data to observe and identify relationships between variables; and
 - (F) read the scale on scientific instruments with precision.
- (3) Scientific processes. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:
- (A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information;
 - (B) express laws symbolically and employ mathematical procedures including vector addition and right-triangle geometry to solve physical problems;
- 6) Science concepts. The student knows forces in nature. The student is expected to:
- (A) identify the influence of mass and distance on gravitational forces;
- 8) Science concepts. The student knows the characteristics and behavior of waves. The student is expected to:
- (A) examine and describe a variety of waves propagated in various types of media and describe wave characteristics such as velocity, frequency, amplitude, and behaviors such as reflection, refraction, and interference;
 - (B) identify the characteristics and behaviors of sound and electromagnetic waves; and
 - (C) interpret the role of wave characteristics and behaviors found in medicinal and industrial applications.
- (9) Science concepts. The student knows simple examples of quantum physics. The student is expected to:
- (A) describe the photoelectric effect; and
 - (B) explain the line spectra from different gas-discharge tubes.