CSAP Achievement Levels   **Science Grade 10**

Advanced – Performance Level 4 (Score range: 581-900)
Describe a source of unexplained data/how to evaluate it; explain new evidence is used to revise conclusions; describe covalent/ionic bonds; explain frequency and wavelength are inversely related; describe macromolecule functions; describe homeostatic feedback mechanisms; identify immune/endocrine/nervous system functions; relate polarity and properties of water; describe how mutation/natural selection/reproductive isolation/humans affect biodiversity; analyze data on sustainable resource use; explain differential heating/changes in moisture cause weather; analyze technology effects on progression of knowledge.

Proficient – Performance Level 3 (Score range: 507-580)
Design an investigation/identify errors; use the Periodic Table; explain electrons are in orbitals; recognize balanced equations; calculate specific heat; explain energy changes to heat; apply the terms frequency, wavelength, amplitude; apply Newton's Laws; explain community succession; describe DNA structure/replication; construct a classification system; predict how biological variation increases/decreases survival; describe Earth's internal layers; explain plate tectonics; identify how Earth's movement/ocean currents affect weather; classify stars; identify use for peer review; describe hypothesis/theory/law.

Partially Proficient – Performance Level 2 (Score range: 469-506)
Record data using appropriate tools/units; describe how technologies are used; identify exothermic/endothermic reactions; describe conduction, convection, radiation; compare total mass/energy of materials; describe different animal structures/behaviors; identify composition of biological molecules; compare energy requirements based on situational needs; predict the niche of an organism; infer that organisms undergo evolution over time; describe uses of renewable/nonrenewable resources; describe cause-effect relationships in a system; identify examples of when new scientific evidence has changed previous views.

Unsatisfactory – Performance Level 1 (Score range: 300-468)
Students have a very limited understanding of scientific inquiry processes, as well as life, physical, and earth and space science concepts and vocabulary.

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