Stars Educational Standards (5-12)

Grade 5:

SC.5.1.2	Formulate and defend conclusions based on evidence.
SC.5.8.1	Describe the relationship (size and distance) of Earth to other components in the solar system.
SC.5.8.2	Describe examples of what astronomers have discovered using telescopes.
SC.5.8.3	Explain that the planets orbit the sun and the moon orbits the Earth.
SS.5.1.1	Use chronological order to explain the causal relationships between and among people and events.
SS.5.2.1	Analyze how beliefs and education and/or society in which a person resides shapes his/her "point of view"
SS.5.3.1	Judge the past in the context of the time instead of imposing present norms and values on historical events.

Grade 6:

SC.6.2.1	Explain how technology has an impact on society and science.
SC.6.6.4	Describe and give examples of different types of energy waves.
SS.6.1.1	Define causal relationships on historical chronologies.
SS.6.2.2	Explain the past on its own terms; not judging it solely by present day norms and values.

Grade 7:

SC. 7.1.3	Explain the need to revise conclusions and explanations based on new scientific evidence.

Grade 8:

SC.8.1.1	Determine the link between evidence and the conclusion of an investigation.

SC.8.2.1	Describe significant relationships among society, science and technology and how one impacts the other.
SC.8.6.1	Explain the relationship between the color of light and wavelength within the electromagnetic spectrum.
SC.8.6.3	Identify the characteristics and properties of mechanical and electromagnetic waves.
SC.8.7.1	Explain that every object has mass and therefore exerts a gravitational force on other objects.
SC.8.8.8	Describe the composition of objects in the galaxy.
SC.8.8.11	Describe the major components of the universe.

Earth and Space Science:

SC.ES.1.6	Engage in and explain the importance of peer review in science.
SC.ES.1.7	Revise, as needed, conclusions and explanations based on new evidence.
SC.ES.2.1	Explain how scientific advancements and emerging technologies have influenced society.
SC.ES.2.4	Describe technologies used to collect information about the universe.
SC.ES.8.9	Describe the physical and nuclear dynamics involved in the life cycle of a star.

Physical Science:

SC.PS.1.6	Engage in and explain the importance of peer review in science.
SC.PS.1.7	Revise, as needed, conclusions and explanations based on new evidence.
SC.PS.1.9	Explain how scientific explanations must meet a set of established criteria to be considered valid.
SC.PS.2.1	Explain how scientific advancements and emerging technologies have influenced society.

SC.PS.6.6	Explain and provide examples of electromagnetic radiation and sound using a wave model.
SC.PS.6.12	Describe nuclear reactions and how they produce energy.
SC.PS.7.3	Explain the relationship among the gravitational force, the mass of the object and the distance between the objects.

Biology:

SC.BS.1.6	Engage in and explain the importance of peer review in science.
SC.BS.1.7	Revise as needed, conclusions and explanations based on new evidence.
SC.BS.1.9	Explain how scientific explanations must meet a set of established criteria to be considered valid.
SC.BS.2.1	Explain how scientific advancement and emerging technologies have influenced society.

Chemistry:

SC.CH.1.6	Engage in and explain the importance of peer review in science.
SC.CH.1.7	Revise as needed, conclusions and explanations based on new evidence.
SC.CH.1.9	Explain how scientific explanations must meet a set of established criteria to be considered valid.
SC.CH.2.1	Explain how scientific advancement and emerging technologies have influenced society.

Physics:

SC.PH.1.6	Engage in and explain the importance of peer review in science.
SC.PH.1.7	Revise as needed, conclusions and explanations based on new evidence.
SC.PH.1.9	Explain how scientific explanations must meet a set of established criteria to be considered valid.

SC.PH.2.1	Explain how scientific advancement and emerging technologies have influenced society.
SC.PH.6.4	Describe the range of the electromagnetic spectrum (eg radio waves, microwaves, infrared radiation).
SC.PH.8.1	Explain the general concepts related to the theory of relativity (eg nothing can travel faster than the speed of light in a vacuum, the speed of light is the same for all observers.)