

EARTH AND SPACE SCIENCE LONG TERM TRANSFER GOALS

Students will be able to independently use their learning to:

1. Approach science as a reliable and tentative way of knowing and explaining the natural world.
2. Weigh evidence and use scientific approaches to ask questions, investigate, and make informed decisions.
3. Make and use observations to analyze relationships and patterns in order to explain phenomena, develop models, and make predictions.
4. Evaluate systems, in order to connect how form determines function and how any change to one component affects the entire system.
5. Explain how the natural and designed worlds are interrelated and the application of scientific knowledge and technology can have beneficial, detrimental, or unintended consequences.

EARTH AND SPACE SCIENCE BIG IDEAS AND ESSENTIAL QUESTIONS

Big Ideas	Essential Questions
Big Idea 1: The universe is composed of a variety of different objects, which are organized into systems, each of which develops according to accepted physical processes and laws.	<i>What is the universe, and what is Earth's place in it?</i>
Big Idea 2: Earth is a complex and dynamic set of interconnected systems (e.g. geosphere, hydrosphere, atmosphere, biosphere) that interact over a wide range of temporal and spatial scales.	<i>How and why is Earth constantly changing?</i>
The Earth's surface processes affect and are affected by human activities.	<i>How do Earth's processes and human activities affect each other?</i>