







TABR Grade 6 Earth Science Overarching Science Objectives for 2013-2014

Students will:

- understand that Science is a process of observing, studying, and thinking in order to solve problems and answer questions about the universe.
- understand the importance of the earth's atmosphere as a protective covering for our planet.
- understand factors that impact weather and climate across our planet.
- understand factors that adversely affect our environment and ways in which pollution can be reduced.
- develop an understanding of the science of astronomy by studying celestial objects such as: the sun, the moon, the planets, and comets

TRIMESTER	TOPICS	TEXTS AND MATERIALS
1	The Nature of Science  The Earth's Atmosphere  Weather Patterns and Forecasting	Glencoe/McGraw Hill <u>Earth Science</u>
2	The Water Cycle  Impact of Population and Land Use on the Environment  Conserving Resources and Reducing Pollution	Glencoe/McGraw Hill <u>Earth Science</u>
3	Exploring Space  The Sun-Earth-Moon System  The Solar System	Glencoe/McGraw Hill <u>Earth Science</u>

TABR Grade 7 Life Science Overarching Science Objectives for 2013-2014

Students will:

- understand that Science is a process of observing, studying, and thinking in order to solve problems and answer questions about the universe.
- understand that classification systems developed by scientists help us understand the relationships that exist among living things.
- understand that a cell's survival depends on how its structures work together, the processes it undergoes, and its ability to reproduce.
- understand that an organism's traits are determined by inherited genes.
- understand that your immune system provides defenses against infectious and noninfectious diseases.
- be introduced to the human brain and senses via a series of hands-on investigations which will lead them to understand that the brain initiates and controls every human thought, emotion, and physical action.

TRIMESTER	TOPICS	TEXTS AND MATERIALS
1	The Nature of Science ↳ Classifying Living Things ↳ Cell Structure	Glencoe/McGraw Hill <u>Life Science</u>
2	Cell Processes ↳ Cell Reproduction ↳ Heredity	Glencoe/McGraw Hill <u>Life Science</u>
3	Immunity and Disease ↳ Using Imaging to Reveal Brain Anatomy and Activity	Glencoe/McGraw Hill <u>Life Science</u>

TABR Grade 8 Physical Science Overarching Science Objectives for 2013-2014

Students will:

- understand that science is a process of observing, studying, and thinking in order to solve problems and answer questions about the universe.
- learn about acceleration, speed, velocity, inertia, mass, forces, friction, gravity, air resistance, and momentum in order to understand how motion occurs.
- identify different kinds of energy and how they convert from one form to another.
- identify the composition of matter, properties of matter, and related theories and principles.
- develop an understanding of the properties of atoms, the Periodic Table, and the impact of radioactivity and nuclear reactions on atoms.

TRIMESTER	TOPICS	TEXTS AND MATERIALS
1	The Nature of Science ~~~~~ Motion, Acceleration, and Forces ~~~~~ Newton's Laws of Motion	Glencoe/McGraw Hill <i>Physical Science</i>
2	Defining and Conserving Energy ~~~~~ Work, Power, and Machines ~~~~~ Thermal Energy	Glencoe/McGraw Hill <i>Physical Science</i>
3	Classification of Matter ~~~~~ Solids, Liquids, and Gases ~~~~~ Properties of Atoms and the Periodic Table ~~~~~ Radioactivity and Nuclear Reactions	Glencoe/McGraw Hill <i>Physical Science</i>