8th Grade Science

First 9 Weeks

- Design a simple experimental procedure with an identified control and appropriate variables.
- Select tools and procedures needed to conduct a moderately complex experiment.
- Interpret and translate data in a table, graph, or diagram.
- Draw a conclusion that establishes a cause and effect relationship supported by evidence.
- Identify a faulty interpretation of data that is due to bias or experimental error.
- Identify the tools and procedures needed to test the design features of a prototype.
- Evaluate a protocol to determine if the engineering design process was successfully applied.
- Distinguish between the intended benefits and the unintended consequences of a new technology.
- Differentiate between adaptive and assistive engineered products (e.g,. food, biofuels, medicines, integrated pest management).
- Use a simple classification key to identify an unknown organism.
- Analyze structural, behavioral, and physiological adaptations to predict which populations are likely to survive in particular environmental conditions.
- Analyze data on levels of variation within a population to make predictions about survival under environmental conditions.

Common Formative Assessment 1 – Week of August 29, 2016

Second 9 Weeks

- Identify several reasons for the importance of maintaining the earth's biodiversity.
- Compare fossils found in sedimentary rock to determine their relative age.
- Apply an equation to determine the density of an object based on its mass and volume.
- Distinguish between mass and weight using appropriate measuring instruments and units.
- Compare the particle arrangement and type of particle motion associated with different states of matter.
- Recognize that all matter consists of atoms.

Common Formative Assessment 3 – Week of November 7, 2016

Common Formative Assessment 4 – Week of December 12, 2016

Third 9 Weeks

- Use the periodic table to determine the properties of an element.
- Classify common substances as elements or compounds based on their symbols or formulas.
- Differentiate between a mixture and a compound.
- Identify the reactants and products of a chemical reaction.
- Recognize that in a chemical reaction the mass of the reactants is equal to the mass of the products (Law of Conservation of Mass).
- Identify the properties of acids and bases.

Common Formative Assessment 5 – Week of January 30, 2017.

Common Formative Assessment 6 – Week of March 6, 2017

Fourth 9 Weeks

- Describe the chemical makeup of the atmosphere.
- Determine the relationship among the mass of objects, the distance between these objects, and the amount of gravitational attraction.
- Illustrate how gravity controls the motion of objects in the solar system.
- that electricity can be produced using a magnet and wire coil.
- Describe the basic principles of an electromagnet.
- Distinguish among the Earth's magnetic field, a magnet, and the fields that surround a magnet and an electromagnet.

Common Formative Assessment 7 – Week of April 3, 2017

Science 8th Grade State Standards are found: http://tn.gov/assets/entities/education/attachments/std_sci_gr_8.pdf

*All common assessments will be scheduled within the week assigned. Each school may adjust the day of the week to meet the individual's school schedule.

*Common assessments may be rescheduled due to inclement weather.