

INSTRUCTIONAL OBJECTIVES

Science – First Quarter

Seventh Grade

Interactions/Environment Unit

The student will:

- Identify biotic and abiotic factors, producers, consumers, and decomposers
- Interpret drawing of a food chain and/or food web
- List the limiting factors for a population
- Recognize examples of three symbiotic relationships
- Identify stages of major nature cycles (water, carbon, nitrogen) using provided characteristics
- Connect the major biomes of the world with appropriate characteristics
- Identify cause and/or effect of major types of pollutants
- Understand appropriate conservation practices
- Interpret graphics relating to succession

INSTRUCTIONAL OBJECTIVES

Science – Second Quarter

Seventh Grade

Animals/Classification Unit

The student will:

- Identify characteristics of invertebrates
- Distinguish among the basic classes and/or subgroups of invertebrates
- Identify characteristics of vertebrates
- Distinguish among the basic classes and/or subgroups of vertebrates
- Compare structure and function of invertebrates vs. vertebrates
- Identify and interpret the eight levels of classification
- Classify an organism using a dichotomous key

INSTRUCTIONAL OBJECTIVES

Science – Third Quarter

Seventh Grade

Force and Motion Unit; Astronomy Unit

The student will:

- State how forces affect motion and interpret data in regard to force and motion
- Using stated formulas; calculate speed, velocity, acceleration, and momentum
- Identify the effects of friction
- Understand the difference between mass and weight
- Compare and contrast Newton's three laws of motion
- Describe the scientific theories for the beginning of the universe
- Order the stages for the life cycle of large and small stars
- Recognize the types and formation of galaxies

INSTRUCTIONAL OBJECTIVES

Science – Fourth Quarter

Seventh Grade

Dynamic Earth Unit; Light Unit

The student will:

- Recognize the phases of the rock cycle
- List characteristics of igneous, sedimentary, and metamorphic rock
- Identify the importance of fossils in the fossil record
- Use the geologic column to identify age of earth strata
- Explain the effects of the movement of Earth's plates
- Connect plate movement to earthquake and volcanic action
- Describe the energy and nature of light