CLAY COMMUNITY SCHOOLS – CURRICULUM SCIENCE STANDARDS GRADE 4

QUARTER 1

Physical Science (PS)

4.PS.1 Investigate transportation systems and devices that operate on or in land, water, air and space and recognize the forces (lift, drag, friction, thrust and gravity) that affect their motion.

4.PS.2 Investigate the relationship of the speed of an object to the energy of that object.

4.PS.3 Investigate how multiple simple machines work together to perform everyday tasks.

4.PS.4 Describe and investigate the different ways in which energy can be generated and/or converted from one form of energy to another form of energy.

4.PS.5 Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.

QUARTER 2

Life Science (LS)

4.LS.1 Observe, analyze, and interpret how offspring are very much, but not exactly, like their parents or one another. Describe how these differences in physical characteristics among individuals in a population may be advantageous for survival and reproduction.

4.LS.2 Use evidence to support the explanation that a change in the environment may result in a plant or animal will survive and reproduce, move to a new location, or die.

4.LS.3 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction in a different ecosystems.

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QUARTER 3

Earth and Space Science (ESS)

4.ESS.1 Investigate how the moon appears to move through the sky and it changes day to day, emphasizing the importance of how the moon impacts the Earth, the rising and setting times, and solar and lunar eclipses.

4.ESS.2 Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

4.ESS.3 Describe how geological forces change the shape of the land suddenly and over time.

4.ESS.4 Develop solutions that could be implemented to reduce the impact of humans on the natural environment and the natural environment on humans.

QUARTER 4

Engineering (E)

3-5.E.1 Identify a simple problem with the design of an object that reflects a need or a want. Include criteria for success and constraints on materials, time, or cost.

3-5.E.2 Construct and compare multiple plausible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

3-5.E.3 Construct and perform fair investigations in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.