

**ADW Grade 4 Science Standards
2017**

PHYSICAL SCIENCE (PS)	Standards
SC.4.PS.1	Investigate the relationship of the speed of an object to the energy of that object and predict outcomes about the changes in energy that occur when objects collide..
SC.4.PS.2	Ask questions and predict outcomes about the transfer and changes in energy that occur when objects collide.
SC.4.PS.3E	Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.
SC.4.PS.4	Develop a model of waves to describe patterns in terms of amplitude, wavelength, and energy.
SC.4.PS.5	Investigate and recognize properties of sound that include pitch, loudness (amplitude), and vibration as determined by the physical properties of the object making the sound
LIFE SCIENCE (LS)	Standards
SC.4.LS.1	Obtain evidence that all living organisms are made of one or more cells.
SC.4.LS.2	Develop a model to describe the organization of cells into systems of tissues and organs that carry out bodily functions in multicellular organisms.
SC.4.LS.3	Use evidence to explain how animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.
SC.4.LS.4	Construct an explanation of characteristics that scientists use to classify organisms.
EARTH AND SPACE SCIENCE (ESS)	Standards
SC.4.ESS.1	Investigate how the moon appears to move through the sky and how the moon affects the Earth.
SC.4.ESS.2	Observe the detailed characteristics of rocks and minerals. Identify and classify rocks as being composed of different combinations of minerals
SC.4.ESS.3	Determine how fossils are formed, discovered, layered over time, and used to provide evidence of the organisms and the environments in which they lived long ago.
SC.4.ESS.4	Describe how geological forces change the shape of the land suddenly and gradually, over time.
SC.4.ESS.5E	Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.
SC.4.ESS.6	Obtain and combine information to describe how energy and fuels are derived from natural resources and how their uses affect the environment
Grades 3-5 Engineering Standards (E)	Standards
SC.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.
SC.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.
SC.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.