

# Fourth Grade Kansas Next Generation Science Standards

Record keeping of implementation:

PINK= WEEKLY (Once or Twice/Week)

BLUE=DAILY (3 or MORE X/Week)

ALL OTHERS=Dates Listed

<b>4-PS3 Energy</b>	
<b>4-PS3-1</b>	Use evidence to construct an explanation relating the speed of an object to the energy of that object.
dates ---->	
<b>4-PS3-2</b>	Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.
dates ---->	
<b>4-PS3-3</b>	Ask questions and predict outcomes about the changes in energy that occur when objects collide.
dates ---->	
<b>4-PS3-4</b>	Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.
dates ---->	
<b>4-PS4 Waves and their Applications in Technologies for Information Transfer</b>	
<b>4-PS4-1</b>	Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.
dates ---->	
<b>4-PS4-2</b>	Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen.
dates ---->	
<b>4-PS4-3</b>	Generate and compare multiple solutions that use patterns to transfer information.
dates ---->	
<b>4-LS1 From Molecules to Organisms: Structures and Processes</b>	
<b>4-LS1-1</b>	Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.
dates ---->	
<b>4-LS1-2</b>	Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.
dates ---->	
<b>4-ESS1 Earth's Place in the Universe</b>	
<b>4-ESS1-1</b>	Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.
dates ---->	
<b>4-ESS2 Earth's Systems</b>	
<b>4-ESS2-1</b>	Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.
dates ---->	
<b>4-ESS2-2</b>	Analyze and interpret data from maps to describe patterns of Earth's features.
dates ---->	

<b>4-ESS3 Earth and Human Activity</b>																				
<b>4-ESS3-1</b>	<b>Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.</b>																			
dates ---->																				
<b>4-ESS3-2</b>	<b>Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.</b>																			
dates ---->																				
<b>3-5-ETS1 Engineering Design</b>																				
<b>3-5-ETS1-1</b>	<b>Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.</b>																			
dates ---->																				
<b>3-5-ETS1-2</b>	<b>Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.</b>																			
dates ---->																				
<b>3-5-ETS1-3</b>	<b>Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.</b>																			
dates ---->																				