

School District of Loyal

Science

Grade: 6

Student Learning Targets



Class: Science 6 (Integrated)

Students who demonstrate understanding can:

WI State Standards	Standard:	Student Learning Targets:
SCI.SEP3.m	Evaluate the accuracy of various methods for collecting data. Collect data under a range of conditions that serve as the basis for evidence to answer scientific questions or test design solutions. Collect data about the performance of a proposed object, tool, process, or system under a range of conditions.	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Determine which tool is used for what type of measurement (mass, weight, volume, length) • Give measurements to the correct number of digits, based upon the markings of the tool that is used • Calculate density based on measurements they take in the lab
SCI.SEP4.m	Construct, analyze, or interpret graphical displays of data and large data sets to identify linear and nonlinear relationships.	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Identify the three main types of graphs used in science • Determine which type of graph is the best for a given data set • Correctly construct the three main types of graphs used in science • Analyze a variety a graph types to obtain values and relationships
SCI.SEP5.m	Apply mathematical concepts and processes (such as ratio, rate, percent, basic operations, and simple algebra) to scientific and engineering questions and problems.	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Perform metric conversions • Perform customary conversions using dimensional analysis • Convert between customary units and metric units using dimensional analysis • Solve one-step equations for an unknown • Utilize percentages, especially in making circle graphs
SCI.CC3.m	Students use proportional relationships (e.g., speed as the ratio of distance traveled to time taken) to gather information about the magnitude of properties and	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Calculate mechanical advantage when discussing simple machines • Use simple algebra to convert map scales to actual distances

	processes. They represent scientific relationships through the use of algebraic expressions and equations.	<ul style="list-style-type: none"> ● Calculate speed, distance, and time ● Use proportions when calculating using Kepler's Laws
MS-ESS1-2	Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.	<p>Students will be able to:</p> <ul style="list-style-type: none"> ● Distinguish between mass and weight ● Understand how gravity varies with mass and distance ● Explain how planets, solar systems, and galaxies form and move under gravitational forces
MS-ESS1-3	Analyze and interpret data to determine scale properties of objects in the solar system.	<p>Students will be able to:</p> <ul style="list-style-type: none"> ● Gain and understanding as to how big outer space truly is ● Compare planet sizes ● Compare star sizes
MS-ESS2-1	Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.	<p>Students will be able to:</p> <ul style="list-style-type: none"> ● Discuss the Rock Cycle ● Explain how weathering and erosion change the surface of the Earth
SCI.LS1.A	All living things are made up of cells. In organisms, cells work together to form tissues and organs that are specialized for particular body functions.	<p>Students will be able to:</p> <ul style="list-style-type: none"> ● Diagram, label, and identify parts of both plant and animal cells ● Explain the functions of basic organelles ● Discuss the hierarchy of systems, tissues, and cells