

STANDARDS FOR GRADE 3 - MSTP DAY 1

3	1. The Nature of Science and Engineering	3.1.1.1.1	Provide evidence to support claims other than saying “Everyone knows that,” or “I just know,” and question such reasons when given by others.
		3.1.1.2.1	Generate questions that can be answered when scientific knowledge is combined with knowledge gained from one's own observations or investigations.
			<i>For example:</i> Investigate the sounds produced by striking various objects.
		3.1.1.2.2	Recognize that when a science investigation is done the way it was done before, even in a different place, a similar result is expected.
		3.1.1.2.3	Maintain a record of observations, procedures and explanations, being careful to distinguish between actual observations and ideas about what was observed.
			<i>For example:</i> Make a chart comparing observations about the structures of plants and animals.
		3.1.1.2.4	Construct reasonable explanations based on evidence collected from observations or experiments.
	3.1.3.4.1	Use tools, including rulers, thermometers, magnifiers and simple balances, to improve observations and keep a record of the observations made.	
	4. Life Science	3.4.1.1.1	Compare how the different structures of plants and animals serve various functions of growth, survival and reproduction.
			<i>For example:</i> Skeletons in animals and stems in plants provide strength and stability.
3.4.1.1.2		Identify common groups of plants and animals using observable physical characteristics, structures and behaviors.	
	<i>For example:</i> Sort animals into groups such as mammals and amphibians based on physical characteristics. <i>Another example:</i> Sort and identify common Minnesota trees based on leaf/needle characteristics.		



STANDARDS FOR GRADE 5 - MSTP DAY 1

5	1. The Nature of Science and Engineering	5.1.1.2.1	Generate a scientific question and plan an appropriate scientific investigation, such as systematic observations, field studies, open-ended exploration or controlled experiments to answer the question.
		5.1.1.2.2	Identify and collect relevant evidence, make systematic observations and accurate measurements, and identify variables in a scientific investigation.
		5.1.1.2.3	Conduct or critique an experiment, noting when the experiment might not be fair because some of the things that might change the outcome are not kept the same, or that the experiment is not repeated enough times to provide valid results.
		5.1.3.4.1	Use appropriate tools and techniques in gathering, analyzing and interpreting data. <i>For example:</i> Spring scale, metric measurements, tables, mean/median/range, spreadsheets, and appropriate graphs.
	3. Earth and Space Science	5.3.1.2.2	Explain how slow processes, such as water erosion, and rapid processes, such as landslides and volcanic eruptions, form features of the Earth's surface.
4. Life Science		5.4.1.1.1	Describe how plant and animal structures and their functions provide an advantage for survival in a given natural system. <i>For example:</i> Compare the physical characteristics of plants or animals from widely different environments, such as desert versus tropical, and explore how each has adapted to its environment.
		5.4.2.1.1	Describe a natural system in Minnesota, such as a wetland, prairie or garden, in terms of the relationships among its living and nonliving parts, as well as inputs and outputs. <i>For example:</i> Design and construct a habitat for a living organism that meets its need for food, air and water.
		5.4.2.1.2	Explain what would happen to a system such as a wetland, prairie or garden if one of its parts were changed. <i>For example:</i> Investigate how road salt runoff affects plants, insects and other parts of an ecosystem. <i>Another example:</i> Investigate how an invasive species changes an ecosystem.
		5.4.4.1.1	Give examples of beneficial and harmful human interaction with natural systems. <i>For example:</i> Recreation, pollution, or wildlife management.

