

**Helena Public Schools
Gr 5 Teacher Desk Reference**

Fifth Grade Standards/ Benchmarks	IDEA	Skill	Subject completed? (Y/N)	Resources available?	Knowledge of Subject	Was this effective?	Comment
1.1	I/D	Follows and uses the steps of the scientific method to conduct a scientific investigation					
1.1	I/D	Identify manipulated variables					
1.1	I/D	Develops respect for classroom equipment and use safe laboratory procedures					
1.2	I/D	Develop the use of the metric system, to measure length, mass, volume, density, weight, and temperature					
1.2	I	Will use SI units to collect data measure, and draw conclusions					
1.3	I	Students will incorporate scientific method and explain scientific experiments based upon gathered evidence					
1.4	D	Explore relationships among parts of a familiar system					
1.4	D	Discover cause and effect relationships within the system					
1.5	I/D	Construct models to illustrate scientific concepts and discover relationships					
1.6	D	Understand and identify results of controlled experiments					

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2.1	D	Classifies rocks and minerals according to the characteristic properties of the substance					
2.1	D	Examine chemical properties of minerals and crystals					
2.2	D	Construct a simple model of an atom					
2.2	D	Examine the parts of an atom (protons, neutrons and electrons) and their respective electrical charges					
2.2	D	Investigate properties of molecules and compounds					
2.4	D	Develop an understanding of the effects of forces on an object, analyzing and recording those effects					
2.5	D	Compares and maximizes the application of a student-constructed simple machine					
2.6	I/D	Define energy and apply the laws of motion					
2.6	I	Introduce forms of energy (e.g. light, heat, motion, magnetism, electricity, sound or mechanical waves)					
3.1	D	Investigate structure of plant and animal cells					
3.1	I	Describe structure and functions of plant and animal cells and their parts					
3.2	I	Investigates plant system(s) (e.g.. photosynthesis)					
3.2	I	Investigates body system(s) (e.g. integumentary, skeletal, circulatory, digestive, respiratory, nervous or muscular)					

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3.3	I	Investigates differences between reproductive processes in plants					
3.3	I	Discuss the reproductive principles in animals					
3.4	D	Identify the structure and function of various systems of living organisms					
3.4	I	Analyzes how humans have affected the environment in which he lives					
3.5	D	Describe differences between one-celled and multi-celled organisms					
4.2	I	Classify rocks and minerals according to the characteristic properties of the substance					
5.1	D	Explore scientific careers and opportunities in science					
5.2	I	Use group process to conduct scientific investigations					
5.3	D	Identify community connections with scientific investigations					
5.4	D	Uses scientific knowledge to discuss issues (e.g. air, land, and water pollution, recycling to conserve resources, reusing, reducing waste, etc.)					
6.1	D	Awareness of changes in scientific knowledge					
6.2	I/D	Awareness of scientific discoveries and their impact on society.					