

National Science Education Standards

Standards Key

M - major emphasis

m - minor emphasis

i - indirect; i.e., not directly tied to standard, but important background information.

The letters A-G represent various areas in the National Science Education Standards, as follows:

A - Science as Inquiry

B - Physical Science: Motion and Forces

C - Life Science

D - Earth and Space Science

E - Science and Technology

F - Science in Personal and Social Perspectives

G - History and Nature of Science

Activity	A	B	C	D	E	F	G	Emphasis
5 - Nav. the Earth w/ a Compass				i	m		m	E: Students should demonstrate thoughtful planning for a piece of technology or technique. G: In history, diverse cultures have contributed scientific knowledge and technologic inventions.
6 - Polar Wander	m			i			m	A: Identify questions and concepts that guide scientific investigations. G: In history, diverse cultures have contributed scientific knowledge and technologic inventions.
7 - The Declining Magnetic Field	m			i		m	m	A: Identify questions and concepts that guide scientific investigations. F: (Environmental Quality). Many factors influence environmental quality F: (Natural and Human-Induced Hazards) Normal adjustments of earth may be hazardous for humans... there are slow and progressive changes that... result in problems for individuals and societies.
8 - Magnetic Reversals	M			i			m	A: Identify questions and concepts that guide scientific investigations. G: (Nature of Scientific Knowledge). Scientific explanations must meet certain criteria. First and foremost, they must be consistent with experimental and observational evidence about nature, and must make accurate predictions, when appropriate, about systems being studied.

National Math Standards

NUM.9-12.1 (Numbers and Operations). Understand numbers, ways of representing numbers, relationships among numbers, and number systems.

NM-NUM.9-12.3: (Numbers and Operations). Compute fluently and make reasonable estimates.

NM-ALG.9-12.1: (Algebra). Understand patterns, relationships, and functions.

NM-ALG.9-12.4: (Algebra). Analyze change in various contexts.

NM-GEO.9-12.2: (Geometry). Specify locations and describe spatial relationships using coordinate geometry and other representational systems.

NM-GEO.9-12.4: (Geometry). Use visualization, spatial reasoning, and geometric modeling to solve problems.

NM-MEA.9-12.1: (Measurement). Understand measurable attributes of objects and the units, systems, and processes of measurement.

NM-MEA.9-12.2: (Measurement). Apply appropriate techniques, tools, and formulas to determine measurements.

NM-DATA.9-12.1 (Data Analysis & Probability). Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer.

NM-DATA.9-12.3: (Data Analysis & Probability). Develop and evaluate inferences and predictions that are based on data.

NM-PROB.COMM. PK-12.2: (Communication - Grades Pre-K - 12). Communicate their mathematical thinking coherently and clearly to peers, teachers and others.

NM-PROB.CONN. PK-12.3: (Connections - Grades Pre-K - 12). Recognize and apply mathematics in contexts outside of mathematics.

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Activity	NM- NUM. 9-12.1	NM- NUM. 9-12.3	NM- ALG. 9-12.1	NM- ALG. 9-12.4	NM- GEO. 9-12.2	NM- GEO. 9-12.4	NM- MEA. 9-12.1	NM- MEA. 9-12.2	NM- DATA. 9-12.1	NM- DATA. 9-12.3	NM- PROB. COMM. PK- 12.2	NM- PROB. CONN. PK-12.3
5 - Nav. the Earth w/ Compass					M	M	m	m			m	
6 - Polar Wander		M		M			M	M				m
7 - The Declining Magnetic Field		M		M			m			M	m	M
8 - Magnetic Reversals	m	M	m	M			m		M	M	M	M