

**New Mexico Science Content Standards, Benchmarks, and Performance Standards  
Strands and Benchmarks**

**Kindergarten – 4th Grade**

**Strand I: Scientific Thinking and Practice**

**Standard I:** Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

**K-4 Benchmark I:** Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.

**K-4 Benchmark II:** Use scientific thinking and knowledge and communicate findings.

**K-4 Benchmark III:** Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate findings.

**Grade Performance Standards**

**K- 1** Observe and describe the relative sizes and characteristics of objects (e.g. bigger, smaller)

**Strand II: Content of Science**

**Standard III (Earth and Space Science):** Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of the Earth's systems.

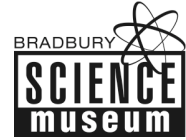
**K-4 Benchmark II:** Know the structure and formation of Earth and its atmosphere and the processes that shape them.

**Grade Performance Standards**

- 2** Know that rocks have different shapes and sizes (e.g, boulders, pebbles, sand) and that smaller rocks result from the breaking and weathering of larger rocks.  
Understand that rocks are made of materials with distinct properties.
- 3** Know that Earth's features are constantly changed by a combination of slow and rapid processes that include the action of volcanoes, earthquakes, mountain building, biological changes, erosion, and weathering.
- 4** Know that the properties of rocks and minerals reflect the processes that shaped them (i.e. igneous, metamorphic, and sedimentary rocks).



Let's Rock! ~ Science on Wheels  
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**New Mexico Science Content Standards, Benchmarks, and Performance Standards  
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**5<sup>th</sup> – 8<sup>th</sup> Grade**

**Strand I: Scientific Thinking and Practice**

**Standard I:** Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

**5-8 Benchmark I:** Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.

**5-8 Benchmark II:** Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.

**Strand II: Content of Science**

**Standard III (Earth and Space Science):** Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of the Earth's systems.

**5-8 Benchmark II:** Describe the structure of Earth and its atmosphere and explain how energy, matter, and forces shape Earth's systems.

**Grade                  Performance Standards**

- 6**      Know that Earth is composed of layers that include a crust, mantle, and core.  
Know that sedimentary, igneous, and metamorphic rocks contain evidence of the materials, temperatures, and forces that created them.  
Understand the history of Earth and how information about it comes from layers of sedimentary rock, including: sediments and fossils as a record of a very slowly changing world and evidence of asteroid impact, volcanic and glacial activity.
- 7**      Understand how the remains of living things give us information about the history of Earth, including: layers of sedimentary rock
- 8**      Describe the role of pressure (and heat) in the rock cycle.