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

Kindergarten – 4th Grade

Strand II: Content of Science
Standard I (Physical Science): Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

K-4 Benchmark I: Recognize that matter has different forms and properties.

Grade	Performance Standards
K	Observe that objects are made of different types of materials (e.g., metal, plastic, cloth, wood). Observe that different materials have different properties (e.g., insulators, conductors).
4	Know that materials are made up of small particles (atoms and molecules) that are too small to see with the naked eye.

Strand II: Content of Science
Standard I (Physical Science): Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

K-4 Benchmark III: Identify forces and describe the motion of objects.

Grade	Performance Standards
K	Observe that things move in many different ways (e.g., straight line, vibration, spin). Know that the position and motion of an object (direction or speed) are changed by pushing or pulling it.
1	Describe ways to make things move, what causes them to stop, and what causes a change of speed, or change of direction.
2	Observe that electrically charged materials and magnets attract and repel each other, and observe their effects on other kinds of materials.
3	Recognize that magnets can produce motion by attracting some materials (e.g., steel) and have no effect on others (e.g., plastics). Describe how magnets have poles (N and S) and that like poles repel each other while unlike poles attract.
4	Know that energy can be carried from one place to another by waves (e.g., water waves, sound waves), by electric currents, and by moving objects. Describe how some forces act on contact and other forces act at a distance (e.g., a person pushing a rock versus gravity acting on a rock).

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5th – 8th Grade

Strand II: Content of Science
Standard I (Physical Science): Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

5-8 Benchmark II: Explain the physical processes involved in the transfer, change, and conservation of energy.

Grade	Performance Standards
5	Describe how energy can be stored and converted to a different form of energy (e.g., springs, gravity) and know that machines and living things convert stored energy to motion and heat.
6	Identify various types of energy (e.g., heat, light, mechanical, electrical, chemical, nuclear).
8	**Energy Transformation** Know that electrical energy is the flow of electrons through electrical conductors that connect sources of electrical energy to points of use.

Strand II: Content of Science
Standard I (Physical Science): Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.

5-8 Benchmark III: Describe and explain forces that produce motion in objects.

Grade	Performance Standards
5	Identify forces in nature (e.g., gravity, magnetism, electricity, friction).
6	Know that gravitational force is hard to detect unless one of the objects (e.g., Earth) has a lot of mass.
8	**Forces** Know that there are fundamental forces in nature (e.g., gravity, electromagnetic forces, nuclear forces). Know that electric charge produces electrical fields and magnets produce magnetic fields.