

RRRPS District Standards: SCIENCE

Kindergarten

STRAND I: SCIENTIFIC THINKING AND PRACTICE

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

NM State Benchmarks Grades K-4

RRPS Kindergarten Power Standard

All benchmarks must be taught; Power Standards are consistently emphasized.

NM State Benchmark I-A: Grades K-4

Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.

Power Standard I (Strand I):

Observe and describe surroundings using scientific processes.

NM Grade Kindergarten Performance Standards

1. Use observation and questioning skills in science inquiry (e.g., What happens when something is pushed or pulled?
2. Ask and answer questions about surroundings and share finding with classmates.
3. Record observations and data with pictures, numbers, and/or symbols.

Performance Indicators:

- a. Record observations through pictures and words.
- b. Communicate observations orally.
- c. Describe sizes and characteristics of objects.

NM State Benchmark I-B: Grades K-4

Use scientific thinking and knowledge and communicate findings.

NM Grade Kindergarten Performance Standards

1. Communicate observations and answer questions about surroundings.

NM State Benchmark I-C: Grades K-4

Use mathematical skills and vocabulary to analyze data, understand patterns and relationships, and communicate findings.

NM Grade Kindergarten Performance Standards

1. Observe and describe the relative sizes and characteristics of objects (e.g., bigger, brighter, louder, smellier)

STRAND II: CONTENT OF SCIENCE

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

NM State Benchmarks Grades K-4

RRPS Kindergarten Power Standard

All benchmarks must be taught; Power Standards are consistently emphasized.

NM State Benchmark II-A: Grades K-4

Recognize that matter has different forms and properties.

Power Standard II (Strand II):

Observe different forms and characteristics of matter and energy and how they interact.

Performance Indicators:

- a. Identify and distinguish between different types of material and their properties (i.e. sorting, classifying, graphing).
- b. Observe and demonstrate with words and pictures how energy affects objects.
- c. Use senses to observe and describe surroundings through pictures and words, through pictures and words both orally and written both orally and written.

NM Grade Kindergarten Performance Standards

1. Observe that objects are made of different types of materials (e.g., metal, plastic, cloth, wood).
2. Observe that different materials have different properties (e.g., color, odor).

NM State Benchmark II-B: Grades K-4

Know that energy is needed to get things done and that energy has different forms.

NM Grade Kindergarten Performance Standards

1. Observe how energy does things (e.g., batteries, the sun, wind, electricity).

NM State Benchmark II-C: Grades K-4

Identify forces and describe the motion of objects.

NM Grade Kindergarten Performance Standards

1. Observe that things move in many different ways (e.g., straight line, vibration, circular).
2. Know that the position and motion of an object (direction or speed) are changed by pushing or pulling it.

STRAND II: CONTENT OF SCIENCE

NM State Content Standard III (Life Science): Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

NM State Benchmarks Grades K-4

RRPS Kindergarten Power Standard

All benchmarks must be taught; Power Standards are consistently emphasized.

NM State Benchmark III-A: Grades K-4

Know that living things have diverse forms, structures, functions, and habitats.

Power Standard III (Strand II):

Observe and describe characteristics of common living things.

NM Grade Kindergarten Performance Standards

1. Identify major structures of common living organisms (e.g., stems, leaves, and roots of plants; arms, wings, and legs of animals).
2. Observe that differences exist among individual living organisms (e.g., plants, animals) of the same kind.

Performance Indicators:

- a. Describe basic structures of humans and animals through pictures and words, both orally and written (i.e. head, legs, arms, body, wings).
- b. Describe basic structures of plants through pictures and words, both orally and written (i.e. stem, leaves, roots).
- c. Use senses to observe and describe surroundings through pictures and words, both orally and written.

NM State Benchmark III-B: Grades K-4

Know that living things have similarities and differences and that living things change over time.

NM Grade Kindergarten Performance Standards

1. Observe and describe similarities and differences in the appearance and behavior of living organisms (e.g., plants, animals).
2. Observe that living organisms (e.g., plants, animals) closely resemble their parents.

NM State Benchmark III-C: Grades K-4

Know the parts of the human body and their functions.

NM Grade Kindergarten Performance Standards

1. Use the senses (e.g., sight, hearing, smell, taste, touch) to observe surroundings, and describe the observations.
2. Identify the parts of the human body (e.g., legs, arms, head, hands) and the functions of these parts.

STRAND II: CONTENT OF SCIENCE

NM State Content Standard IV (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 Earth's systems.

NM State Benchmarks Grades K-4

RRPS Kindergarten Power Standard

All benchmarks must be taught; Power Standards are consistently emphasized.

NM State Benchmark IV-A: Grades K-4

Know the structure of the solar system and the objects in the universe.

Power Standard IV (Strand II):

NM Grade Kindergarten Performance Standards

1. Observe that there are many objects in the night sky and that some are brighter than others.
2. Describe the location and movements of objects in the sky (e.g., stars, sun, moon).

Observe and describe common weather conditions.

Performance Indicators:

- a. Describe different types of weather through pictures and words, both orally and written (i.e. sunny, cloudy, rainy, etc.)
- b. Describe how weather differs from day to day through pictures and words, both orally and written.
- c. Describe different seasons through pictures and words, both orally and written.

NM State Benchmark IV-B: Grades K-4

Know the structure and formation of Earth and its atmosphere and the processes that shape them.

NM Grade Kindergarten Performance Standards

1. Observe that changes in weather occur from day to day and season to season.
2. Observe that the sun warms the land and water and they warm the air.

STRAND III: SCIENCE AND SOCIETY

NM State Content Standard V: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

NM State Benchmarks Grades K-4

RRPS Kindergarten Power Standard

All benchmarks must be taught; Power Standards are consistently emphasized.

NM State Benchmark V-A: Grades K-4

Describe how science influences decisions made by individuals and societies.

NM Grade Kindergarten Performance Standards

1. Recognize that germs exist and may cause disease.
2. Describe how science helps provide products we use every day (e.g., gasoline for cars; electricity for lights, refrigerators, TVs; gas or electricity for heating, cooking).