

Opportunities for New Mexico Connections to the NGSS

The document outlines teaching opportunities for teachers in New Mexico to integrate local examples NM STEM Ready standards.

Kindergarten

K-LS1-1. Use New Mexico plants and animals to describe patterns.

Grade 1

1-ESS1-2. Use events such as leaf budding for spring or fall colors for fall times of year.

Grade 2

2-ESS1-1. New Mexico examples may include, but are not limited to, Rio Grande Rift, the Valles Caldera, Shiprock Rock Formation, Organ Mountains, Mount Taylor, Cabezón Peak, Tent Rocks, and the Taos Gorge.

2-ESS2-2. Examples could include land features and bodies of water found in New Mexico.

2-ESS2-3. Examples of where water is found could include bodies of water and snow in mountains of New Mexico.

Grade 3

3-LS4-1. Example of a fossil to use could be the *Coelophysis*, New Mexico's state fossil.

3-LS3-2. New Mexico examples include stunted growth of pinon trees receiving insufficient rainfall and supplemental feeding of farm animals producing optimal weight.

Grade 4

4-ESS3-1. Examples of renewable energy resources found in New Mexico could include wind energy, hydroelectric energy, and solar energy; non-renewable energy resources found in New Mexico are fossil fuels and fissile materials. New Mexico environmental effects could include water contamination due to leakage of nuclear waste.

4-ESS1-1. Examples may include New Mexico specific rock formations.

4-ESS3-2. New Mexico specific solutions could include, but are not limited to, utilizing fire simulation technology and improving monitoring of drought activity.

Grade 5

5-ESS2-1. Examples may include the influence of New Mexico mountain ranges and deserts on winds and clouds in the atmosphere.

Middle School

- MS-LS2-1. New Mexico ecosystems and examples such as big horn sheep, black bears, cougars, elk, deer, fish, coyote, and wolves.
- MS-LS2-4. New Mexico examples could include, but are not limited to forest, grasslands, desert, and bosque ecosystems.
- MS-LS2-5. New Mexico examples of ecosystem services could include forest fire control, water conservation, and cultural services.
- MS-ESS2-1. New Mexico specific models could include volcanoes, canyons, and mountains.
- MS-ESS3-1. Examples may include regional concentrations of mineral, energy, and groundwater resource in New Mexico.
- MS-ESS2-5. Examples of New Mexico-related weather phenomena could include the monsoon season.

High School

- HS-LS4-6. Incorporate organisms native to New Mexico or to the local community when designing solutions for a proposed problem related to threatened or endangered species, or to genetic variation of organisms for multiple species.
- HS-ESS3-6. Include research and models developed and applied at national laboratories and universities in New Mexico.