

U.S. Curriculum Correlations by State

Arizona

5th Grade

Strand 2

PO 3. Conduct simple investigations (e.g., related to forces and motion, Earth processes) based on student-developed questions in life, physical, and Earth and space sciences.

Strand 6- Earth and Space Science

Concept 2: Earth's Processes and Systems

Understand the processes acting on Earth and their interaction with the Earth Systems.

PO 1. Describe how the Moon's appearance changes during a four-week lunar cycle.

Starry Night Lesson Plans

In order of relevance

All Starry Night Lessons

PO 2. Describe how Earth's rotation results in day and night at any particular location.

PO 3. Distinguish between revolution and rotation.

PO 4. Describe the role of gravity as an attractive force between celestial objects.

Concept 3: Earth in the Solar System

PO 1. Identify the known planets of the Solar System.

PO 2. Describe the distinguishing characteristics of the known planets in the Solar System.

PO 3. Describe various objects in the sky (e.g., asteroids, comets, stars, meteors/shooting stars).

PO 4. Describe the change in position and motion of the following objects in the sky over time:

- real motion- Moon, planets

- apparent motion- (due to motion of the Earth)- Sun, Moon, stars

PO 5. Explain the apparent motion of the Sun and stars.

PO 6. Describe the efforts to explore space (e.g., Apollo missions, space shuttles, Hubble Space Telescope, space probes).

A4

A1

A3 A1 A2

C2 F3

C1

C1 C2 C3

D1 D2 D3

A3 A4 A5 C2 B1 F3

A1 A2 E3 E2

A1 A2 E3 E2

H1

U.S. Curriculum Correlations by State

Arizona Continued

7th Grade

Strand 6- Earth and Space Science

Concept 3: Earth in the Solar System

Understand the relationships of the Earth and other objects in the Solar System.

PO 1. Explain the phases of the Moon in terms of the relative positions of the Earth, Sun, and Moon.

Starry Night Lesson Plans

In order of relevance

A4

PO 2. Construct a model for the relative positions of the Earth, Sun, and Moon as they relate to corresponding eclipses.

A5

PO 3. Explain the interrelationship between the Earth's tides and the Moon.

A3

PO 4. Explain the seasons in the Northern and Southern Hemispheres in terms of the tilt of the Earth's axis relative to the Earth's revolution around the Sun.

A2

PO 5. Identify the following major constellations visible (seasonally) from the Northern Hemisphere:

- Orion
- Ursa Major (Great Bear)
- Cygnus
- Scorpius
- Cassiopeia

E1 E2 E3

PO 6. Explain the relationship among common objects in the Solar System, galaxy, and the Universe.

B1 B2 F1 F2 F3 G1 G2 G3 G4