

U.S. Curriculum Correlations by State

Arkansas

STRAND 1: Physical Systems

Content Standard 1: Students will demonstrate an understanding of physical systems as a process of inquiry.

PS.1.1 Understand that the laws of science are universal.

Starry Night Lesson Plans

In order of relevance

C2 G2 G3 G4 A3

PS.1.2. Understand that a scientific theory is based on current, accepted evidence and used to make predictions.

C2 D2 D3 G2 G4

PS.1.3. Generate written conclusions based on evidence acquired through experimentation.

All Starry Night lesson plans and computer exercises.

PS.1.4. Interpret scientific information from graphs and charts.

F1 G2 D3 E1 B2 C2 D1 G4 H1

Content Standard 2: Students will explore, demonstrate, communicate, apply, and evaluate the knowledge of physical systems.

PS.2.5. Examine the sources and analyze the preservation of energy resources.

F1

PS.2.6. Experiment with forces (gravity, magnetism, and electricity).

A3 C2 F2

PS.2.7. Investigate the laws of motion.

C2

PS.2.9. Introduce the electromagnetic spectrum (radio, infrared, visible light, and ultraviolet waves; x-rays).

G2

PS.2.11. Distinguish energy transfer (conduction, convection, radiation).

H1 F1

Content Standard 3: Students will demonstrate an understanding of the connections and applications of physical science.

PS.3.1. Design and conduct different kinds of scientific investigations to answer different kinds of questions.

All Starry Night lesson plans and computer exercises.

PS.3.2. Demonstrate how physical science is connected to mathematics (analyze collected data.)

F1 G2 G3 E1 B2 C2 D1 G4 H1

PS.3.3. Apply multiple strategies to problem solving.

All Starry Night lesson plans and computer exercises.

PS.3.4. Use appropriate equipment, tools, techniques, technology, mathematics, and technical writing in scientific investigation.

All Starry Night lesson plans and computer exercises.

PS.3.5 Investigate a variety of careers related to physical science.

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PS.3.6. Acknowledge the impact of scientific discoveries upon society.

D3 A3 D2 E2 F1 F2 G4 H1

PS.3.7. Recognize that scientific discovery has been influenced by historical events.

SkyGuide tutorials embedded in Starry Night computer exercises.

U.S. Curriculum Correlations by State

Arkansas Continued

STRAND 3: Earth/Space Systems

Content Standard 1: Students will demonstrate an understanding of the inquiry process through the study of Earth and space systems.

ES.1.2. Understand that Earth and objects in space constantly undergo changes and/or cycles which can be observed and measured.

Starry Night Lesson Plans

In order of relevance

A1 A2 A3 A4 A5 C2 E3 F2

ES.1.3. Generate conclusions based on evidence acquired through experimentation.

All Starry Night lesson plans and computer exercises.

ES.1.4. Interpret scientific information from graphs and charts.

F1 G2 D3 E1 B2 C2 D1 G4 H1

ES.1.6. Understand the relationship between Earth and objects in space.

A1 A2 A4 A5 F1 F2 H1 B1 C1

Content Standard 2: Students will explore, demonstrate, communicate, apply, and evaluate the knowledge of properties of Earth and space systems.

ES.2.8. Model and explain how the Earth's shape and tilt result in different seasons.

A2 E3

ES.2.9. Investigate the predictable motion of objects in space in explaining phenomena such as day, night, Moon phases, ocean tides, and eclipses.

A1 A3 A4 A5

ES.2.11. Compare the ability to support life on Earth and other objects in space.

B1 B2 C1 D3 F1 F2

ES.2.12. Explain and compare the properties (gravity, size, shape, distance, and color) of objects in the Solar System.

B1 B2 C1 C3 D1 D2 D3 F1 F3

ES.2.13. Explore past, present, and future space technology.

H1 F2

ES.2.14. Relate the physical characteristics of the Sun to other stars.

G2

Content Standard 3: Students will demonstrate an understanding of the connections and applications of Earth/space systems.

ES.3.1. Design and conduct different kinds of scientific investigations to answer different kinds of questions.

All Starry Night lesson plans and computer exercises.

ES.3.2. Apply multiple strategies to problem solving.

All Starry Night lesson plans and computer exercises.

ES.3.3. Use appropriate equipment, tools, techniques, technology, mathematics, and technical writing in scientific investigation.

All Starry Night lesson plans and computer exercises.

ES.3.7. Explore the impact of space technology on society.

H1 F2

ES.3.10. Calculate the gravitational forces of objects in space.

C2 A3