

## U. S. Curriculum Correlations by State

### Rhode Island

#### Earth and Space Science

**ESS2- The Earth is part of a Solar System, made up of distinct parts that have temporal and spatial interrelationships.**

**ESS2 (ext)- Students demonstrate an understanding of temporal or positional relationships between or among the Earth, Sun, and Moon and the stars by:**

Xaa- Explaining their role in navigation, beginning with ancient civilizations, advancing through 19th century mathematical celestial navigation, to current Global Positioning Systems.

**ESS3- The origin and evolution of galaxies and the Universe demonstrate fundamental principles of physical science across vast distances and time.**

Explain how scientific theories about the structure of the Universe have been advanced through the use of sophisticated technology (e.g., space probes; visual, radio and x-ray telescopes).

**ESS3-5 Students demonstrate an understanding of the origins and evolution of galaxies and the Universe by:**

5a- Using appropriate prompts (diagrams, charts, narratives, etc.) students will explain how scientific knowledge regarding the structure of the Universe has changed over time due to advances in technology which accumulates new evidence to redefine scientific theories and ideas.

#### Example Extensions

**ESS3 (Ext) -5 Students demonstrate an understanding of the origins and evolution of galaxies and the Universe by:**

5aa- Comparing the processes involved in the life cycle of stars (e.g., gravitational collapse, thermonuclear fusion, nova) and evaluate supporting evidence.

NOS-6- Provide scientific evidence that supports or refutes the “Big Bang” theory of how the Universe was formed.

**ESS3-6 Students demonstrate an understanding of the formation of the Universe by:**

6a- Using data (diagrams, charts, narratives, etc.) to explain how the “Big Bang” Theory has developed over time citing evidence to support its occurrence (Doppler Effect/red shift).

#### Starry Night Lesson Plans

*In order of relevance*

E1 E2 E3 I2

E1 E2 E3 I2

C2 H1-H3 I1-I2 G1-G2 F1-F3

H1-H3 I1-I2 G1-G2 F1-F3

C2 H1-H3 I1-I2 G1-G2 F1-F3

C2 H1-H3 I1-I2 G1-G2 F1-F3

F3 G2 H2 H3 I1

F3 G2

H2 H3 I1

H1 H2 H3 I1 I2