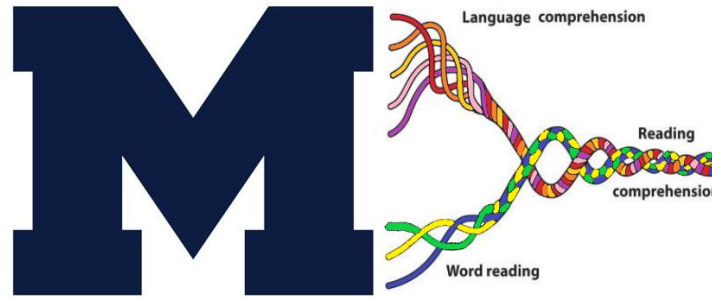




## FOURTH GRADE ELA KNOWLEDGE-BASED UNITS



Theme	<i>Unit #5: Astronomy</i>	Suggested Duration	<i>3-4 weeks</i>
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### GSE Standards

#### **Priority Standards**

ELAGSE4RI2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.

ELAGSE4RI3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

ELAGSE4RI4 Determine the meaning of general academic language and domain specific words or phrases in a text relevant to a grade 4 topic or subject area.

ELAGSE4RI7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

**Essential Questions**

<p><b>Factual—</b></p> <p>What type of space objects are the Earth, the Sun, and the Moon?</p> <p>How do the Earth and the Moon move through space?</p> <p>What happens during a solar and lunar eclipse?</p> <p>What is the order of the eight planets in our solar system?</p>	<p><b>Inferential—</b></p> <p>Which planets in our solar system are most and least like one another?</p> <p>How does a planet’s atmosphere and distance from the Sun affect its physical features?</p>	<p><b>Critical Thinking-</b></p> <p>Why is the Sun not part of any named constellation?</p> <p>Which planets in our solar system might best and least support establishing a human colony?</p>
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Tier I Words (conversational)	Tier II Words (transdisciplinary)	Tier III Words (content-specific)
size, see, compare, color, far, near, shape	relative, phase, moon, quarter, full, new, tilt, composition, planet, stars	crescent, gibbous, orbit, satellite, refraction

**Science of Reading Strategies**

<p><a href="#">Berger Framework for Comprehension: Template</a></p> <p><a href="#">Berger Framework with Instructional Notes</a></p>	<p><b>Fluency Strategy</b></p> <p>Use the <a href="#">Fluency Grids</a> to practice various groups of vocabulary related to this unit:</p> <ul style="list-style-type: none"> <li>● <i>lunar, solar, Sun, Moon, Earth, orbit</i></li> <li>● <i>crescent, gibbous, waxing, waning, new, full</i></li> </ul>	<p><b>Phonics Strategy</b></p> <p>Use the <a href="#">Flexible the Vowel</a> strategy to discuss using multiple known phonics rules when encountering a new word rather than consistently using one rule without monitoring the outcomes. For example:</p> <p><i>planet</i> starts with a CVC <i>plān/ĕt</i> not Silent e <i>plānt</i></p> <p><i>gibbous</i> starts with a CVC <i>gĭb/ŭs</i> not Open Syllable <i>gī/bŭs</i></p>
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## Assessments

### **Formative Assessment(s):**

Description: What? Pair Share

Asking questions after a read-aloud is one way to see how much everyone has learned. Think of a question you can ask your neighbor about the read-aloud that starts with the word what. For example, you could ask, “What is the difference between a meteoroid, a meteor, and a meteorite?” Turn to your neighbor and ask your question. Listen to your neighbor’s response. Then your neighbor will ask a new “what” question, and you will get a chance to respond.

#### **Standards:**

ELAGSE4RI1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

ELAGSE4RI3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

ELAGSE4RI7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

### **Summative Assessment(s):**

Description: Interpreting Passages and Diagrams adapted from district mini assessments

#### **Standards:**

ELAGSE4RI1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

ELAGSE4RI2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.

ELAGSE4RI3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

ELAGSE4RI4 Determine the meaning of general academic language and domain specific words or phrases in a text relevant to a grade 4 topic or subject area.

ELAGSE4RI7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

### **Writing Task and Rubric:**

Description:

Provide students with the following prompt and any available resources generated during this unit: *Compare and contrast the “sister” planets Earth and Venus. How are they similar? How are they different?* Provide students with an [Information Writing Checklist](#) to guide their work and score the final products using an [Information Writing Rubric](#).

#### **Standards:**

ELAGSE4W2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

ELAGSE4RI3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

Objective or Content	Learning Experiences	Differentiation Consideration
<b>Building Background Knowledge Through The Berger Framework</b>	<a href="#">Berger Framework: Cool Astronomy</a>	
<b>Standards Based Text Activities</b> - tasks should require metacognitive strategies. Process of thinking and building knowledge is visible in learning.	Using available resources on the physical features and atmospheres of various planets in our solar system, have students design and explain a creature that could survive on a chosen planet.	
<b>Performance Task</b> - students should use both written and verbal expression to complete the task.	Think Pair Share Imagine you are traveling through the universe and you meet an imaginary extraterrestrial life form that asks you where your school is located. Describe the parts of your space address that would be important to share. Students should identify levels including galaxy, solar system, planet, continent, country, state, city, and street.	
<b>Recommended High Quality Complex Text By Lexile Band</b>		
Cool Astronomy (This book can be found in Media Centers and at <a href="https://openlibrary.org/">https://openlibrary.org/</a> ) Math in Space National Geographic Everything Space (This book can be found in Media Centers and at <a href="https://getepic.com">https://getepic.com</a> ) Margot and the Moon landing (This book can be found in Media Centers and at <a href="https://getepic.com">https://getepic.com</a> )		