

# ESL 4 Unit 3

Content Area: **ESL**  
Course(s): **ELA Grade 9, ELA Grade 10, ELA Grade 11, ELA Grade 12**  
Time Period: **MP3**  
Length: **45**  
Status: **Published**

## Unit Focus

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Readings and research reading will be focused on the solar system. The theories about the creation of the universe. What are planets and stars? Science studies the physical world and nature; this branch of science -- astronomy-- has fueled more questions than answers to man's quest for knowledge. The academic language students will be exposed to will support ELs in their science courses.

## NJSLS ELA

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LA.L.9-10.1.B	Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or presentations.
LA.L.9-10.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
LA.L.9-10.2.C	Spell correctly.
LA.L.9-10.3	Apply knowledge of language to make effective choices for meaning, or style, and to comprehend more fully when reading, writing, speaking or listening.
LA.L.9-10.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies.
LA.L.9-10.6	Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
LA.W.9-10.1.E	Provide a concluding paragraph or section that supports the argument presented.
LA.W.9-10.2.B	Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.

LA.W.9-10.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
LA.W.9-10.5	Develop and strengthen writing as needed by planning, revising, editing, rewriting, trying a new approach, or consulting a style manual (such as MLA or APA Style), focusing on addressing what is most significant for a specific purpose and audience.
LA.W.9-10.6	Use technology, including the Internet, to produce, share, and update individual or shared writing products, taking advantage of technology’s capacity to link to other information and to display information flexibly and dynamically.
LA.W.9-10.7	Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
LA.W.9-10.8	Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation (MLA or APA Style Manuals).
LA.W.9-10.10	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.
LA.RI.9-10.1	Accurately cite strong and thorough textual evidence, (e.g., via discussion, written response, etc.) and make relevant connections, to support analysis of what the text says explicitly as well as inferentially, including determining where the text leaves matters uncertain.
LA.RI.9-10.2	Determine a central idea of a text and analyze how it is developed and refined by specific details; provide an objective summary of the text.
LA.RI.9-10.3	Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.
LA.RI.9-10.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).
LA.RI.9-10.8	Describe and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and reasoning.
LA.RI.9-10.9	Analyze and reflect on (e.g., practical knowledge, historical/cultural context, and background knowledge) documents of historical and literary significance, (e.g., Washington’s Farewell Address the Gettysburg Address, Roosevelt’s Four Freedoms speech, King’s “Letter from Birmingham Jail”, Declaration of the Rights of Man and Citizen, U.N. Universal Declaration of Human Rights, etc.), including how they relate in terms of themes and significant concepts.
LA.RL.9-10.1	Cite strong and thorough textual evidence and make relevant connections to support analysis of what the text says explicitly as well as inferentially, including determining where the text leaves matters uncertain.
LA.RL.9-10.4	Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).
LA.SL.9-10.1	Initiate and participate effectively in a range of collaborative discussions (one-on-one, in

groups, and teacher-led) with peers on grades 9–10 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively.

LA.SL.9-10.1.A

Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.

LA.SL.9-10.3

Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, identifying any false reasoning or distorted evidence.

LA.SL.9-10.4

Present information, findings, and supporting evidence clearly, concisely, and logically. The content, organization, development, and style are appropriate to task, purpose, and audience.

LA.SL.9-10.5

Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance findings, reasoning, and evidence and to add interest.

LA.SL.9-10.6

Adapt speech to a variety of contexts and tasks, demonstrating command of formal English.

Integration of Knowledge and Ideas

### NJSLS and Correlating SLOs

NJSLS	Student Learning Objectives
ELA RL 9-12.1	<ul style="list-style-type: none"> <li>• there can be uncertainty in texts</li> <li>• cited evidence must be strong, thorough, and relevant</li> <li>• cite strong and thorough textual evidence</li> <li>• make relevant connections to support the analysis</li> </ul>
ELA RL 9-12.4	<ul style="list-style-type: none"> <li>• the figurative and connotative meanings of words and phrases are determined by how they are used in the text</li> <li>• determine the figurative and connotative meaning of words and phrases as they are used in the text</li> </ul>
ELA W 9-12.1	<ul style="list-style-type: none"> <li>• arguments must have valid reasoning and relevant and sufficient evidence to support a claim(s)</li> <li>• arguments include an analysis of substantive topics or texts</li> </ul>
ELA W 9-12.2	<ul style="list-style-type: none"> <li>• informative and explanatory texts examine and convey complex ideas, concepts, and information through the effective selection, organization, and analysis of content</li> </ul>

<p>ELA W.9-12.4</p>	<ul style="list-style-type: none"> <li>• produce clear and coherent writing in which the development is appropriate to the task, purpose, and audience</li> <li>• produce clear and coherent writing in which the style is appropriate to the task, purpose, and audience</li> </ul>
<p>ELA W 9-12.5</p>	<ul style="list-style-type: none"> <li>• planning, revising, editing, rewriting, and consulting style manuals develops and strengthens writing</li> <li>• addressing what is most significant for a specific purpose and audience strengthens writing</li> </ul>
<p>ELA W.9-12.6</p>	<ul style="list-style-type: none"> <li>• technology can be used to produce, share, and update individual or shared writing projects</li> <li>• use technology to produce, share, and update individual or shared writing products. use technology to link to other information</li> </ul>
<p>ELA W 9-12.7</p>	<ul style="list-style-type: none"> <li>• the research process is used to answer a question or solve a problem</li> <li>• research process applies to our own questions and/or problems</li> <li>• narrow or broaden the inquiry when appropriate</li> <li>• synthesize multiple sources on the subject to demonstrate understanding of the subject</li> <li>• conduct short and sustained research projects to answer a question or solve a problem</li> <li>• narrow or broaden the inquiry when appropriate</li> </ul>
<p>ELA W 9-12 .8</p>	<ul style="list-style-type: none"> <li>• use advanced searches effectively</li> </ul>
<p>ELA W. 9-12.10</p>	<ul style="list-style-type: none"> <li>• writing occurs over various time frames for a variety of tasks, purposes and audiences</li> <li>• write routinely over extended and shorter time frames</li> <li>• write routinely for a range of tasks, purposes, and audiences</li> </ul>

<p>ELA RI 9-12.1</p>	<ul style="list-style-type: none"> <li>• accurately interpret and cite strong and thorough textual evidence in support of what the text says (means) explicitly and inferentially</li> <li>• identify and cite areas where the text leaves matters uncertain</li> <li>• support analysis of what the text says explicitly as well as inferentially</li> <li>• analyze a text, particularly in areas where matters are left uncertain</li> </ul>
<p>ELA RI 9-12.2</p>	<ul style="list-style-type: none"> <li>• determine a central idea of a text</li> <li>• provide an objective summary of the text</li> </ul>
<p>ELA RI 9-12.3</p>	<ul style="list-style-type: none"> <li>• authors make decisions regarding the organization, presentation, and connections of ideas and events</li> </ul>
<p>ELA RI 9-12.4</p>	<ul style="list-style-type: none"> <li>• words and phrases can have figurative, connotative, and technical meanings</li> </ul>
<p>ELA RI 9-12.8</p>	<ul style="list-style-type: none"> <li>• we can describe the reasoning within the premises, purposes, and arguments in works of public advocacy</li> <li>• certain U.S. and global texts are seminal</li> <li>• we can evaluate the reasoning within the premises, purposes, and arguments in seminal U.S. and global texts</li> <li>• describe the reasoning in seminal U.S. texts and global texts including the application of constitutional principles and use of legal reasoning and the premises, purposes, and arguments in works of public advocacy</li> <li>• evaluate the path of reasoning in seminal U.S. texts and global texts including the application of constitutional principles and use of legal reasoning and the premises, purposes, and arguments in works of public advocacy</li> </ul>
<p>ELA RI 9-12.9</p>	<ul style="list-style-type: none"> <li>• certain historical and literary documents are significant for their themes, purposes, and rhetorical features</li> </ul>
<p>ELA L.9-12.1</p>	<ul style="list-style-type: none"> <li>• demonstrate command of the conventions of standard English grammar and usage when</li> </ul>

	writing or speaking
ELA L.9-12.2	<ul style="list-style-type: none"> <li>• spell correctly</li> </ul>
ELA L.9-12.3	<ul style="list-style-type: none"> <li>• word choice and sentence structure can be varied to demonstrate an understanding of the influence of language</li> <li>• apply knowledge of language to make effective choices for meaning or style</li> </ul>
ELA L 9-12.4	<ul style="list-style-type: none"> <li>• determine or clarify the meanings of unknown or multiple-meaning words and phrases</li> <li>• determine or clarify the meaning of unknown and multiple-meaning words and phrases, choosing flexibly from a range of strategies</li> <li>• use context clues to determine or clarify meaning</li> <li>• identify and use patterns of word changes to determine different meanings or the part of speech of words or phrases</li> <li>• consult reference materials to find the pronunciation, to determine meaning, and to understand its part of speech, where the word came from, and how it is used</li> <li>• verify our preliminary determination of the meaning of a word or phrase, such as by checking the inferred meaning in context or in a dictionary</li> </ul>
ELA L.9-12.6	<ul style="list-style-type: none"> <li>• accurate use of words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level is important to comprehension or expression</li> </ul>
ELA SL.9-12.1	<ul style="list-style-type: none"> <li>• initiate and participate effectively in a range of collaborative discussions with peers</li> <li>• build on others' ideas and express our ideas clearly and persuasively</li> </ul>
ELA SL.9-12.3	<ul style="list-style-type: none"> <li>• evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric</li> <li>• identify any false reasoning or distorted evidence</li> </ul>

ELA SL 9-12 .4	<ul style="list-style-type: none"> <li>• content, organization, development, and style are appropriate to task, purpose, and audience</li> <li>• present information, findings, and supporting evidence clearly, concisely, and logically</li> </ul>
ELA SL.9-12.5	<ul style="list-style-type: none"> <li>• strategic use of digital media can enhance findings, reasoning, and evidence, and add interest in presentations</li> <li>• strategically use digital media to add interest to presentations</li> </ul>
ELA SL.9-12.6	<ul style="list-style-type: none"> <li>• adapt speech to a variety of contexts and tasks</li> <li>• demonstrate command of formal English</li> </ul>

## WIDA Standards

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2:	Language for Language Arts
9-12.HS-ESS1-6.6.1	Apply scientific reasoning to link evidence to the claims to assess the extent to which the reasoning and data support the explanation or conclusion.
9-12.HS-ESS1-3.ESS1.A.2	<p>Other than the hydrogen and helium formed at the time of the Big Bang, nuclear fusion within stars produces all atomic nuclei lighter than and including iron, and the process releases electromagnetic energy. Heavier elements are produced when certain massive stars achieve a supernova stage and explode.</p> <p>Emphasis is on using available evidence within the solar system to reconstruct the early history of Earth, which formed along with the rest of the solar system 4.6 billion years ago. Examples of evidence include the absolute ages of ancient materials (obtained by radiometric dating of meteorites, moon rocks, and Earth's oldest minerals), the sizes and compositions of solar system objects, and the impact cratering record of planetary surfaces.</p> <p>Introduce and define topic and/or entity for audience</p> <p>Logically organize claims, counterclaims, reasons, and evidence; offer a conclusion with recommendations</p> <p>Add precision, details, and clarity about complex attributes, qualities, characteristics, activities, and conceptual relationships</p> <p>Establish and maintain a formal style and objective tone</p> <p>Develop coherence and cohesion throughout text</p> <p>Establish an objective or neutral stance</p> <p>Engage and adjust for audience</p>

## Rationale, Transfer Goals, and Enduring Understandings

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The previous unit provided students with an understanding of how humankind has developed over the millennium, so the next step is understanding our planet and its place in the solar system. Even though planets,

stars, and the sun are concrete and real, they are too far away for people to connect to the relevancy and importance of these outer space objects. Scientists have theories to explain the creation of the universe (ex. Big Bang), but why do scientists develop theories to explain? Is there evidence of life elsewhere? The academic language related to this science topic will be beneficial to students in their science courses.

## Essential Questions

Overarching Essential Question	Content-Specific	Skill Specific
<ul style="list-style-type: none"> <li>• Why is the sun the most important member of our solar system?</li> <li>• How are planets the same and different?</li> <li>• How do we come up with theories to explain the galaxy?</li> <li>• Can we come up with theories to explain other things?</li> <li>• What are the results of collaboration?</li> </ul>	<ul style="list-style-type: none"> <li>• What ELA tier 3 vocabulary words will the student have to acquire to do well in school?</li> <li>• Readers use resources to determine the meaning of unknown words.</li> <li>• Students use formal academic language when speaking and writing.</li> <li>• Writers convey their ideas in different forms of writing.</li> <li>• A knowledge base of the past assists people in making decisions.</li> </ul>	<ul style="list-style-type: none"> <li>• Listening for understanding</li> <li>• Speaking for communication &amp; presentation</li> <li>• Writing for communication and explanation (with conventions and mechanics)</li> <li>• Reading for comprehension (with reading strategies).</li> <li>• Writers convey ideas clearly using an organizational pattern.</li> <li>• Writers use evidence and facts from research to support the analysis of their writing.</li> </ul>

## Spiraling for Mastery

Content or Skill for this Unit	Spiral Focus from Previous Unit
<ul style="list-style-type: none"> <li>- Problem solving</li> <li>-Brainstorming</li> </ul>	<ul style="list-style-type: none"> <li>-Strategies: visualizing, prior knowledge, context clues</li> <li>-Use language patterns</li> <li>-Make and use graphic organizers (of choice) to</li> </ul>



<ul style="list-style-type: none"> <li>-Theories</li> <li>-Strategies: word attack, definition/ connotation, think alouds</li> <li>-Marking up the text</li> <li>-Grammar adjectives, verb tenses, contractions</li> <li>-Comparing &amp; contrasting writing and speaking</li> <li>-Idiomatic &amp; figurative phrases</li> <li>-Writing (persuasive)</li> <li>-Oral presentation</li> </ul>	<ul style="list-style-type: none"> <li>prepare for writing</li> <li>-Produce writing pieces</li> <li>-Give information requested from oral or written directions</li> <li>-Follow two-step oral directions</li> <li>-Research using sound internet sources and/or databases</li> <li>-Ask questions orally in English</li> <li>-Describe events</li> <li>-Idioms</li> <li>-Grammar</li> <li>-Comparing &amp; contrasting writing and speaking</li> <li>-Oral presentation</li> </ul>
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## Bi-Weekly Scope and Sequence

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WEEK S	Standards	Reading	Writing	Listening	Speaking	Assessment
1-2 SKILLS	L.1b,.2,.6 W..1,.2,4,.5,.10 SL.1,.1a,.1d,.3,.5,.6 RL.1,.4 RI .1,.8,9	-Build background (KWL) about space and our planets <a href="https://www.youtube.com/watch?v=lcZTcfdZ3Ow">https://www.youtube.com/watch?v=lcZTcfdZ3Ow</a> - Planets, moons, stars, etc... - Definitions of new vocabulary	- Vocabulary (frontload) - Writing authentic sentences with new vocabulary - Grammar: comparatives and superlatives - Expositor	-Following 2-step directions -Using context clues to determine the meaning -Teacher and audio read aloud -Engagement in teacher-modeled processes <a href="https://www.youtube.com/watch?v=noiwY7kQ5NQ">https://www.youtube.com/watch?v=noiwY7kQ5NQ</a>	- Prereading activities for predictions about the text - Asking Questions for clarity -Read text aloud	- Comprehension check on text - Participation - Notebook evaluation - Teacher Observation (TO) - Writing

			<p>y writing</p> <ul style="list-style-type: none"> <li>- Persuasive writing</li> </ul>		<ul style="list-style-type: none"> <li>- Students presenting &amp; teaching vocabulary (to peers)</li> <li>- Students read aloud portions of text</li> </ul>	<p>prompt: How else can you make a profit?</p> <ul style="list-style-type: none"> <li>-TO</li> <li>-post its/warm-ups/exit tickets</li> <li>- graphic organizers</li> <li>-quick writes/rough drafts</li> <li>- conferences</li> </ul>
<p><b>1-2 RESOURCES</b></p>	<p>Champion of Ideas (Blue Level Ch 23)</p> <p>Champion of Ideas Writer &amp; Audio disc</p> <p>Interactive Notebook (teacher created)</p> <p>Newsela</p> <p>Smartboard, Camera, miscellaneous paper &amp; pens</p>	<p>Supplemental Resources :</p> <p>Books: A Doorway Through Space, The Backyard's Astronomer's Guide</p> <p>esl-bits.net</p> <p>IXL (Grammar)</p> <p>Internet (Vocabul</p>				

			<p>ary)</p> <p>Youtube (audio clips)</p> <p>edpuzzle</p> <p>Commonl it</p> <p>Wizer.me</p> <p>liveworks heets.com</p> <p>blooket</p> <p>quizlet</p> <p>openAI</p>			
<b>3-4 SKILLS</b>	<p>L.1b,2,3,4</p> <p>W.6,.7,.8,.10</p> <p>SL.1,.3,.5</p> <p>RL.4</p> <p>RI .8,.9</p>	<p>-Class novel</p> <p>-Dr. Carl Sagan <a href="https://www.youtube.com/watch?v=wupToqz1e2g">https://www.youtube.com/watch?v=wupToqz1e2g</a></p> <p>-Area 51 <a href="https://www.youtube.com/watch?v=cMLaJsSrZuQ">https://www.youtube.com/watch?v=cMLaJsSrZuQ</a></p> <p><a href="https://www.youtube.com/watch?v=UkKvachjP2s">https://www.youtube.com/watch?v=UkKvachjP2s</a></p>	<p>-Students will respond to the class novel</p> <p>-Students will write about astronomers</p> <p>-Students will research the weirdest Area 51 stories</p>	<p>-Following multi-step directions</p> <p>-Engaged &amp; participating in discourse</p>	<p>- Present astronomers</p> <p>-Turn &amp; talk to partners</p> <p>- Partners share with partners</p>	<p>-TO Q &amp; A for comprehension</p> <p>-Race Responses</p> <p>-Class Discussions</p> <p>-post its/warm-ups/exit tickets</p> <p>- graphic organizers</p> <p>-quick writes/rough drafts</p>

						- conferences
<b>3-4 RESOURCES</b>		<p>Champion of Ideas (Blue Level Ch 23)</p> <p>Champion of Ideas Writer &amp; Audio disc</p> <p>Interactive Notebook (teacher created)</p> <p>Newsela</p> <p>Smartboard, Camera, miscellaneous paper &amp; pens</p>	<p>Supplemental Resources :</p> <p>IXL (Grammar)</p> <p>Internet (Vocabulary)</p> <p>Youtube (audio clips)</p> <p>edpuzzle</p> <p>Commonlit</p> <p>Wizer.me</p> <p>liveworksheets.com</p> <p>blooket</p> <p>quizlet</p> <p>openAI</p>			
<b>5-6 SKILLS</b>	<p>L.1b,.2,.6</p> <p>W.7,.8,.9,.10</p> <p>SL.1,.3,.4,.5,.6</p> <p>RL.4</p> <p>RI.1,.2,.4,.8</p>	<p>-Class novel</p> <p>-Dr. Carl Sagan</p> <p>-Area 51</p>	<p>-Students will respond to the class novel</p> <p>-Students will write about astronomers</p> <p>-Students will</p>	<p>-Following multi-step directions</p> <p>-Engaged &amp; participating in discourse</p>	<p>-Finish presentations</p>	<p>- Participation</p> <p>-Short Answers</p> <p>-Race Responses</p> <p>-Class Discuss</p>

			research the weirdest Area 51 stories		<p>ions</p> <p>-TO</p> <p>-post its/warm-ups/exit tickets</p> <p>- graphic organizers</p> <p>-quick writes/rough drafts</p> <p>- conferences</p>
<b>5-6 RESOURCES</b>		<p>Champion of Ideas (Blue Level Ch 23)</p> <p>Champion of Ideas Writer &amp; Audio disc</p> <p>Interactive Notebook (teacher created)</p> <p>Newsela</p> <p>Smartboard, Camera, miscellaneous paper &amp; pens</p>	<p>Supplemental Resources :</p> <p>IXL (Grammar)</p> <p>Internet (Vocabulary)</p> <p>Youtube (audio clips)</p> <p>edpuzzle</p> <p>Commonlit</p> <p>Wizer.me</p> <p>liveworksheets.com</p>		

			blookey quizlet openAI			
<b>7-8</b>  <b>SKILLS</b>	L.1b,.2,.3 .6  W..1.2,.3, .8.10  SL.1,.1a,. 1d,.3,.5  RL.1,.4  RI .1,4,.7	-Getting Around the Milky Way  <a href="https://www.youtube.com/watch?v=bUDYpnBwzDo">https://www.youtube.com/watch?v=bUDYpnBwzDo</a>	-Making connections to the text and analysis of blending fantasy with facts.  - Inferencing character traits from novel.  -Creating the solar system	-Students will follow multi-step directions  -Students will use teacher-created2 resource strategies	- Students will analyze characters in text using the STEAM method  - Student organizer  -TO on engagement & participation  -Short Answers  -Race Responses  -Class Discussions  -post its/warm-ups/exit tickets  - graphic organizers  -quick writes/rough drafts  - conferences	
		Champion of Ideas (Blue	Supplemental Resources			

<p><b>7-8</b></p> <p><b>RESOURCES</b></p>		<p>Level Ch 23)</p> <p>Champion of Ideas Writer &amp; Audio disc</p> <p>Interactive Notebook (teacher created)</p> <p>Newsela</p> <p>Smartboard, Camera, miscellaneous paper &amp; pens</p>	<p>:</p> <p>IXL (Grammar)</p> <p>Internet (Vocabulary)</p> <p>Youtube (audio clips)</p> <p>edpuzzle</p> <p>Commonlit</p> <p>Wizer.me</p> <p>liveworksheets.com</p> <p>blooket</p> <p>quizlet</p> <p>openAI</p>		
<p><b>9</b></p> <p><b>SKILLS</b></p>	<p>L.1b,3,6</p> <p>W.4,5,7,8,10</p> <p>SL.1,1a,1d,3,4,5</p> <p>RL.4</p> <p>RI .2,8.9</p>	<p>-Evaluation Week for Unit 3</p>	<p>- Students will write an essay about what they have learned from this unit (teacher-created criteria and model provided)</p>	<p>-Students follow directions</p>	<p>- Student unit survey</p> <p>- Students ask questions to clarify teacher expectations of assignments</p> <p>- Timeline completion</p> <p>-Race Responses</p> <p>- Graphic Organizer</p> <p>-TO</p>

<b>9</b>  <b>RESO</b> <b>URCE</b> <b>S</b>		Champion tester	Suppleme ntal Materials:			
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## **Career Awareness, Exploration, Preparation, and Training**

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What have we learned from space exploration? What jobs are available that were not previously available due to space exploration?

CAEP.9.2.12.C.4

Analyze how economic conditions and societal changes influence employment trends and future education.

## **21st Century Skills**

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CRP.K-12.CRP1

Act as a responsible and contributing citizen and employee.

CRP.K-12.CRP2

Apply appropriate academic and technical skills.

CRP.K-12.CRP4

Communicate clearly and effectively and with reason.

CRP.K-12.CRP5

Consider the environmental, social and economic impacts of decisions.

CRP.K-12.CRP7

Employ valid and reliable research strategies.

CRP.K-12.CRP8

Utilize critical thinking to make sense of problems and persevere in solving them.

CRP.K-12.CRP11

Use technology to enhance productivity.

CRP.K-12.CRP12

Work productively in teams while using cultural global competence.

## **Interdisciplinary Connections**

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Students will be reading scientific articles and text on real science information. This unit will fall during holidays --- students will read and do research on the importance of our solar system and the various holidays.



9-12.HS-ESS1

Earth's Place in the Universe

9-12.HS-ESS1-2

Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe.

9-12.HS-ESS1-3

Communicate scientific ideas about the way stars, over their life cycle, produce elements.

9-12.HS-ESS1-2.ESS1.A.2

The Big Bang theory is supported by observations of distant galaxies receding from our own, of the measured composition of stars and non-stellar gases, and of the maps of spectra of the primordial radiation (cosmic microwave background) that still fills the universe.

Emphasis is on using available evidence within the solar system to reconstruct the early history of Earth, which formed along with the rest of the solar system 4.6 billion years ago. Examples of evidence include the absolute ages of ancient materials (obtained by radiometric dating of meteorites, moon rocks, and Earth's oldest minerals), the sizes and compositions of solar system objects, and the impact cratering record of planetary surfaces.