

CONTENT	STANDARD INDICATORS	SKILLS	ASSESSMENT	VOCABULARY/ KEY TERMS	PRIORITY
<b>ENGINEERING</b>					
<b>Studying People Scientifically</b>					
<ul style="list-style-type: none"> <li>Criteria</li> <li>Constraints</li> <li>Solutions</li> <li>Scientific principles</li> <li>Potential impacts</li> </ul>	<p><b>6-8.E.1:</b> Identify the criteria and constraints of a design to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.</p>	<ul style="list-style-type: none"> <li>Identify the criteria of a design to ensure a successful solution.</li> <li>Make predictions and develop testable questions based on research and prior knowledge.</li> <li>Identify ways scientists solve problems.</li> <li>Identify roadblocks/ constraints that may be encountered during the process.</li> <li>Identify ethical scientific principles of testing using the scientific method</li> </ul>	<ul style="list-style-type: none"> <li>Analysis questions (short answer and longer written responses)</li> <li>Three level reading guides</li> <li>Venn diagrams</li> <li>Concept maps</li> <li>Evaluation of developed experiments</li> <li>Collected and graphed data from experiments</li> <li>Designed experiments</li> <li>Lab reports</li> <li>Quizzes</li> <li>Tests</li> </ul>	<ul style="list-style-type: none"> <li>Control</li> <li>Data</li> <li>Ethics</li> <li>Evidence</li> <li>Hypothesis</li> <li>Inference</li> <li>Observation</li> <li>Qualitative</li> <li>Quantitative</li> <li>Reproducible</li> <li>Science and Engineering Process Skills (SEPS)</li> <li>Trade-offs</li> <li>Variable</li> </ul>	IMPORTANT

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<b>ENGINEERING</b>					
<b>Studying People Scientifically</b>					
<ul style="list-style-type: none"> <li>Design solutions</li> <li>Systematic process</li> <li>Criteria and constraints</li> </ul>	<b>6-8.E.2:</b> Evaluate competing design solutions using a systematic process to identify how well they meet the criteria and constraints of the problem.	<ul style="list-style-type: none"> <li>Evaluate design solution</li> <li>Compare and contrast ethical dilemmas.</li> <li>Identify criteria to the solution.</li> </ul>		<ul style="list-style-type: none"> <li>Informed consent</li> <li>Range</li> <li>Sample size</li> </ul>	IMPORTANT
<ul style="list-style-type: none"> <li>Investigations</li> <li>Similarities and differences</li> <li>Designed solutions</li> <li>Best characteristics</li> <li>Criteria for success</li> </ul>	<b>6-8.E.3:</b> Analyze data from investigations to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.	<ul style="list-style-type: none"> <li>Analyze and identify similarities and difference in several design solutions.</li> <li>Analyze data from investigations and apply those to potential experiment solutions.</li> <li>Determine similarities and difference among design solutions.</li> <li>List best characteristics for scientific investigations.</li> <li>Identify the best characteristics of scientific investigations that can be combined into a new solution.</li> </ul>		<ul style="list-style-type: none"> <li>Placebo</li> <li>Placebo effect</li> </ul>	CRITICAL

CONTENT	STANDARD INDICATORS	SKILLS	ASSESSMENT	VOCABULARY/ KEY TERMS	PRIORITY
<b>ENGINEERING</b>					
<b>Studying People Scientifically</b>					
<ul style="list-style-type: none"> <li>• Prototype</li> <li>• Generated data</li> <li>• Investigations</li> <li>• Proposed object, tool, process</li> <li>• Optimal design</li> </ul>	<p><b>6-8.E.4:</b> Develop a prototype to generate data for repeated investigations and modify a proposed object, tool, or process such that an optimal design can be achieved.</p>	<ul style="list-style-type: none"> <li>• Develop a prototype for a scientific experiment</li> <li>• Collect data from scientific experiments.</li> <li>• Collect and graph qualitative and quantitative data</li> <li>• Modify a designed experiment and adapt objects, tools, and processes</li> </ul>			IMPORTANT

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6-8.E.1:</b> Identify the criteria and constraints of a design to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.</p>	<p><b>SEPS.1: Posing questions and defining problems</b></p> <p><b>SEPS.2: Developing and using models and tools</b></p> <p><b>SEPS.4: Analyze and interpret data</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts</li> </ul> <p><b>6-8.LST.2.1:</b></p> <ul style="list-style-type: none"> <li>• Cite specific textual evidence to support analysis of science and technical texts.</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <p><b>6-8.LST.4.1:</b></p> <ul style="list-style-type: none"> <li>• Integrate quantitative or technical information with a version expressed visually (e.g., <i>in a flowchart, diagram, model, graph, or table</i>).</li> </ul> <p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <p><b>6-8.LST.5.1:</b></p> <ul style="list-style-type: none"> <li>• Write arguments focused on discipline-specific content.</li> </ul> <p><b>6-8.LST.5.2:</b></p> <ul style="list-style-type: none"> <li>• Write informative texts</li> <li>• Include precise descriptions and conclusions drawn from data and research.</li> </ul>

		<ul style="list-style-type: none"> <li>• Edit to produce and strengthen writing that is clear and coherent.</li> </ul>
<b>STANDARD INDICATORS</b>	<b>SCIENCE AND ENGINEERING</b>	<b>LITERACY IN SCIENCE</b>
<p><b>6-8.E.1:</b> Identify the criteria and constraints of a design to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.</p>		<p><b>6-8.LST.6.1:</b></p> <ul style="list-style-type: none"> <li>• Plan and develop.</li> <li>• Write a draft.</li> <li>• Revise using appropriate reference materials. Rewrite.</li> <li>• Try a new approach.</li> </ul> <p><b>6-8.LST.6.2:</b></p> <ul style="list-style-type: none"> <li>• Use technology to produce and publish writing.</li> <li>• Present the relationships between information and ideas clearly and efficiently.</li> </ul> <p><b>6-8.LST.7.1:</b></p> <ul style="list-style-type: none"> <li>• Conduct short research assignments and tasks to answer a question or test a hypothesis.</li> <li>• Draw on several sources.</li> <li>• Generate additional related, focused questions that allow for multiple avenues of exploration.</li> </ul> <p><b>6-8.LST.7.2:</b></p> <ul style="list-style-type: none"> <li>• Gather relevant information from multiple source. Use search terms effectively.</li> <li>• Annotate sources.</li> <li>• Assess the credibility and accuracy of each source.</li> <li>• Quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation (e.g., <i>APA or CSE</i>).</li> </ul>

		<p><b>6-8.LST.7.3:</b></p> <ul style="list-style-type: none"> <li>• Draw evidence from informational texts to support analysis, reflection, and research.</li> </ul>
<b>STANDARD INDICATORS</b>	<b>SCIENCE AND ENGINEERING</b>	<b>LITERACY IN SCIENCE</b>
<p><b>6-8.E.2:</b> Evaluate competing design solutions using a systematic process to identify how well they meet the criteria and constraints of the problem.</p>	<p><b>SEPS.1: Posing questions and defining problems</b></p> <p><b>SEPS.2: Developing and using models and tools</b></p> <p><b>SEPS.3: Construct and perform investigation</b></p> <p><b>SEPS.4: Analyze and interpret data</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts</li> </ul> <p><b>6-8.LST.2.1:</b></p> <ul style="list-style-type: none"> <li>• Cite specific textual evidence to support analysis of science and technical texts.</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <p><b>6-8.LST.4.1:</b></p> <ul style="list-style-type: none"> <li>• Integrate quantitative or technical information with a version expressed visually (e.g., <i>in a flowchart, diagram, model, graph, or table</i>).</li> </ul> <p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <p><b>6-8.LST.5.1:</b></p> <ul style="list-style-type: none"> <li>• Write arguments focused on discipline-specific content.</li> </ul> <p><b>6-8.LST.5.2:</b></p> <ul style="list-style-type: none"> <li>• Write informative texts</li> <li>• Include precise descriptions and conclusions drawn from data and research.</li> </ul>

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<b>6-8.E.3:</b> Analyze data from investigations to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.	<b>SEPS.1: Posing questions and defining problems</b>  <b>SEPS.2: Developing and using models and tools</b>  <b>SEPS.3: Construct and perform investigations</b>  <b>SEPS.4: Analyze and interpret data</b>  <b>SEPS.5: Use mathematics and computational thinking</b>  <b>SEPS.6: Construct explanations and design solutions.</b>	<b>6-8.LST.1.1:</b> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts</li> </ul> <b>6-8.LST.2.1:</b> <ul style="list-style-type: none"> <li>• Cite specific textual evidence to support analysis of science and technical texts.</li> </ul> <b>6-8.LST.2.3:</b> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <b>6-8.LST.4.1:</b> <ul style="list-style-type: none"> <li>• Integrate quantitative or technical information with a version expressed visually (e.g., <i>in a flowchart, diagram, model, graph, or table</i>).</li> </ul> <b>6-8.LST.4.3:</b> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <b>6-8.LST.5.1:</b> <ul style="list-style-type: none"> <li>• Write arguments focused on discipline-specific content.</li> </ul> <b>6-8.LST.5.2:</b> <ul style="list-style-type: none"> <li>• Write informative texts</li> <li>• Include precise descriptions and conclusions drawn from data and research.</li> </ul>

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<b>6-8.E.4:</b> Develop a prototype to generate data for repeated investigations and modify a proposed object, tool, or process such that an optimal design can be achieved.	<b>SEPS.1: Posing questions and defining problems</b>  <b>SEPS.2: Developing and using models and tools</b>  <b>SEPS.3: Construct and perform investigations</b>  <b>SEPS.4: Analyze and interpret data</b>  <b>SEPS.5: Use mathematics and computational thinking</b>  <b>SEPS.6: Construct explanations and design solutions</b>  <b>SEPS.7: Engage in argument from evidence</b>  <b>SEPS.8: Obtain, evaluate, and communicate information</b>	<b>6-8.LST.1.1:</b> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts</li> </ul> <b>6-8.LST.2.1:</b> <ul style="list-style-type: none"> <li>• Cite specific textual evidence to support analysis of science and technical texts.</li> </ul> <b>6-8.LST.2.3:</b> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <b>6-8.LST.4.1:</b> <ul style="list-style-type: none"> <li>• Integrate quantitative or technical information with a version expressed visually (e.g., <i>in a flowchart, diagram, model, graph, or table</i>).</li> </ul> <b>6-8.LST.4.3:</b> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <b>6-8.LST.5.1:</b> <ul style="list-style-type: none"> <li>• Write arguments focused on discipline-specific content.</li> </ul> <b>6-8.LST.5.2:</b> <ul style="list-style-type: none"> <li>• Write informative texts</li> <li>• Include precise descriptions and conclusions drawn from data and research.</li> </ul>

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<b>STANDARD INDICATORS</b>	<b>SCIENCE AND ENGINEERING</b>	<b>LITERACY IN SCIENCE</b>
<b>6-8.E.4:</b> Develop a prototype to generate data for repeated investigations and modify a proposed object, tool, or process such that an optimal design can be achieved.		<b>6-8.LST.7.3:</b> Draw evidence from informational texts to support analysis, reflection, and research.

CRAWFORDSVILLE COMMUNITY SCHOOL CORPORATION

GRADE LEVEL: SIXTH

SUBJECT: SCIENCE

DATE: 2018-2019

GRADING PERIOD: QUARTER 2

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CONTENT	STANDARD INDICATORS	SKILLS	ASSESSMENT	VOCABULARY/ KEY TERMS	PRIORITY
<b>PHYSICAL SCIENCE</b>					
<ul style="list-style-type: none"> <li>• Position</li> <li>• Distance</li> <li>• Displacement</li> <li>• Speed</li> <li>• Velocity</li> </ul>	<p><b>6.PS.1:</b> Distinguish between the terms position, distance, and displacement, as well as, the terms speed and velocity.</p>	<ul style="list-style-type: none"> <li>• Compare and contrast effect of position on distance of an object.</li> <li>• Show how position, distance, and displacement are related.</li> <li>• Collect and graph how speed and distance are related.</li> </ul>	<ul style="list-style-type: none"> <li>• Analysis questions at the end of each activity</li> <li>• Diagrams</li> <li>• Graphs</li> <li>• Lab reports</li> <li>• Mathematical problems</li> <li>• Models</li> <li>• Quizzes</li> <li>• Student designed experiment</li> <li>• Unit Test</li> </ul>	<ul style="list-style-type: none"> <li>• Direction</li> <li>• Displacement</li> <li>• Distance</li> <li>• Efficiency</li> <li>• Energy conservation</li> <li>• Law of conservation of energy</li> <li>• Motion</li> <li>• Position</li> <li>• Speed</li> <li>• Velocity</li> </ul>	CRITICAL
<ul style="list-style-type: none"> <li>• Object motion</li> <li>• Time</li> <li>• Position</li> </ul>	<p><b>6.PS.2:</b> Describe the motion of an object graphically showing the relationship between time and position.</p>	<ul style="list-style-type: none"> <li>• Describe the motion of an object.</li> <li>• Show the relationship between time and position.</li> </ul>		<ul style="list-style-type: none"> <li>• Heat</li> <li>• Temperature</li> <li>• Time</li> <li>• Transferred</li> <li>• Transformed</li> </ul>	CRITICAL

CONTENT	STANDARD INDICATORS	SKILLS	ASSESSMENT	VOCABULARY/ KEY TERMS	PRIORITY
<b>PHYSICAL SCIENCE</b>					
<ul style="list-style-type: none"> <li>• Potential energy</li> <li>• Kinetic energy</li> <li>• Energy transformation</li> </ul>	<b>6.PS.3:</b> Describe how potential and kinetic energy can be transferred from one form to another.	<ul style="list-style-type: none"> <li>• Determine where kinetic and potential energy are highest and lowest within a system.</li> <li>• Examine how water changes states.</li> </ul>		<ul style="list-style-type: none"> <li>• Gravitational potential energy</li> <li>• Kinetic energy</li> <li>• Potential energy</li> </ul>	CRITICAL
<ul style="list-style-type: none"> <li>• Properties</li> <li>• Light</li> <li>• Sound</li> <li>• Energy waves</li> <li>• Reflection</li> <li>• Absorption</li> <li>• Materials</li> <li>• Space</li> </ul>	<b>6.PS.4:</b> Investigate the properties of light, sound, and other energy waves and how they are reflected, absorbed, and transmitted through materials and space.	<ul style="list-style-type: none"> <li>• Describe how different energies transform.</li> <li>• Differentiate between the properties of energy waves on the electromagnetic spectrum.</li> <li>• Compare and contrast how materials reflect and absorb.</li> <li>• Illustrate how sound and light waves travel.</li> </ul>		<ul style="list-style-type: none"> <li>• Absorbed</li> <li>• Calorie</li> <li>• Conductors</li> <li>• Electricity generation</li> <li>• Electromagnetic spectrum</li> <li>• Insulators</li> <li>• Nonrenewable resource</li> <li>• Power plant</li> <li>• Reflected</li> <li>• Renewable resource</li> <li>• Transmitted</li> </ul>	CRITICAL

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6.PS.1:</b> Distinguish between the terms position, distance, and displacement, as well as, the terms speed and velocity.</p>	<p><b>SEPS.1: Posing questions and defining problems</b></p> <p><b>SEPS.2: Developing and using models and tools</b></p> <p><b>SEPS.3: Construct and perform investigation</b></p> <p><b>SEPS.4: Analyze and interpret data</b></p> <p><b>SEPS.5: Use mathematics and computational thinking</b></p> <p><b>SEPS.6: Construct explanations and design solutions.</b></p> <p><b>SEPS.8: Obtain, evaluate, and communicate information.</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>Read and comprehend science and technical texts</li> </ul> <p><b>6-8.LST.2.1:</b></p> <ul style="list-style-type: none"> <li>Cite specific textual evidence to support analysis of science and technical texts.</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <p><b>6-8.LST.4.1:</b></p> <ul style="list-style-type: none"> <li>Integrate quantitative or technical information with a version expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</li> </ul> <p><b>6-8.LST.4.2:</b></p> <ul style="list-style-type: none"> <li>Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</li> </ul> <p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <p><b>6-8.LST.5.1:</b></p> <ul style="list-style-type: none"> <li>Write arguments focused on discipline-specific content.</li> </ul>
STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE

<p><b>6.PS.1</b> Distinguish between the terms position, distance, and displacement, as well as, the terms speed and velocity.</p>		<p><b>6-8.LST.7.1:</b></p> <ul style="list-style-type: none"> <li>• Conduct short research assignments and tasks to answer a question or test a hypothesis.</li> <li>• Draw on several sources.</li> <li>• Generate additional related, focused questions that allow for multiple avenues of exploration.</li> </ul>
<p><b>6.PS.2:</b> Describe the motion of an object graphically showing the relationship between time and position.</p>	<p><b>SEPS.1: Posing questions and defining problems.</b></p> <p><b>SEPS.2: Developing and using models and tools.</b></p> <p><b>SEPS.3: Construct and perform investigation.</b></p> <p><b>SEPS.4: Analyze and interpret data.</b></p> <p><b>SEPS.5: Use mathematics and computational thinking.</b></p> <p><b>SEPS.8: Obtain, evaluate, and communicate information.</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts.</li> </ul> <p><b>6-8.LST.1.2:</b></p> <ul style="list-style-type: none"> <li>• Write routinely for a range of discipline-specific tasks, purposes, and audiences.</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <p><b>6-8.LST.4.1:</b></p> <ul style="list-style-type: none"> <li>• Integrate quantitative or technical information with a version expressed visually (e.g., <i>in a flowchart, diagram, model, graph, or table</i>).</li> </ul>
<p><b>STANDARD INDICATORS</b></p>	<p><b>SCIENCE AND ENGINEERING</b></p>	<p><b>LITERACY IN SCIENCE</b></p>

<p><b>6.PS.2:</b> Describe the motion of an object graphically showing the relationship between time and position.</p>		<p><b>6-8.LST.4.2:</b></p> <ul style="list-style-type: none"> <li>• Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</li> </ul> <p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <p><b>6-8.LST.7.1:</b></p> <ul style="list-style-type: none"> <li>• Conduct short research assignments and tasks to answer a question or test a hypothesis.</li> <li>• Draw on several sources.</li> <li>• Generate additional related, focused questions that allow for multiple avenues of exploration.</li> </ul> <p><b>6-8.LST.7.3:</b></p> <ul style="list-style-type: none"> <li>• Draw evidence from informational texts to support analysis, reflection, and research.</li> </ul>
<p><b>STANDARD INDICATORS</b></p>	<p><b>SCIENCE AND ENGINEERING</b></p>	<p><b>LITERACY IN SCIENCE</b></p>

<p><b>6.PS.3:</b> Describe how potential and kinetic energy can be transferred from one form to another.</p>	<p><b>SEPS.1: Posing questions and defining problems.</b></p> <p><b>SEPS.2: Developing and using models and tools.</b></p> <p><b>SEPS.3: Construct and perform investigations.</b></p> <p><b>SEPS.4: Analyze and interpret data.</b></p> <p><b>SEPS.5: Use mathematics and computational thinking.</b></p> <p><b>SEPS.6: Construct explanations and design solutions.</b></p> <p><b>SEPS.8: Obtain, evaluate, and communicate information.</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts.</li> </ul> <p><b>6-8.LST.1.2:</b></p> <ul style="list-style-type: none"> <li>• Write routinely for a range of discipline-specific tasks, purposes, and audiences.</li> </ul> <p><b>6-8.LST.2.1:</b></p> <ul style="list-style-type: none"> <li>• Cite specific textual evidence to support analysis of science and technical texts.</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <p><b>6-8.LST.3.1:</b></p> <ul style="list-style-type: none"> <li>• Determine the meaning of symbols, key terms, and other domain-specific words and phrases</li> </ul> <p><b>6-8.LST.4.1:</b></p> <ul style="list-style-type: none"> <li>• Integrate quantitative or technical information with a version expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</li> </ul> <p><b>6-8.LST.4.2:</b></p> <ul style="list-style-type: none"> <li>• Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</li> </ul>
<p><b>STANDARD INDICATORS</b></p>	<p><b>SCIENCE AND ENGINEERING</b></p>	<p><b>LITERACY IN SCIENCE</b></p>

<p><b>6.PS.3:</b> Describe how potential and kinetic energy can be transferred from one form to another.</p>		<p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <p><b>6-8.LST.7.1:</b></p> <ul style="list-style-type: none"> <li>• Conduct short research assignments and tasks to answer a question or test a hypothesis.</li> <li>• Draw on several sources.</li> <li>• Generate additional related, focused questions that allow for multiple avenues of exploration.</li> </ul>
<p><b>6.PS.4:</b> Investigate the properties of light, sound, and other energy waves and how they are reflected, absorbed, and transmitted through materials and space.</p>	<p><b>SEPS.1: Posing questions (for science) and defining problems (for engineering).</b></p> <p><b>SEPS.2: Developing and using models and tools.</b></p> <p><b>SEPS.3: Construct and perform investigations.</b></p> <p><b>SEPS.4: Analyze and interpret data.</b></p> <p><b>SPES.6: Construct explanations (for science) and design solutions (for engineering).</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts.</li> </ul> <p><b>6-8.LST.1.2:</b></p> <ul style="list-style-type: none"> <li>• Write routinely for a range of discipline-specific tasks, purposes, and audiences.</li> </ul> <p><b>6-8.LST.2.1:</b></p> <ul style="list-style-type: none"> <li>• Cite specific textual evidence to support analysis of science and technical texts.</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul>
<p><b>STANDARD INDICATORS</b></p>	<p><b>SCIENCE AND ENGINEERING</b></p>	<p><b>LITERACY IN SCIENCE</b></p>

<p><b>6.PS.4:</b> Investigate the properties of light, sound, and other energy waves and how they are reflected, absorbed, and transmitted through materials and space.</p>	<p><b>SEPS.7: Engage in argument from evidence.</b></p> <p><b>SEPS.8: Obtain, evaluate, and communicate information.</b></p>	<p><b>6-8.LST.3.1:</b></p> <ul style="list-style-type: none"> <li>Determine the meaning of symbols, key terms, and other domain-specific words and phrases.</li> </ul> <p><b>6-8.LST.4.1:</b></p> <ul style="list-style-type: none"> <li>Integrate quantitative or technical information with a version expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</li> </ul> <p><b>6-8.LST.4.2:</b></p> <ul style="list-style-type: none"> <li>Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</li> </ul> <p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <p><b>6-8.LST.7.1:</b></p> <ul style="list-style-type: none"> <li>Conduct short research assignments and tasks to answer a question or test a hypothesis.</li> <li>Draw on several sources.</li> <li>Generate additional related, focused questions that allow for multiple avenues of exploration.</li> </ul>
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CRAWFORDSVILLE COMMUNITY SCHOOL CORPORATION

GRADE LEVEL: SIXTH

SUBJECT: SCIENCE

DATE: 2018-2019

GRADING PERIOD: QUARTER 3

MASTER COPY 5-22-19

CONTENT	STANDARD INDICATORS	SKILLS	ASSESSMENT	VOCABULARY	PRIORITY
<b>EARTH AND SPACE SCIENCE</b>					
<ul style="list-style-type: none"> <li>• Gravity</li> <li>• Inertia</li> <li>• Celestial body motions</li> <li>• Gravity</li> <li>• Inertia</li> </ul>	<p><b>6.ESS.1:</b> Describe the role of gravity and inertia in maintaining the regular and predictable motion of celestial bodies.</p>	<ul style="list-style-type: none"> <li>• Analyze data of gravitational pull between space objects.</li> <li>• Explain that mass and distance are related to the force of gravity.</li> <li>• Create a model that explains how mass and weight are related, but are not the same.</li> <li>• Diagram how celestial bodies move.</li> <li>• Describe how inertia affects objects.</li> </ul>	<ul style="list-style-type: none"> <li>• 3-level tiered constructed responses</li> <li>• Analysis questions</li> <li>• Designed experiments</li> <li>• Drawings</li> <li>• Evaluation of developed experiments</li> <li>• Graphic organizers,</li> <li>• Lab reports</li> <li>• Maps</li> <li>• Models</li> <li>• Oral</li> <li>• Participation points</li> <li>• Partner/peer evaluations presentations</li> <li>• Quizzes/tests</li> <li>• Research projects</li> <li>• Small group and class discussions</li> <li>• Venn diagrams</li> </ul>	<ul style="list-style-type: none"> <li>• Celestial</li> <li>• Gravitational pull</li> <li>• Gravity</li> <li>• Inertia</li> <li>• Mass</li> <li>• Orbit</li> <li>• Weight</li> <li>• Weightlessness</li> </ul>	<p>CRITICAL</p>

CONTENT	STANDARD INDICATORS	SKILLS	ASSESSMENT	VOCABULARY	PRIORITY
<ul style="list-style-type: none"> <li>• Models</li> <li>• Rotation</li> <li>• Revolution</li> <li>• Tilt</li> <li>• Interaction</li> <li>• Sun</li> <li>• Moon</li> <li>• Seasons</li> <li>• Tides</li> <li>• Daylight hours</li> <li>• Eclipses</li> <li>• Moon phases</li> </ul>	<p><b>6.ESS.2:</b> Design models to describe how Earth's rotation, revolution, tilt, and interaction with the sun and moon cause seasons, tides, changes in daylight hours, eclipses, and phases of the moon.</p>	<ul style="list-style-type: none"> <li>• Model earth's rotation and revolution processes.</li> <li>• Explore and diagram the effects of direct and indirect sunlight on the solar energy striking Earth's surface.</li> <li>• Design a labeled pictorial explanation of what a day, month, year, and seasons are.</li> <li>• Explain night and day, using a model of Earth's rotation.</li> <li>• Predict the phase of the Moon based on the lunar cycle.</li> <li>• Draw physical models of the phases of the Moon.</li> <li>• Model and present the day length, year length, seasons, and tides of the 7 other solar system planets.</li> <li>• Analyze and describe the relationship between the Moon's phase and the occurrence of extreme (spring) and neap tides.</li> </ul>		<ul style="list-style-type: none"> <li>• Astronomer</li> <li>• Axis</li> <li>• Clockwise</li> <li>• Counter-clockwise</li> <li>• Crescent moon</li> <li>• Day-night cycle</li> <li>• Equator</li> <li>• Equinox – vernal/ autumnal</li> <li>• Evidence</li> <li>• Extreme (i.e. spring) tides</li> <li>• First/third moon</li> <li>• Force</li> <li>• Gibbous moon</li> <li>• Hemisphere</li> <li>• Leap year</li> <li>• Lunar cycle</li> <li>• Lunar eclipse</li> <li>• Month</li> <li>• Moon</li> <li>• Neap tides</li> <li>• New moon phase</li> <li>• Observation</li> <li>• Orbit</li> <li>• Piloted/ unpiloted</li> <li>• Planet</li> <li>• Plausible</li> </ul>	<p>CRITICAL</p>

CONTENT	STANDARD INDICATORS	SKILLS	ASSESSMENT	VOCABULARY	PRIORITY
<ul style="list-style-type: none"> <li>• Earth's Rotation</li> </ul>	<b>ESS.2: (cont.)</b>			<ul style="list-style-type: none"> <li>• Proportion</li> <li>• Quarter moon</li> <li>• Remote sensing</li> <li>• Revolve/ revolution</li> <li>• Rotate/ rotation</li> <li>• Satellite – natural/artificial</li> <li>• Solar eclipse</li> <li>• Solstice – summer/winter</li> <li>• Telescope</li> <li>• Tides – high/low</li> <li>• Tilt</li> <li>• Time zone</li> <li>• Topography</li> <li>• Trade-off</li> <li>• Waxing/waning moon</li> <li>• Year</li> </ul>	<b>CRITICAL</b>

CONTENT	STANDARD INDICATORS	SKILLS	ASSESSMENT	VOCABULARY	PRIORITY
<ul style="list-style-type: none"> <li>• Earth's moon</li> <li>• Planets</li> <li>• Solar system</li> <li>• Comets</li> <li>• Asteroids</li> <li>• Size</li> <li>• Surface features</li> <li>• Atmospheric characteristics</li> <li>• Life</li> </ul>	<p><b>6.ESS.3:</b> Compare and contrast the Earth, its moon, and other planets in the solar system, including comets and asteroids. (Comparisons should be made in regard to size, surface features, atmospheric characteristics, and the ability to support life.)</p>	<ul style="list-style-type: none"> <li>• Compare and contrast characteristics of the Sun.</li> <li>• Compare and contrast characteristics of Earth's moon.</li> <li>• Compare and contrast characteristics of comets and asteroids in terms of size, surface features, atmospheric conditions and ability to support life.</li> <li>• Compare and contrast the 8 solar systems planets with other stars in terms of size, composition, color, and age.</li> <li>• Investigate spacecraft design</li> <li>• Study remote sensing related to planetary characteristics</li> <li>• Evaluate NASA's current space program</li> </ul>		<ul style="list-style-type: none"> <li>• Asteroid</li> <li>• Astronomical unit (AU)</li> <li>• Astronomy</li> <li>• Evidence</li> <li>• Galaxy</li> <li>• Light-year</li> <li>• Meteor</li> <li>• Meteorite</li> <li>• Nuclear fusion</li> <li>• Observation</li> <li>• Orbit</li> <li>• Piloted/unpiloted</li> <li>• Planet</li> <li>• Remote sensing</li> <li>• Satellite – natural/artificial</li> <li>• Solar system</li> <li>• Space</li> <li>• Space exploration</li> <li>• Spacecraft</li> <li>• Star</li> <li>• Star/sun</li> <li>• Universe</li> <li>• Waxing/waning moon</li> </ul>	<p>CRITICAL</p>

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6.ESS.1:</b> Describe the role of gravity and inertia in maintaining the regular and predictable motion of celestial bodies.</p>	<p><b>SEPS.1: Posing questions and defining problems.</b></p> <p><b>SEPS.2: Developing and using models and tools.</b></p> <p><b>SEPS.3: Construct and perform investigation.</b></p> <p><b>SEPS.4: Analyze and interpret data.</b></p> <p><b>SEPS.5: Use mathematics and computational thinking.</b></p> <p><b>SEPS.6: Construct explanations and design solutions.</b></p> <p><b>SEPS.7: Engage in argument from evidence.</b></p> <p><b>SEPS.8: Obtain, evaluate, and communicate information.</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <p><b>6-8.LST.3.1:</b></p> <ul style="list-style-type: none"> <li>• Determine the meaning of symbols, key terms, and other domain-specific words and phrases.</li> </ul> <p><b>6-8.LST.4.1:</b></p> <ul style="list-style-type: none"> <li>• Integrate quantitative or technical information with a version expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</li> </ul> <p><b>6.8.LST.4.2:</b></p> <ul style="list-style-type: none"> <li>• Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</li> </ul> <p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <p><b>6-8.LST.5.1:</b></p> <ul style="list-style-type: none"> <li>• Write arguments focused on discipline-specific content.</li> </ul>

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6.ESS.1:</b> Describe the role of gravity and inertia in maintaining the regular and predictable motion of celestial bodies.</p>		<p><b>6-8.LST.6.2:</b></p> <ul style="list-style-type: none"> <li>• Use technology to produce and publish writing.</li> <li>• Present the relationships between information and ideas clearly and efficiently.</li> </ul> <p><b>6-8.LST.7.1:</b></p> <ul style="list-style-type: none"> <li>• Conduct short research assignments and tasks to answer a question or test a hypothesis.</li> <li>• Draw on several sources.</li> <li>• Generate additional related, focused questions that allow for multiple avenues of exploration.</li> </ul> <p><b>6-8.LST.7.2:</b></p> <ul style="list-style-type: none"> <li>• Gather relevant information from multiple source. Use search terms effectively.</li> <li>• Annotate sources.</li> <li>• Assess the credibility and accuracy of each source.</li> <li>• Quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation (e.g., <i>APA</i> or <i>CSE</i>).</li> </ul> <p><b>6-8.LST.7.3:</b></p> <ul style="list-style-type: none"> <li>• Draw evidence from informational texts to support analysis, reflection, and research.</li> </ul>

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6.ESS.2:</b> Design models to describe how Earth's rotation, revolution, tilt, and interaction with the sun and moon cause seasons, tides, changes in daylight hours, eclipses, and phases of the moon.</p>	<p><b>SEPS.1: Posing questions and defining problems.</b></p> <p><b>SEPS.2: Developing and using models and tools.</b></p> <p><b>SEPS.3: Construct and perform investigation.</b></p> <p><b>SEPS.4: Analyze and interpret data.</b></p> <p><b>SEPS.5: Use mathematics and computational thinking.</b></p> <p><b>SEPS.6: Construct explanations and design solutions.</b></p> <p><b>SEPS.7: Engage in argument from evidence.</b></p> <p><b>SEPS.8: Obtain, evaluate, and communicate information.</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <p><b>6-8.LST.4.1:</b></p> <ul style="list-style-type: none"> <li>• Integrate quantitative or technical information with a version expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</li> </ul> <p><b>6.8.LST.4.2:</b></p> <ul style="list-style-type: none"> <li>• Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</li> </ul> <p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <p><b>6-8.LST.7.1:</b></p> <ul style="list-style-type: none"> <li>• Conduct short research assignments and tasks to answer a question or test a hypothesis.</li> <li>• Draw on several sources.</li> <li>• Generate additional related, focused questions that allow for multiple avenues of exploration.</li> </ul>

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6.ESS.3:</b> Compare and contrast the Earth, its moon, and other planets in the solar system, including comets and asteroids. (Comparisons should be made in regard to size, surface features, atmospheric characteristics, and the ability to support life.)</p>	<p><b>SEPS.1: Posing questions and defining problems.</b></p> <p><b>SEPS.2: Developing and using models and tools.</b></p> <p><b>SEPS.3: Construct and perform investigation.</b></p> <p><b>SEPS.4: Analyze and interpret data.</b></p> <p><b>SEPS.5: Use mathematics and computational thinking.</b></p> <p><b>SEPS.6: Construct explanations and design solutions.</b></p> <p><b>SEPS.7: Engage in argument from evidence.</b></p> <p><b>SEPS.8: Obtain, evaluate, and communicate information.</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts.</li> </ul> <p><b>6-8.LST.1.2:</b></p> <ul style="list-style-type: none"> <li>• Write routinely for a range of discipline-specific tasks, purposes, and audiences.</li> </ul> <p><b>6-8.LST.2.1:</b></p> <ul style="list-style-type: none"> <li>• Cite specific textual evidence to support analysis of science and technical texts.</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <p><b>6-8.LST.4.1:</b></p> <ul style="list-style-type: none"> <li>• Integrate quantitative or technical information with a version expressed visually (e.g., <i>in a flowchart, diagram, model, graph, or table</i>).</li> </ul> <p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <p><b>6-8.LST.5.1:</b></p> <ul style="list-style-type: none"> <li>• Write arguments focused on discipline-specific content.</li> </ul> <p><b>6-8.LST.5.2:</b></p> <ul style="list-style-type: none"> <li>• Write informative texts</li> <li>• Include precise descriptions and conclusions drawn from data and research.</li> <li>• Edit to produce and strengthen writing that is clear and coherent.</li> </ul>

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6.ESS.3:</b> Compare and contrast the Earth, its moon, and other planets in the solar system, including comets and asteroids. (Comparisons should be made in regard to size, surface features, atmospheric characteristics, and the ability to support life.)</p>		<p><b>6-8.LST.6.1:</b></p> <ul style="list-style-type: none"> <li>• Plan and develop.</li> <li>• Write a draft.</li> <li>• Revise using appropriate reference materials. Rewrite.</li> <li>• Try a new approach.</li> </ul> <p><b>6-8.LST.6.2:</b></p> <ul style="list-style-type: none"> <li>• Use technology to produce and publish writing.</li> <li>• Present the relationships between information and ideas clearly and efficiently.</li> </ul> <p><b>6-8.LST.7.1:</b></p> <ul style="list-style-type: none"> <li>• Conduct short research assignments and tasks to answer a question or test a hypothesis.</li> <li>• Draw on several sources.</li> <li>• Generate additional related, focused questions that allow for multiple avenues of exploration.</li> </ul> <p><b>6-8.LST.7.2:</b></p> <ul style="list-style-type: none"> <li>• Gather relevant information from multiple source. Use search terms effectively.</li> <li>• Annotate sources.</li> <li>• Assess the credibility and accuracy of each source.</li> <li>• Quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation (e.g., <i>APA</i> or <i>CSE</i>).</li> </ul> <p><b>6-8.LST.7.3:</b></p> <ul style="list-style-type: none"> <li>• Draw evidence from informational texts to support analysis, reflection, and research.</li> </ul>

**CRAWFORDSVILLE COMMUNITY SCHOOL CORPORATION**

**GRADE LEVEL: SIXTH**

**SUBJECT: SCIENCE**

**DATE: 2018-2019**

**GRADING PERIOD: QUARTER 4**

**MASTER COPY 5-22-19**

CONTENT	STANDARD INDICATORS	SKILLS	ASSESSMENT	VOCABULARY	PRIORITY
<b>LIFE SCIENCE</b>					
<ul style="list-style-type: none"> <li>• Homeostasis</li> <li>• Living things</li> <li>• Basic needs                             <ul style="list-style-type: none"> <li>– Food</li> <li>– Water</li> <li>– Shelter</li> <li>– Space</li> <li>– Air</li> </ul> </li> </ul>	<p><b>6.LS.1:</b> Investigate and describe how homeostasis is maintained as living things seek out their basic needs of food, water, shelter, space, and air.</p>	<ul style="list-style-type: none"> <li>• Investigate and describe how homeostasis is maintained in living things</li> <li>• Justify methods used that animals use to seek out their basic needs of:                             <ul style="list-style-type: none"> <li>– Food</li> <li>– Water</li> <li>– Shelter</li> <li>– Space</li> <li>– Air</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Analysis questions at the end of each activity</li> <li>• Diagrams</li> <li>• Graphs</li> <li>• Lab reports</li> <li>• Mathematical problems</li> <li>• Models</li> <li>• Quizzes</li> <li>• Student designed experiment</li> <li>• Unit Test</li> </ul>	<ul style="list-style-type: none"> <li>• Carrying capacity</li> <li>• Field study</li> <li>• Limiting factors</li> <li>• Observation</li> <li>• Population</li> <li>• Producer Classification/ classify</li> <li>• Ecologists</li> <li>• Ecology</li> <li>• Ecosystem</li> <li>• Phylum/phyla</li> <li>• Invertebrate</li> <li>• Vertebrate</li> <li>• Homeostasis</li> </ul>	<p>CRITICAL</p>

CONTENT	STANDARD INDICATORS	SKILLS	ASSESSMENT	VOCABULARY	PRIORITY
<b>LIFE SCIENCE</b>					
<ul style="list-style-type: none"> <li>• Photosynthesis</li> <li>• Flow of energy</li> <li>• Food chains</li> <li>• Energy pyramids</li> <li>• Food webs</li> <li>• Diagrams</li> <li>• Energy</li> <li>• Animals' food</li> <li>• Bodily processes</li> <li>• Sun</li> </ul>	<p><b>6.LS.2:</b> Describe the role of photosynthesis in the flow of energy in food chains, energy pyramids, and food webs. Create diagrams to show how the energy in animals' food used for bodily processes was once energy from the sun.</p>	<ul style="list-style-type: none"> <li>• Describe the role of photosynthesis in the flow of energy.</li> <li>• Diagram energy in food chains, energy pyramids, and food webs.</li> <li>• Calculate energy in animals' food used for bodily processes.</li> <li>• Prove all energy began with the sun.</li> </ul>		<ul style="list-style-type: none"> <li>• Food web</li> <li>• Producer</li> <li>• Photosynthesis</li> <li>• Energy flow</li> <li>• Endothermic</li> <li>• Exothermic</li> </ul>	CRITICAL
<ul style="list-style-type: none"> <li>• Relationships</li> <li>• Predator</li> <li>• Prey</li> <li>• Consumer</li> <li>• Producer</li> <li>• Parasite</li> <li>• Host</li> <li>• Organisms</li> <li>• Patterns of interaction</li> <li>• Ecosystem</li> </ul>	<p><b>6.LS.3:</b> Describe specific relationships (predator/prey, consumer/producer, parasite/host) and symbiotic relationships between organisms. Construct an explanation that predicts why patterns of interactions develop between organisms in an ecosystem.</p>	<ul style="list-style-type: none"> <li>• Differentiate the following: <ul style="list-style-type: none"> <li>– Predator/prey</li> <li>– Consumer/producer</li> <li>– Parasite/host</li> <li>– Symbiotic relationships</li> </ul> </li> <li>• Predict patterns of interactions develop between organisms in an ecosystem.</li> </ul>		<ul style="list-style-type: none"> <li>• Predator</li> <li>• Prey</li> <li>• Consumer</li> <li>• Decomposer</li> <li>• Parasite</li> <li>• Host</li> </ul>	
<ul style="list-style-type: none"> <li>• Data</li> <li>• Changes</li> <li>• Biotic and abiotic components</li> <li>• Habitat</li> <li>• Native plants and animals</li> </ul>	<p><b>6.LS.4:</b> Investigate and use data to explain how changes in biotic and abiotic components in a given habitat can be beneficial or detrimental to native plants and animals.</p>	<ul style="list-style-type: none"> <li>• Identify biotic and abiotic components.</li> <li>• Investigate and use data to explain how changes in biotic and abiotic components in a given habitat can be beneficial or detrimental to native plants and animals.</li> </ul>		<ul style="list-style-type: none"> <li>• Biotic</li> <li>• Abiotic</li> <li>• Habitat</li> <li>• Owl pellet</li> </ul>	

CONTENT	STANDARD INDICATORS	SKILLS	ASSESSMENT	VOCABULARY	PRIORITY
<b>LIFE SCIENCE</b>					
<ul style="list-style-type: none"> <li>• Invasive species</li> <li>• Impact</li> <li>• Ecosystems</li> </ul>	<p><b>6.LS.5:</b> Research invasive species and discuss their impact on ecosystems.</p>	<ul style="list-style-type: none"> <li>• Research and create an interactive project describing invasive species and discussing their impact on ecosystems.</li> </ul>		<ul style="list-style-type: none"> <li>• Biological control</li> <li>• Chemical control</li> <li>• Introduced/</li> <li>• Invasive species</li> <li>• Physical control</li> <li>• Trade-offs</li> </ul>	CRITICAL

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6.LS.1:</b> Investigate and describe how homeostasis is maintained as living things seek out their basic needs of food, water, shelter, space, and air.</p>	<p><b>SEPS.1: Posing questions and defining problems.</b></p> <p><b>SEPS.2: Developing and using models and tools.</b></p> <p><b>SEPS.3: Construct and perform investigation.</b></p> <p><b>SEPS.4: Analyze and interpret data.</b></p> <p><b>SEPS.5: Use mathematics and computational thinking.</b></p> <p><b>SEPS.6: Construct explanations and design solutions.</b></p> <p><b>SEPS.7: Engage in argument from evidence.</b></p> <p><b>SEPS.8: Obtain, evaluate, and communicate information.</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts.</li> </ul> <p><b>6-8.LST.2.1:</b></p> <ul style="list-style-type: none"> <li>• Cite specific textual evidence to support analysis of science and technical texts.</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <p><b>6.8.LST.4.2:</b></p> <ul style="list-style-type: none"> <li>• Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</li> </ul> <p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <p><b>6-8.LST.5.2:</b></p> <ul style="list-style-type: none"> <li>• Write informative texts</li> <li>• Include precise descriptions and conclusions drawn from data and research.</li> <li>• Edit to produce and strengthen writing that is clear and coherent.</li> </ul> <p><b>6-8.LST.7.3:</b></p> <ul style="list-style-type: none"> <li>• Draw evidence from informational texts to support analysis, reflection, and research.</li> </ul>

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6.LS.2:</b> Describe the role of photosynthesis in the flow of energy in food chains, energy pyramids, and food webs. Create diagrams to show how the energy in animals' food used for bodily processes was once energy from the sun.</p>	<p><b>SEPS.1: Posing questions and defining problems.</b></p> <p><b>SEPS.2: Developing and using models and tools.</b></p> <p><b>SEPS.3: Construct and perform investigation.</b></p> <p><b>SEPS.4: Analyze and interpret data.</b></p> <p><b>SEPS.5: Use mathematics and computational thinking.</b></p> <p><b>SEPS.6: Construct explanations and design solutions.</b></p> <p><b>SEPS.7: Engage in argument from evidence.</b></p> <p><b>SEPS.8: Obtain, evaluate, and communicate information.</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts.</li> </ul> <p><b>6-8.LST.2.1:</b></p> <ul style="list-style-type: none"> <li>• Cite specific textual evidence to support analysis of science and technical texts.</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <p><b>6-8.LST.4.1:</b></p> <ul style="list-style-type: none"> <li>• Integrate quantitative or technical information with a version expressed visually (e.g., <i>in a flowchart, diagram, model, graph, or table</i>).</li> </ul> <p><b>6.8.LST.4.2:</b></p> <ul style="list-style-type: none"> <li>• Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</li> </ul> <p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <p><b>6-8.LST.7.1:</b></p> <ul style="list-style-type: none"> <li>• Conduct short research assignments and tasks to answer a question or test a hypothesis.</li> <li>• Draw on several sources.</li> <li>• Generate additional related, focused questions that allow for multiple avenues of exploration.</li> </ul>

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6.LS.2:</b> Describe the role of photosynthesis in the flow of energy in food chains, energy pyramids, and food webs. Create diagrams to show how the energy in animals' food used for bodily processes was once energy from the sun.</p>		<p><b>6-8.LST.7.2:</b></p> <ul style="list-style-type: none"> <li>• Gather relevant information from multiple source. Use search terms effectively.</li> <li>• Annotate sources.</li> <li>• Assess the credibility and accuracy of each source.</li> <li>• Quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation (e.g., <i>APA or CSE</i>).</li> </ul>
<p><b>6.LS.3:</b> Describe specific relationships (predator/prey, consumer/producer, parasite/host) and symbiotic relationships between organisms. Construct an explanation that predicts why patterns of interactions develop between organisms in an ecosystem.</p>	<p><b>SEPS.1: Posing questions and defining problems.</b></p> <p><b>SEPS.2: Developing and using models and tools.</b></p> <p><b>SEPS.3: Construct and perform investigation.</b></p> <p><b>SEPS.4: Analyze and interpret data.</b></p> <p><b>SEPS.5: Use mathematics and computational thinking.</b></p> <p><b>SEPS.6: Construct explanations and design solutions.</b></p> <p><b>SEPS.7: Engage in argument from evidence.</b></p> <p><b>SEPS.8: Obtain, evaluate, and communicate information.</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts.</li> </ul> <p><b>6-8.LST.2.1:</b></p> <ul style="list-style-type: none"> <li>• Cite specific textual evidence to support analysis of science and technical texts.</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <p><b>6-8.LST.4.1:</b></p> <ul style="list-style-type: none"> <li>• Integrate quantitative or technical information with a version expressed visually (e.g., <i>in a flowchart, diagram, model, graph, or table</i>).</li> </ul> <p><b>6.8.LST.4.2:</b></p> <ul style="list-style-type: none"> <li>• Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</li> </ul>

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6.LS.3:</b> Describe specific relationships (predator/prey, consumer/producer, parasite/host) and symbiotic relationships between organisms. Construct an explanation that predicts why patterns of interactions develop between organisms in an ecosystem.</p>		<p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul> <p><b>6-8.LST.6.2:</b></p> <ul style="list-style-type: none"> <li>• Use technology to produce and publish writing.</li> <li>• Present the relationships between information and ideas clearly and efficiently.</li> </ul>
<p><b>6.LS.4:</b> Investigate and use data to explain how changes in biotic and abiotic components in a given habitat can be beneficial or detrimental to native plants and animals.</p>	<p><b>SEPS.1: Posing questions and defining problems.</b></p> <p><b>SEPS.2: Developing and using models and tools.</b></p> <p><b>SEPS.3: Construct and perform investigation.</b></p> <p><b>SEPS.4: Analyze and interpret data.</b></p> <p><b>SEPS.5: Use mathematics and computational thinking.</b></p> <p><b>SEPS.6: Construct explanations and design solutions.</b></p> <p><b>SEPS.7: Engage in argument from evidence.</b></p> <p><b>SEPS.8: Obtain, evaluate, and communicate information.</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts.</li> </ul> <p><b>6-8.LST.2.1:</b></p> <ul style="list-style-type: none"> <li>• Cite specific textual evidence to support analysis of science and technical texts.</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <p><b>6.8.LST.4.2:</b></p> <ul style="list-style-type: none"> <li>• Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</li> </ul> <p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul>

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6.LS.4:</b> Investigate and use data to explain how changes in biotic and abiotic components in a given habitat can be beneficial or detrimental to native plants and animals.</p>		<p><b>6-8.LST.7.1:</b></p> <ul style="list-style-type: none"> <li>• Conduct short research assignments and tasks to answer a question or test a hypothesis.</li> <li>• Draw on several sources.</li> <li>• Generate additional related, focused questions that allow for multiple avenues of exploration.</li> </ul>
<p><b>6.LS.5:</b> Research invasive species and discuss their impact on ecosystems.</p>	<p><b>SEPS.1: Posing questions and defining problems.</b></p> <p><b>SEPS.2: Developing and using models and tools.</b></p> <p><b>SEPS.3: Construct and perform investigation.</b></p> <p><b>SEPS.4: Analyze and interpret data.</b></p> <p><b>SEPS.5: Use mathematics and computational thinking.</b></p> <p><b>SEPS.6: Construct explanations and design solutions.</b></p> <p><b>SEPS.7: Engage in argument from evidence.</b></p> <p><b>SEPS.8: Obtain, evaluate, and communicate information.</b></p>	<p><b>6-8.LST.1.1:</b></p> <ul style="list-style-type: none"> <li>• Read and comprehend science and technical texts.</li> </ul> <p><b>6-8.LST.1.2:</b></p> <ul style="list-style-type: none"> <li>• Write routinely for a range of discipline-specific tasks, purposes, and audiences.</li> </ul> <p><b>6-8.LST.2.1:</b></p> <ul style="list-style-type: none"> <li>• Cite specific textual evidence to support analysis of science and technical texts.</li> </ul> <p><b>6-8.LST.2.3:</b></p> <ul style="list-style-type: none"> <li>• Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</li> </ul> <p><b>6.8.LST.4.2:</b></p> <ul style="list-style-type: none"> <li>• Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</li> </ul> <p><b>6-8.LST.4.3:</b></p> <ul style="list-style-type: none"> <li>• Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</li> </ul>

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6.LS.5:</b> Research invasive species and discuss their impact on ecosystems.</p>		<p><b>6-8.LST.5.1:</b></p> <ul style="list-style-type: none"> <li>• Write arguments focused on discipline-specific content.</li> </ul> <p><b>6-8.LST.6.1:</b></p> <ul style="list-style-type: none"> <li>• Plan and develop.</li> <li>• Write a draft.</li> <li>• Revise using appropriate reference materials. Rewrite.</li> <li>• Try a new approach.</li> </ul> <p><b>6-8.LST.6.2:</b></p> <ul style="list-style-type: none"> <li>• Use technology to produce and publish writing.</li> <li>• Present the relationships between information and ideas clearly and efficiently.</li> </ul> <p><b>6-8.LST.7.1:</b></p> <ul style="list-style-type: none"> <li>• Conduct short research assignments and tasks to answer a question or test a hypothesis.</li> <li>• Draw on several sources.</li> <li>• Generate additional related, focused questions that allow for multiple avenues of exploration.</li> </ul> <p><b>6-8.LST.7.2:</b></p> <ul style="list-style-type: none"> <li>• Gather relevant information from multiple source. Use search terms effectively.</li> <li>• Annotate sources.</li> <li>• Assess the credibility and accuracy of each source.</li> <li>• Quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation (e.g., <i>APA</i> or <i>CSE</i>).</li> </ul>

STANDARD INDICATORS	SCIENCE AND ENGINEERING	LITERACY IN SCIENCE
<p><b>6.LS.5:</b> Research invasive species and discuss their impact on ecosystems.</p>		<p><b>6-8.LST.7.3:</b></p> <ul style="list-style-type: none"> <li>• Draw evidence from informational texts to support analysis, reflection, and research.</li> </ul>