## Quarter 1

### Unifying Concept

Students will understand how to ask scientific questions and communicate ideas about sustainability.

### Reading Focus

- Information/Literature

### Writing Focus

- Narrative, Informative / Explanatory

<table>
<thead>
<tr>
<th>Highly Leveraged</th>
<th>Supporting</th>
<th>Constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS.S1.C1, C2, C3, C4</td>
<td>HS.S2.C2</td>
<td>HS.S2.C1, C3</td>
</tr>
<tr>
<td>HS.S4.C3</td>
<td>HS.S3.C2, C3</td>
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</tbody>
</table>

### Crosscutting Concepts

- Patterns
- Cause & Effect
- Structure & Function
- Stability & Change
- Systems & System Models
- Scale, Proportion, & Quantity
- Energy & Matter

### Science & Engineering Practices

- Ask questions and define problems
- Develop and use models
- Plan and carry out investigations
- Analyze and interpret data

## Quarter 2

### Unifying Concept

Students will understand different types of resources and energy as well as human impact on the environment.

### Reading Focus

- Informational/Literature

### Writing Focus

- Narrative, Informative / Explanatory

<table>
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<tr>
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<th>Constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS.S2.C1, C2</td>
<td>HS.S3.C2, C3</td>
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</tbody>
</table>

### Crosscutting Concepts

- Patterns
- Cause & Effect
- Structure & Function
- Stability & Change
- Systems & System Models
- Scale, Proportion, & Quantity
- Energy & Matter

### Science & Engineering Practices

- Use mathematics and computational thinking
- Construct explanations and design solutions
- Engage in argument from evidence
- Obtain, evaluate, and communicate information

## Quarter 3

### Unifying Concept

Students will understand that energy is a quantifiable entity and the physical laws that govern it.

### Reading Focus

- Informational/Literature

### Writing Focus

- Narrative, Informative / Explanatory

<table>
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<tr>
<th>Highly Leveraged</th>
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<tr>
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<td>HS.S1.C1, C2, C3, C4</td>
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<tr>
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<td>HS.S2.C1, C2</td>
<td>HS.S3.C2, C3</td>
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### Crosscutting Concepts

- Patterns
- Cause & Effect
- Structure & Function
- Stability & Change
- Systems & System Models
- Scale, Proportion, & Quantity
- Energy & Matter

## Quarter 4

### Unifying Concept

Students will understand how forces impact an object’s motion.

### Reading Focus

- Informational/Literature

### Writing Focus

- Narrative, Informative / Explanatory

<table>
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<th>Constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS.S1.C1, C2, C3, C4</td>
<td>HS.S2.C1, C2</td>
<td>HS.S3.C2, C3</td>
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### Crosscutting Concepts

- Patterns
- Cause & Effect
- Structure & Function
- Stability & Change
- Systems & System Models
- Scale, Proportion, & Quantity
- Energy & Matter
• Ask questions and define problems
• Develop and use models
• Plan and carry out investigations
• Analyze and interpret data

• Use mathematics and computational thinking
• Construct explanations and design solutions
• Engage in argument from evidence
• Obtain, evaluate, and communicate information

1Highly-Leveraged Standards are essential for students to learn because they have endurance (knowledge and skills relevant throughout a student’s lifetime); leverage (knowledge and skills used across multiple content areas); and essentiality (knowledge and skills necessary for success in future courses or grade levels). This definition for Highly-Leveraged Standards was adapted from the “power standard” definition on the website of the Millis Public Schools, K-12, Massachusetts, USA, 2016.

2Supporting Standards are emphasized during the quarter as they are integral to achieve mastery of the Highly Leveraged Standards. Mastery of these standards are measured using classroom assessments.

3Constant Standards are repeatedly addressed to reinforce grade-level mastery.