Astronaut Educational Standards (4-12)

Grade 4:
**HE.3-5.1.9** Explain the consequences associated with exposure to environmental elements.

**SC.4.7.1** Describe that the mass of the Earth exerts a gravitational force on all objects.

Grade 5:
**CTE.5.1.1** Examine how different innovations have developed/evolved in various cultures over time to improve life and solve problems.

**HE.3-5.1.9** Explain the consequences associated with exposure to environmental elements.

**SC.5.4.1** Describe the structures of the human body and how they work together to sustain life.

**SC.5.8.3** Explain that the planets orbit the sun and that the moon orbits the Earth.

Grade 6:
**HE.6-8.1.8** Describe the body system functions, how they interact with each other, and how they are impacted by health behaviors.

**SC.6.2.1** Explain how technology has an impact on society and science.

**SC.6.2.2** Explain how the needs of society have influenced the development and use of technologies.

Grade 7:
**HE.6-8.1.8** Describe the body system functions, how they interact with each other, and how they are impacted by health behaviors.

**SC.7.1.3** Explain the need to revise conclusions and explanations based on new scientific evidence.

Grade 8:
**HE.6-8.1.8** Describe the body system functions, how they interact with each other, and how they are impacted by health behaviors.
SC.8.2.1 Describe significant relationships among society, science, technology and how one impacts the other.

SC.8.7.1 Explain that every object has mass and therefore exerts a gravitational force on other objects.

**Earth and Space Science:**

SC.ES.2.1 Explain how scientific advancements and emerging technology have influenced society.

SC.ES.2.2 Compare the risks and benefits of potential solutions to technological issues.

SC.ES.2.3 Explain the impact of humans on Earth system.

SC.ES.2.4 Describe technologies used to collect information about the universe.

**Physical Science:**

SC.PS.2.1 Explain how scientific advancements and emerging technologies have influenced society.

SC.PS.2.2 Compare the risks and benefits of potential solutions to technological issues.

SC.PS.7.3 Explain the relationship among the gravitational forces, the mass of objects and distance between objects.

**Chemistry:**

SC.CH.2.1 Explain how scientific advancements and emerging technology have influenced society.

SC.CH.2.2 Compare the risks and benefits of potential solutions to technological issues.

**Physics:**

SC.PH.2.1 Explain how scientific advancements and emerging technologies have influenced society.
<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
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<tbody>
<tr>
<td>SC.PH.2.2</td>
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<tr>
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<td>SC.BS.2.1</td>
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<td>SC.BS.4.2</td>
<td>Explain how cells are specialized into different tissues and organs.</td>
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<td>SC.BS.4.4</td>
<td>Describe how homeostatic balance occurs in cells and organisms.</td>
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<td><strong>Human Physiology:</strong></td>
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<tr>
<td>SC.HP.3.3</td>
<td>Classify the various types of human tissue (e.g. muscle, epithelial, connective, nervous) by structure and function.</td>
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<td>SC.HP.4.9</td>
<td>Explain how the central nervous system functions in regulating physiological activities.</td>
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<td>SC.HP.5.2</td>
<td>Determine the relationship between the skeletal and muscular systems.</td>
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