



**School District of Horicon  
Course Outline  
Learning Targets**

**8th Grade Science**

**UNIT: Harnessing Human Energy**

- Design a device that uses human energy to charge the batteries of a rescue worker's electrical device
- Use evidence and reasoning to support a claim

**UNIT: Force and Motion**

- Figure out why the pod ended up moving in the opposite direction rather than docking
- Apply knowledge of force and motion to a new problem
- Use evidence and reasoning to support a claim

**UNIT: Magnetic Fields**

- Understand the attractive and repulsive forces that can exist between magnets
- Grasp the importance of isolating variables in order to gather strong evidence
- Discuss the energy in a magnet system and explain why some systems have more energy
- Apply knowledge of magnet systems to a new problem
- Use evidence and reasoning to support a claim

**UNIT: Light Waves**

- To construct an explanation of why skin cancer rates are high in Australia
- To practice gathering evidence from various sources
- Apply knowledge of light waves to a new problem
- Use evidence and reasoning to support a claim

**UNIT: Earth, Moon and Sun**

- Explain what causes the characteristic changes in the appearance of the Moon that we observe, and what conditions are required to view phenomena, such as particular moon phases and lunar eclipses
- Use models to communicate thinking
- Use evidence and reasoning to support a claim

**UNIT: Natural Selection**

- Explain what caused a newt population to become more poisonous
- Know the difference between adaptive and non-adaptive traits
- Apply knowledge of natural selection to a new problem
- Use evidence and reasoning to support a claim

*Students will be able to meet the learning targets above as evidenced by formative and summative classroom assessments.*