

Physical Systems, Semester 2 Curriculum Map

Time Span	3 weeks	6 weeks	4 weeks	4 weeks
Unit Name	Electricity & Magnetism CPO Ch. 6 & 10 II.2.C, VII, VIII	Waves, Sound, and Light CPO Ch. 12 & 14 I.2.A, I.2.C, VII, VIII	Astronomy / Solar System Ch. 30 & 31 VI.1.A-C, VI.2.C-D, I.2.C, I.2.E, I.2.F, II.2.B, VII, VIII	Universe CPO Ch. 32 I.2.C, I.2.E, VI.1.B-C, VII, VIII
Essential Questions	What is the relationship between electricity and circuits?	How does electromagnetic energy transfer to different forms of waves?	How does the cycles of the earth relate to the Sun and moon?	What makes up the universe and it's energy properties?
Content	<ul style="list-style-type: none"> • Closed Circuits • Open Circuits • Electric Charges • Positive • Negative • Electroscope 	<ul style="list-style-type: none"> • Electromagnetic • Spectrum • Frequency • Pitch • Amplitude • Wavelength • Node/anti-node 	<ul style="list-style-type: none"> • Lunar cycles • Seasons • Eclipses • Telescope • Astronomical Units • Satellites • Cultural Contribution 	<ul style="list-style-type: none"> • Celestial Bodies • Nuclear Fusion • Electromagnetism
Skills	<ul style="list-style-type: none"> • Analyze how magnetic forces are related to electrical forces as different aspects of a single electromagnetic force. • Recognize that changing magnetic fields can produce electrical current and electric currents can produce magnetic forces. • Make qualitative and quantitative observations using the appropriate tools and techniques to collect, analyze, and interpret data. 	<ul style="list-style-type: none"> • Describe how electromagnetic energy is transferred through space as electromagnetic waves. • Describe the relationship among wavelength, energy, and frequency as illustrated by the electromagnetic spectrum. 	<ul style="list-style-type: none"> • Identify information that the electromagnetic spectrum provides about the stars and the universe. • Evaluate the advantages/ disadvantages of using different tools to gather information about the universe. • Relate units of time. • Explain seasonal phenomena. • Provide evidence that can be observed from earth. • Recognize contributions to science are not limited to the work of one particular group, but are made by a diverse group of scientists representing various ethnic and gender groups. 	<ul style="list-style-type: none"> • Describe how electromagnetic energy is transferred through space as electromagnetic waves. • Identify the role of nuclear energy as it serves as a source of energy for the earth. • Identify stars as producers of electromagnetic energy. • Identify information that the electromagnetic spectrum provides about the stars and the universe.

Assessments	<u>CPO Black Line Masters</u> Lab 6.1 <u>CPO Skill Sheet</u> 9-A, 9-B Written Quizzes & Tests	<u>CPO Black Line Masters</u> Lab 12.2 Lab 12.3 Lab 14.1 Lab 14.2 <u>CPO Skill Sheet</u> 12 Written Quizzes & Tests	<u>CPO Black Line Masters</u> Lab 30.1 Lab 30.2 <u>CPO Skill Sheet</u> 30, 31-A, 31-B Written Quizzes & Tests	<u>CPO Black Line Masters</u> Lab 32.2 <u>CPO Skill Sheet</u> 32-A, 32-B Written Quizzes & Tests
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