

4th Nine Weeks: Scope and Sequence-Sanders-Wade

Content Standards	Dates Taught	% of Students scoring over 70%	Dates Re-taught (Optional)	Formative and Summative Assessments/ (Any Additional Comments Optional)
<p>ACOS (2) Chapter 6 Define the law of conservation of momentum.</p> <ul style="list-style-type: none"> • Calculate the momentum of a single object • Calculating momenta of two objects before and after collision in one dimensional motion 				
<p>ACOS (1, 3) Chapter 7 Explain linear, circular, and projectile motions using one-and two-dimensional vectors. Explain planetary motion and navigation in space in terms of Kepler’s and Newton’s laws.</p>				
<p>ACOS (5) Chapter 9 & 10 Explain the concept of entropy as it relates to heating and cooling, using the laws of thermodynamics.</p> <ul style="list-style-type: none"> • Using qualitative and quantitative methods to show the relationship between changes in heat energy and changes in temperature. 				
<p>ACOS (6) Describe wave behavior in terms of reflection, refraction, diffraction, constructive and destructive wave interference, and the Doppler effect.</p> <ul style="list-style-type: none"> • Explaining reasons for differences in speed, frequency, and wavelength of a propagating wave • Describing uses of different components of the electromagnetic spectrum, including radio waves, microwaves, infrared radiation, visible light, ultraviolet radiation, X-rays, and gamma radiation • Demonstrating particle and wave duality • Describing the change of wave speed in different media 				

<p>ACOS(7) Describe properties of reflection, refraction, and diffraction</p> <p>>Examples: Tracing the path of a reflected light ray, predicting the formation of reflected images through the tracing of rays</p> <ul style="list-style-type: none"> • Demonstrating the path of light through mirrors, lenses, and prisms <p>>Example: tracing the path of a reflected light ray through prisms using Snell's law</p> <ul style="list-style-type: none"> • Describing the effect of filters and polarization on the transmission of light 				
<p>Chapters 11-15 for the above</p>				
<p>ACOS (8) Summarize similarities in the calculation of electrical, magnetic, and gravitational forces between objects.</p> <ul style="list-style-type: none"> • Determining the force on charged particles using Coulomb's law 				
<p>ACOS (9) Describe quantitative relationships among charge, current, electrical potential energy, potential difference, resistance, and electrical power for simple series, parallel, or combination direct current (DC) circuits.</p>				
<p>Chapter 16</p>				