

# Year at a Glance: ADVANCED 6<sup>th</sup> Grade Science

2016-2017

	Week	Major Concepts / Topics	Possible Resources
Quarter 1	1	Beginning Science skills including Lab safety, review of lab equipment and lab practices.	<b>Simulation:</b> Gravity Force Lab: phet.colorado.edu <b>Simulation:</b> forces and Motion: phet Cpalms.org for all topics
	2-4	SC.6.N.1.1-N.1.5, 2.1-2.3: Scientific method including data collection and organization, metric system, SI units, etc.	
	5-7	SC.6.P.12.1, 13.1, 13.3: Forces, interpretation of graphics for distance vs. time.	
	8-9	SC.6..P.11.1, SC.6.N.3.2, 3.3, SC.6.P.13.2: Scientific laws, Law of Gravity.	
Quarter 2	Week	Major Concepts / Topics	Possible Resources
	1-3	SC.6.E.7.4, 7.1, 7.2, 7.9, SC.912.E.7.3, SC.912.P.10.4: Interactions between Earth's spheres, water cycle, heat transfer through Earth systems, composition of atmosphere.	<b>Nova:</b> Clouds & Weather <b>Nbc.Learn.com:</b> Changing Planet: Ocean Temperatures. <b>Bozeman Science:</b> Biogeochemical Cycles.
	4-7.5	SC.6.E.7.5, 7.3, 7.6, 7.7, SC.912.E.7.5, 7.6: Global patterns and interactions and impact on weather/climate, severe weather, predicting weather.	
	7.5-9	SC.6.E.6.1, 6.2: Erosion, deposition.	
Quarter 3	Week	Major Concepts / Topics	Possible Resources
	1	Revisit/review/reinforce SC.6.N.1.1-1.5, 1.2-2.3: Scientific methods, especially data organization (graph interpretation),SI units, Scientific variables.	<b>Cell simulation:</b> <a href="http://www.cellsalive.com/cells/3dcell.htm">http://www.cellsalive.com/cells/3dcell.htm</a> <b>BozemanScience.com:</b> The Wacky History of the Cell, Cellular Organelles.
	2-3	SC.6.N.2.2, 3.1, 3.4, SC.6.L.14.2: Scientific Theories, Cell Theory.	
	4-7	SC.6.L.14.3, 14.4, SC.912.L.14.2,SC.912. L.16.14, SC.912.L.14.3: Structure, function of plant and animal cells. Pro/eukaryotic cells, cell cycle/mitosis.	
8-9	SC.6.L.15.1: Classification		
Quarter 4	Week	Major Concepts / Topics	Possible Resources
	1-5	SC.6..14.1, 14.5: Hierarchical patterns in living things, functions of systems of the body.	<b>Amoeba Sisters:</b> You Tube: Human Body Systems, Infectious Agents, Viruses.
6-9	SC.6.L.14.6, HE.6.C.1.3, 1.5: Infectious agents and their impact on the bodily systems.		

All standards are designed to be learned by the end of the course. This guide represents a recommended time line and sequence to be used voluntarily by teachers for planning purposes. Specific questions regarding when content will actually be addressed in a specific course is best answered by the individual teacher.

