Scope and Sequence for 9th – 12th grades					
Prior Knowledge and Experience	**Develop Knowledge**	**Lessons**	**NSES Stds.**	**Colo. Stds. for Science**	**Colo. Stds. for Math**
See Prior Knowledge and Experience 6-8					
Anatomy of the Sun	**Earth and Earth-Sun System**				
Interior of Sun	Earth's Magnetic Field	• Mapping the Field of a Dipole Magnet • Mapping the Ambient Magnetic Field • Mapping the field of Multiple Dipole Magnets • Earth's Magnetic Field from Space	A, B, E, G	1, 2.3, 4.4, 6	5.1
Exterior of Sun	Interplanetary Magnetic Field (IMF)	• Mapping the Field of a Dipole Magnet • Earth's Magnetic Field from Space	A, B, E, G	1, 2.3, 4.4, 6	
Solar activity					
Science and Math Tools	**Science and Math Tools**				
Data collection and interpretation	Data collection and interpretation	• Mapping the Field of a Dipole Magnet • Mapping the Ambient Magnetic Field • Mapping the field of Multiple Dipole Magnets • Earth's Magnetic Field from Space	A, B, E, G	1, 2.3, 4.4, 6	5.1
Scientific Method	Scientific Method	• Mapping the Field of a Dipole Magnet • Mapping the Ambient Magnetic Field	A, B, E, G	1, 2.3, 4.4, 6	5.1

		• **Mapping the field of Multiple Dipole Magnets** • **Earth's Magnetic Field from Space**			
Graphing and Charting	Graphing and Charting	• **Mapping the Field of a Dipole Magnet** • **Mapping the Ambient Magnetic Field** • **Mapping the field of Multiple Dipole Magnets**	A, B, E, G	1, 2.3, 6	5.1
Instrumentation	Vectors and Vector Addition	• **Mapping the field of Multiple Dipole Magnets**	A, B, E, G	1, 2.3, 6	5.1
	Scientific Reporting	• **Mapping the Ambient Magnetic Field** • **Earth's Magnetic Field from Space**	A, B, E, G		
Useful Concepts *					
E-M spectrum					
Electromagnetism					

*Use discretion based on the age/abilities of the students. It is not necessary to have these skills to do lessons.