

Scope and Sequence for Kindergarten through 5th grade

Prior Knowledge and Experience	Develop Knowledge	Lessons	NSES Stds.	Colo. Stds. for Science	Colo. Stds. for Math
Our Place in the Solar System	Motion of the Earth				
Motion of the Planets (see The Outer Planets Compendium)	Day and Night	<ul style="list-style-type: none"> • <u>Making a Sundial</u> 	A,B,D,E,G	1, 4.2, 4.4, 5, 6	2.2, 2.4, 3.2, 5.1, 5.2, 5.3, 5.5
Differences between Stars & Planets	Seasons	<ul style="list-style-type: none"> • <u>Making a Sundial</u> • <u>How Angle Spreads Sunlight</u> • <u>Measuring the Earth's Tilt</u> 	A,B,D,E,G	1, 2.2, 2.3, 4.2, 4.4, 5, 6	2.2, 2.4, 3.2, 5.1, 5.2, 5.3, 5.5
Distance and Size					
	Anatomy of the Sun				
	Solar Activity	<ul style="list-style-type: none"> • <u>Making a Homemade Sunspot Viewer</u> • <u>Sunspot Flip Book Journal</u> • <u>Sunspot Numbers</u> 	A,B,D,E,G	1, 4.4, 6	1.1, 1.2, 2.1, 2.2, 2.3, 3.1, 3.2
	Sunspots	<ul style="list-style-type: none"> • <u>Making a Homemade Sunspot Viewer</u> • <u>Sunspot Flip Book Journal</u> • <u>Sunspot Numbers</u> 	A,B,D,E,G	1, 4.4, 6	1.1, 1.2, 2.1, 2.2, 2.3, 3.1, 3.2
	Motion of the Sun	<ul style="list-style-type: none"> • <u>Making a Homemade Sunspot Viewer</u> • <u>Sunspot Flip Book Journal</u> 	A,B,D,E,G	1, 4.4, 6	1.1, 1.2, 2.1, 2.2, 2.3, 3.1
Useful Concepts *	Science and Math Tools				
Size and Shape	Graphing and Charting	<ul style="list-style-type: none"> • <u>Sunspot Numbers</u> • <u>Interplanetary Pool Games</u> 	A,B,E,G	1, 2.1, 2.2, 4.4, 6	1.1, 1.2, 2.1, 2.2, 2.3, 3.1, 3.2

Temperature	Pattern Recognition	<ul style="list-style-type: none"> • <u>Making a Sundial</u> • <u>Measuring the Earth's Tilt</u> • <u>Making a Homemade Sunspot Viewer</u> • <u>Sunspot Flip Book Journal</u> • <u>Sunspot Numbers</u> • <u>Interplanetary Pool Games</u> 	A,B,D,E,G	1, 2.1, 2.2, 2.3, 4.2, 4.4, 5, 6	1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 5.1, 5.2, 5.3, 5.5
Properties of Atoms	Instrumentation	<ul style="list-style-type: none"> • <u>Making a Homemade Sunspot Viewer</u> • <u>Interplanetary Pool Games</u> 	A,B,D,E,G	1, 2.1, 2.2, 4.4, 6	2.2, 2.3, 3.1, 3.2
Liquids/Solids/Gas	Data Collection and Interpretation	<ul style="list-style-type: none"> • <u>Making a Sundial</u> • <u>How Angle Spreads Sunlight</u> • <u>Measuring the Earth's Tilt</u> • <u>Making a Homemade Sunspot Viewer</u> • <u>Sunspot Flip Book Journal</u> • <u>Interplanetary Pool Games</u> 	A,B,D,E,G	1, 2.1, 2.2, 2.3, 4.2, 4.4, 5, 6	1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 5.1, 5.2, 5.3, 5.5

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