

Science

Grades 6, 7 & 8 Essential Standards

<u>Essential Standard</u>	<u>Enduring/Priority?</u> <i>"I think this has endurance because..."</i>	<u>Leverage?</u> <i>"Value in multiple disciplines"</i>	<u>Rigorous?</u> <i>"Depth of knowledge?"</i>	<u>Readiness for the Next Level of Learning?</u> <i>"Next instruction/grade level"</i>	<u>Pacing</u>
MS-ESS1-1(move to 8th 2022) cycles of lunar phases, eclipses, seasons	Understanding natural cycles	Yes-life	2	Yes	1st quarter
MS-ESS2-1 (move to 7th 2021) cycling of Earth's materials and the flow of energy that drives this process	Maybe	No	3/4	Yes	4th quarter May and June
MS-ESS2-2 (move to 7th 2021) Geoscience process change Earth's surface	Understanding natural cycles and why they occur (heat transfer)	Yes- socio political impacts	3	Yes	2nd quarter
MS-PS3-3	Applying concepts of heat transfer and designing a solution	Yes-math (graphs)	4	Yes	2nd quarter- december
MS-ESS2-4 Water cycle (move to 6th 2020) stays in 7th 2020	Develop a model on how water is cycled through the hydrosphere and the energy sources	Yes - socio political impacts	3/4	Yes	April Showers
MS-ESS2-6 Climate (move to 6th 2020) Stays in 7th 2020	Develop model to determine climates and the regions.	Yes-socio political impacts	4	Yes	4th Quarter - May

MS-LS1-2 Cell and its parts (stays in 6th)	Developing a model; structure and function		3	Yes	1st quarter
MS-LS1-8 Nervous system (stays in 6th)	Understanding the nervous system		3	Yes	1st quarter
MS-LS2-1 (stays in 7th)	Understanding human impacts and other resources on populations	Yes-socio political impacts	3/4	Yes	1st quarter October, November
MS-LS2-3 (stays in 7th)	Understand how matter and energy is transferred in an ecosystem	Yes socio political impacts	3/4	Yes	2nd quarter
MS-LS4-4 (stays in 7th)	Understand how certain natural mechanisms cause populations to evolve	Yes Math and social studies	3	Yes	3rd quarter February/March
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MS-PS1-1. "Understand ing of how matter is assembled" Develop models to describe the atomic composition of simple molecules and extended structures.	There are forces that keep matter together.	Life/Physical Sciences	1/2	Yes	1st Quarter

MS-PS1-5. Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.	“Understand that resources are finite” The Laws of Conservation of Mass and Energy	Physical Sciences Life/Environmental Sciences	2/3	Yes	2nd/3rd quarter
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MS-PS2-2. Plan an investigation to provide evidence that the change in an object’s motion depends on the sum of the forces on the object and the mass of the object.	“Understand how matter reacts to forces”	Physical Sciences	1/2	Yes	4th quarter
MS-PS3-5 Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is	“Understand how energy transfers”	Life/Physical Sciences	3/4	Yes	4th quarter

transferred to or from the object.					
MS-PS4-2 Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials.	“Understand how energy is transferred through different mediums”	Physical Sciences	2/3	Yes	4th quarter