



Trinity Lutheran School Middle School Earth Science Science Essential Standards Chart

Essential Standards Chart: At Trinity Lutheran, we expect children to learn?

Grade: Middle School						Subject: Science
Standard Description	Common Core Standards	Proficiency	Prerequisite Skill	Assessment	When Taught?	Extension Standards
What is the essential standard to be learned? Written in I Can Statements		What does proficiency look like? Provide an example and/or description.	What prior knowledge, skills, and/or vocabulary is/are needed for a student to master this standard?	What assessments will be used to measure student mastery?	When will this standard be taught?	What will we do when students have learned the essential standard(s)?
I can Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons	MS-ESS1-1	Students can describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and season.		Lab Project Rubric		N/A
I can analyze and interpret data to determine scale properties of objects in the solar system.	MS-ESS1-3	Students can determine scale properties of objects in the solar system.		Written Assessment		N/A
I can analyze and interpret data on the	MS-ESS2-3	Students can interpret data on the	Understanding vocabulary such as	Written Assessment		N/A

distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.		distribution of fossils and rocks, continental shapes and seafloor structures to provide evidence of the past plate motions.	fossils, continental shapes, seafloor structures, and plate motions.			
I can develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.	MS-ESS2-1	Students can create a model to describe the cycling of the Earth's materials and the flow of energy that drives this process.		Lab Project Rubric	CKSci Unit 3- Modeling Earth's Systems	N/A
I can develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.	MS-ESS2-4	Students can create a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.		Lab Project Rubric	CKSci Unit 4: Protecting Earth Resources	N/A
I can collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions	MS-ESS2-5	Students can understand and explain how the motions and complex interaction of air masses results in changes in weather conditions.		Written Assessment	CKSci Unit 5: Astronomy	N/A
I can develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation	MS-ESS2-6	Students can create a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation	Understanding vocabulary such as unequal heating, atmospheric and oceanic circulation.	Lab Project Rubric		N/A

that determine regional climates		that determine regional climates.				
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