Department: Science
Course Title: 7th Grade Enrichment
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Unit Title	Unit Length (weeks)	Dates of Unit (Month - Month)	Essential Questions
Astronomy		About 1 quarter	How does the Earth's movement determine daylight and night time?
Astronomy			
Astronomy			Why do we have 4 seasons in CT?
Astronomy			How do gravity and inertia affect the movement of the Earth and moon?
Astronomy			Why do we see different phases of the moon from Earth?
Astronomy			What causes a solar eclipse? What causes a lunar eclipse?
Earth and Human Activity- Found to be missing from 7th and 8th grade curriculums; Unit to be added to 7th grade enrichment starting fall 2025 to expose some students to it before the 8th grade NGSS test.			
Other standards not covered in 7th and 8th grade that need to be added to enrichment include ESS 1-3 and ESS 2-1 starting fall 2025			

Topics to be Covered Texts Used	Skills to be Assessed	Standard Alignment	Formative Assessments
Curriculum is fluid to allow attention to student skill needs and reinformcement from current science curriculum, as well as enrichment opportunities. Curriculum should include middle school astronomy standards because they are not covered in regular 7th or 8th grade class.			
Position of Earth and sun throughout orbit, rotation vs revolution, how Earth's rotation dictates daytime/nighttime	Develop and use a model; geography/map skills		
Position of Earth and sun throughout orbit, factors that influence season, how calendar year is based on Earth's revolution, the cause and effect relationship between latitude from the equator and light intensity/temperature, how light intensity for a location changes depending on the season	Develop and use a model	MS-ESS1-1	
define gravity, distance and mass affect the force of gravity, difference between mass and weight, define inertia, define Newton's First Law of Motion	Develop and use a model	MS-ESS1-2	
label the different phases of the moon, describe what causes the moon phases	Develop and use a model	MS-ESS1-1	
define eclipse, umbra, and penumbra; describe what causes a solar ecplise, describe what causes a lunar eclipse, lunar eclipses only happen during a full moon but we don't have then every month due to the tilt of the moon's orbit	Develop and use a model	MS-ESS1-1	
		MS-ESS3-1, 3-2, 3-3, 3-4, 3-5	

Summative Assessments		