

7th Grade Science
Unit 1: Plate Tectonics & Rock Cycling

Unit Description
Have you ever wondered how mountains are made or if they change over time? In this unit, students will uncover the fascinating world of plate tectonics and rock cycling—two powerful forces that shape the Earth's surface. Through multiple investigations, they'll discover that Earth is far more active and ever-changing than we might think. By the end of the unit, middle schoolers will have a deep understanding of how Earth's plates collide, spread apart, and how forces like uplift and erosion shape the world we live in. They will also be able to explain how even the tallest mountains can change over time, all thanks to the moving plates beneath our feet! Get ready for a thrilling scientific adventure that will make the Earth's secrets come alive.

Unit Essential Questions
What causes Earth's surface to change?

Main Content Standards Covered in Unit
<p>This unit builds toward the following performance expectations as outlined in the Next Generation of Science Standards.</p> <p>MS-ESS1-4. Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history.</p> <p>MS-ESS2-1. Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.</p> <p>MS-ESS2-2. Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.</p> <p>MS-ESS2-3. Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.</p>

Unit Assessments (85% of overall unit letter grade)	
<i>Assessment Name</i>	<i>Weight</i>
Checking for Understanding Quizzes: Approximately 5	Weight will be reflective of the rigor of the assessment, i.e. unit tests will be weighted more heavily than quizzes. Weight of quizzes may vary based on complexity.
Midpoint Transfer Task Test	
End of Unit Transfer Task Test	

*Additional Check In Quizzes may be added based on student questions during the unit.

*Optional extension activities are also available throughout the unit.

Unit PRIDE Score (15% of overall unit letter grade)
<p>PRIDE will be assessed through:</p> <ul style="list-style-type: none"> Weekly Graph of the Week / Work Completion EMS PRIDE Expectations: Persistence, Respect, Independence, Discipline, Engagement

