Instructional Unit Title: Shake, Rattle, and Roll

The teacher may provide a variety of learning opportunities so that students can analyze each layer of the Earth, including each layer's composition.

The teacher may demonstrate how plate motion will create different geologic features so that students can connect plate motion with the changing surface of the planet.

The teacher may present articles, data, and videos of various volcanoes (formation, structure, shape, viscosity, etc.) so the student can analyze the composition and the impact of different types of volcanoes.

The teacher may use simulations of plate movements throughout history so that students can explain the break-up of Pangaea and the continued movement of tectonic plates.

The teacher may present articles and data on earthquakes across the globe so that students can analyze causes, means of measurement, and impacts of earthquakes.

The teacher may show animations and use physical manipulatives representing tectonic plate interactions so that students can predict geologic events due to the constant motion of Earth’s crust.

The teacher may supply visual and physical representations of Earth’s crust so that the student can describe the impact that stress has on the formation of faults and folds.

PERFORMANCE ASSESSMENT: You are on a worldwide news cast team that is reporting on 2 events (volcanic eruption, earthquake, tsunami, etc.). Your news cast team will research these events and their locations. The segment about these events must include a scientific explanation about how the processes at that boundary resulted in the event using the following information to support your broadcast:

- Visual representation of the event (diagram)
- The type of boundary where the event occurred
- An explanation of how plates are interacting at that boundary

This unit was authored by a team of Colorado educators. The unit is intended to support teachers, schools, and districts as they make their own local decisions around the best instructional plans and practices for all students. To see the entire instructional unit sample with possible learning experiences, resources, differentiation, and assessments visit [http://www.cde.state.co.us/standardsandinstruction/instructionalunitsamples](http://www.cde.state.co.us/standardsandinstruction/instructionalunitsamples).