

EARTH CHANGES	
Objective	Each student will individually create a slideshow presentation about Earth changes. The students will be able to identify, by modeling, the earth's structure, namely the core, mantle and crust, identify by experiment and demonstration the forces within the earth that cause constant changes on our earth's surface - earthquakes As a class, they will then use FluidSurveys to compile all the data from the slideshows.
Learning Environment	The class will use a computer with internet access in the computer lab or at home.
Types of Students	The students will be in elementary school and specifically grades 4-6.
Standards	ISTE/NETS Standards Facilitate and Inspire Student Learning and Creativity
Materials	Computers in computer lab with internet access, FluidSurveys.
Procedures	<ol style="list-style-type: none"> 1. The students will learn how to use FluidSurveys with the help of their teacher. 2. Then, each student will be assigned to model and show on the screen: <ol style="list-style-type: none"> a. Earth's Structure. Each student takes a large styrofoam ball (6 in.), cuts a large wedge out of the ball so it can be seen to the center. Draw lines to show the relative thickness of each layers. Color with wax crayons. Label. Put cut-outs of continents on the outside. Summarize what was learned. b. Earthquakes - Shifting vertical layers. Lay two separate strips of cloth or plastic next to each other on the bottom of a cake pan. Let the excess length of one strip hang out at one end of the pan, the other at the other end. Cover the strips with damp soil up to the edge of the pan and pack it down firmly. Place toys on the soil to represent houses, cars, bridges. Now pull the protruding strip at one end and the other at the other end simultaneously. Children describe what happens; they predict what might happen if similar objects were to occur on earth. 3. After each student has created their own slideshow, all of the presentations will be combined using FluidSurveys to show classes data. 4. When the final project is complete, the students will present their project.
Application	Using FluidSurveys, the students will compile their data about the Earth changes from the slideshow.
Evaluation	<p>The students will present their whole project. Each student will present his or her section of the project.</p> <p>The students will be evaluated based on the following:</p> <ul style="list-style-type: none"> • Using FluidSurveys skills – 20 points • Creativeness – 10 points • Individual participation – 20 points <p>50 points</p>