

Extension ideas for 'From clay balls to the structure of the Earth' **A discussion of how physics can be used to probe Earth's structure**

Earthlearningidea team

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www.earthlearningidea.com/PDF/74_Secrets_clay_balls.pdf

(19MB)

from Mary, New Mexico

This was a timely lesson for me. I was discussing the origin of the Earth and differentiation in my Historical Geology class and this activity provided an opportunity to discuss how 'science' works as related to a current topic in class.

As a follow-up or extension of the activity. I gave the students a graph of seismic velocity and density plotted against depth within the Earth. Using this example of the data used to interpret the structure of the Earth students were asked to 'identify' the layers (mantle, inner core and outer core) based on the changes in density and seismic velocity.

also from Mary, New Mexico

I was using the ELI 'Magnetic Earth' as a demonstration to show the magnetic field of the Earth and because of an 'error' on my part got a bonus teaching idea.

I put a bar magnet in a ball composed of Play-doh, a clay that will dry out. The surface of the Play-doh ball dried out and cracked. The interior was still soft and pliable. Good demonstration of the difference in behavior of crust and mantle. One was brittle and cracked while the interior was still plastic.