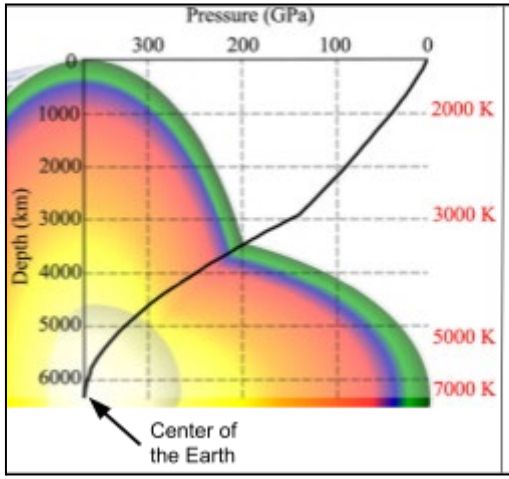
3D-RST is supported by the NSF under grant number #DRL-2101383

This is the Glue-In Version of the worksheet for a Composition Notebook. You print on both sides, fold, and glue this tab into the journal. Students complete it, and it stays intact.

ESS.2.1 Modeling Earth's Interior: Energy and Matter

Pressure vs. Heat as you go down into the Earth



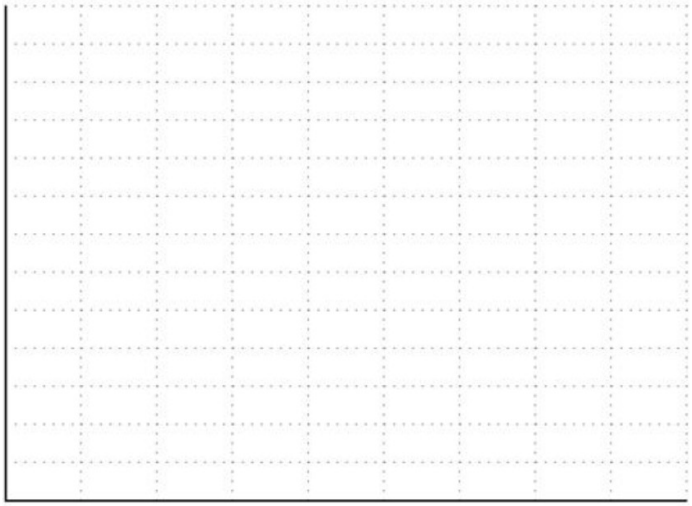
Observations:

Questions:

Review: Why is the interior of the Earth hot?

Model the decay of a radioactive atom: Show energy & matter.

Evidence #1 Kola Borehole



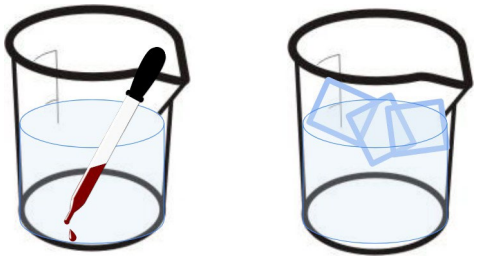
Conclusion from graph: _____

_____

Evidence #2 Convection

You'll be given 2 beakers of water, some hot water colored red, ice, and a pipet.

HOT **COLD**



Observe how the room temperature water and the hot or cold water move.

	Describe	Model
HOT	Using the pipet, gently squeeze some hot water into the bottom of one of the beakers of room temperature water. What do you observe?	Develop a model: Label the food coloring water either a higher density or a lower density, also label what water is hot or cold in the model.
COLD	Next, take some colored ice and place it into the other beaker of room temperature water. What do you observe?	Develop a model: Label the food coloring water either a higher density or a lower density, also label what water is hot or cold in the model.
CONCLUSION	Using the information from the lab, explain how the matter in earth's interior would behave if it were near the cooler crust, or if it were near the hot core.	

Putting it all together:

Define convection in terms of density.	Develop a model for convection:

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