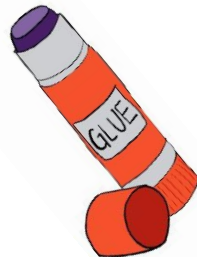




Glue this side into your notebook.



INSIDE EARTH AND PLANETS

- CHECKLIST KEY**
- I could teach this.
 - I somewhat get it.
 - I've heard of it.
 - I need to learn this.

THE THINGS I SHOULD KNOW BEFORE 8th GRADE:

- Different types of rocks (igneous, sedimentary, metamorphic) are caused by different mechanisms.
- Thermal energy can change properties of matter and all energy can be transferred throughout the Earth and into other forms.
- There are different kinds of waves; electromagnetic and seismic are two examples.

THE MOST BASIC IDEAS TO KNOW AFTER THE UNIT:

- The rules of physics affect everything made of matter and energy and can be used to predict things.
- Waves have certain properties and behaviors that can help us understand the inside of the Earth.
- The Earth's interior is made up of different layers with different properties, and each layer is not uniform and transitions to the next.
- Earthquake waves travel differently through different layers of Earth.

I KNOW...

a.	<input type="checkbox"/> the different properties and behaviors (specifically reflection and refraction) of mechanical waves <input type="checkbox"/> how seismic waves behave in matter with different properties <input type="checkbox"/> the different layers of Earth and their properties (their relative densities and states of matter) <input type="checkbox"/> understand how scientists have gained this knowledge of the Earth in this way
b.	<input type="checkbox"/> how matter and energy are transferred through the interior of the Earth (including thermal, radioactive, and seismic energy and convection currents) <input type="checkbox"/> what caused the Earth <u>and</u> other planets to form

I CAN...

a.	<input type="checkbox"/> describe seismic waves based on their properties and behaviors <input type="checkbox"/> predict the direction and/or speed of seismic waves as they travel through matter with different properties <input type="checkbox"/> interpret a velocity graph to predict where layers change inside the Earth and as evidence to explain the density of layers inside the Earth
b.	<input type="checkbox"/> predict the movement of matter inside of the Earth based on density and temperature <input type="checkbox"/> draw connections between how the Earth formed and how other planets formed

VOCABULARY

<input type="checkbox"/> inner core	<input type="checkbox"/> crust	<input type="checkbox"/> magma	<input type="checkbox"/> P-wave
<input type="checkbox"/> outer core	<input type="checkbox"/> density	<input type="checkbox"/> wave	<input type="checkbox"/> S-wave
<input type="checkbox"/> lower mantle	<input type="checkbox"/> planetary differentiation	<input type="checkbox"/> seismic wave	<input type="checkbox"/> body/surface wave
<input type="checkbox"/> upper mantle	<input type="checkbox"/> thermal energy	<input type="checkbox"/> mechanical wave	<input type="checkbox"/> reflection/reflect
<input type="checkbox"/> asthenosphere	<input type="checkbox"/> radioactive decay	<input type="checkbox"/> seismogram	<input type="checkbox"/> refraction/refract
<input type="checkbox"/> lithosphere	<input type="checkbox"/> convection	<input type="checkbox"/> epicenter	<input type="checkbox"/> convection currents