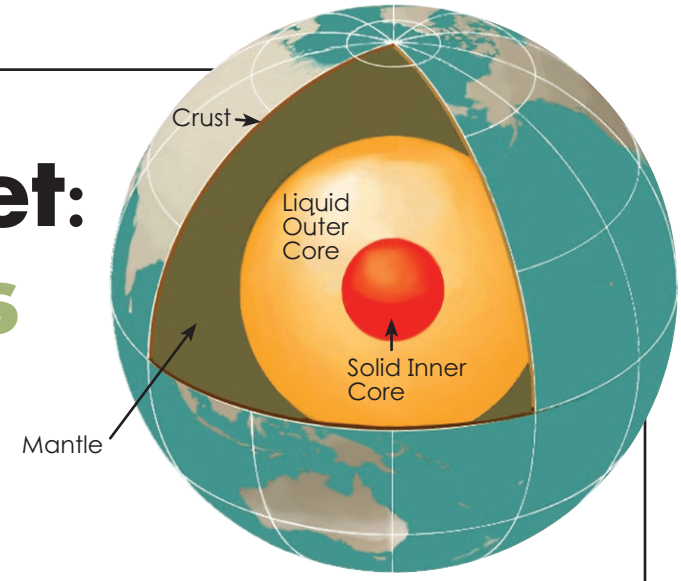
Name: _____

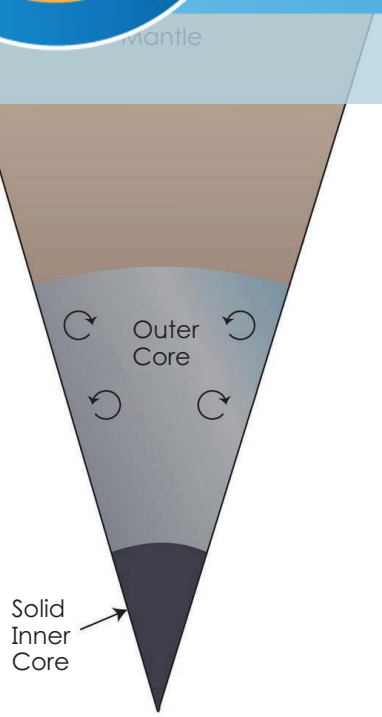
Beneath our Feet:
The Four Layers of Earth



By Kelly Hashway

We all call Earth home, but did you ever think about what our home is actually made of? The planet is approximately 4,000 miles from

Super Teacher Worksheets
Preview
Please log in to download the printable version of this worksheet.



First, let's start with the part of Earth that we live on, the outermost layer called the crust. It is made up of loose material, like rocks, soil, and seabed. The crust is about

are hard rock. The next 150 miles are super-heated molten rock that is so hot it can flow under pressure, like tar. Underneath this heated layer is several hundred miles of solid rock. Think of the mantle like a peanut butter sandwich. You have the two pieces of bread and the peanut butter between them. In the mantle, we have two layers of solid rock with heated flowing rock between them.

Next is the outer core. This is about 1,400 miles thick. The outer core consists of super-heated liquid molten lava. The lava is mostly made up of iron and nickel, which is why some geologists call it molten metal

Name: _____

instead of molten rock. The outer core creates Earth's magnetic field.

The final layer is the inner core, which is about 750 miles thick. Scientists believe the inner core is a solid ball of iron and other minerals. The temperature is extremely hot, somewhere between 9,000 and 13,000 degrees Fahrenheit. But because of the high pressure, the iron and other minerals cannot melt. The heat of the inner core is sometimes compared to the heat of the sun.

Are you wondering why Earth is

the lighter materials rose to the top. This would explain why the inner core is made up of iron and the crust consists of lighter rock and loose material.

As you walk around and enjoy the beauty on Earth's surface, think about the many layers beneath your feet. It takes all these layers to make up the planet we call home.

volcano?

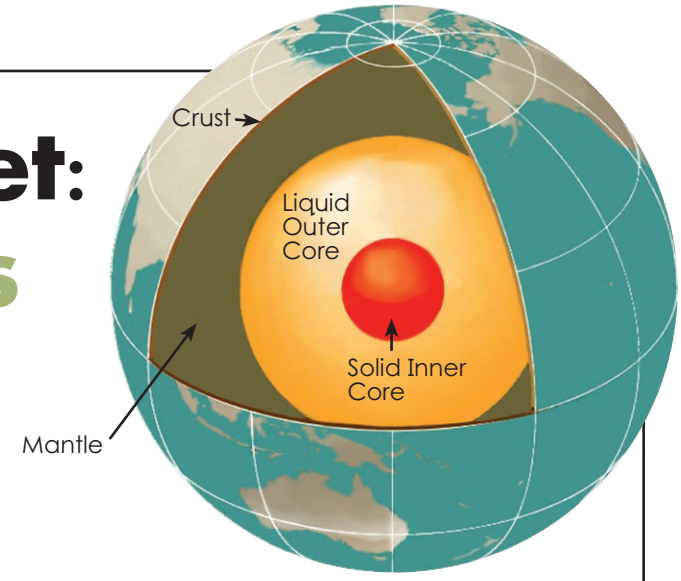
The molten rock inside Earth's mantle is called magma. When it erupts through a volcano, it's called lava.

When it cools, the lava will harden and form new soil and rock, which will become part of Earth's crust.

Preview
Please log in to download the printable version of this worksheet.

Name: _____

Beneath our Feet:
The Four Layers of Earth



By Kelly Hashway

1. Where is Earth's crust the thickest?

a. below the continents
b. beneath the oceans
c. below the equator
d. below the North Pole

Preview
Please log in to download the printable version of this worksheet.

3. Which layers of Earth are made mostly of metals?

_____

4. Write the word *true* or *false* for each sentence.

_____ The inner core of Earth is about nine hundred degrees Fahrenheit.

_____ The inner core of Earth is made of liquid iron and nickel.

_____ Earth's mantle lies directly below the inner core.

5. Explain how scientists believe Earth's four layers were formed.

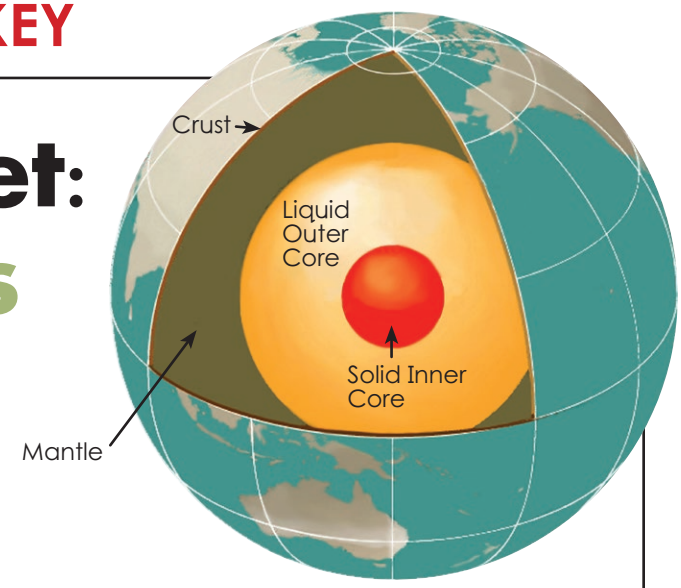
_____

_____

_____

ANSWER KEY

Beneath our Feet:
The Four Layers of Earth



By Kelly Hashway

1. Where is Earth's crust the thickest?

a. below the continents

b. beneath the oceans

c. below the equator

d. below the North Pole

Preview
Please log in to download the printable version of this worksheet.

3. Which layers of Earth are made mostly of metals?

The inner core and outer core are made of metals.

4. Write the word *true* or *false* for each sentence.

False The inner core of Earth is about nine hundred degrees Fahrenheit.

False The inner core of Earth is made of liquid iron and nickel.

False Earth's mantle lies directly below the inner core.

5. Explain how scientists believe Earth's four layers were formed.

Many scientists believe that when Earth was formed, it was a hot ball that was made of a mixture of different rocks and metals. As it cooled, the heavier parts sank to the inside of the planet.