



Mars Inside and Out!

GEOLOGIC SCENE
INVESTIGATOR JOURNAL

PART II: INSIDE MARS

Investigator Name

Explore! Mars Inside and Out



www.lpi.usra.edu/education

GSI: INSIDE MARS – SUMMIT UP

One of these pictures represents the tallest volcano on Earth.
The other represents the tallest volcano on Mars.



This represents the tallest volcano on

_____.



And THIS represents the tallest volcano on

_____.

It's also the tallest volcano in the

!

GSI: INSIDE MARS – COOLING CUPCAKES AND PLANETS

Both of these cupcakes were **HOT** when they came out of the oven!! Which one do you think **COOLED** faster?
(circle one)

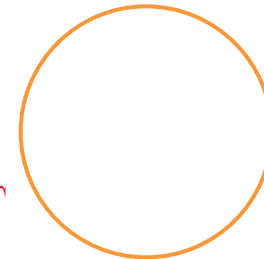


The BIG one, or

the SMALL one?

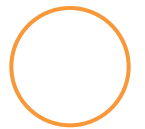


Both of these planets were **REALLY HOT** when they formed!!
Which one do you think **COOLED** faster?
(circle one)



The BIG one, or

the SMALL one?



Why?

Which circle do you think represents Earth?

Which circle represents Mars?

Which is hotter inside today, Earth or Mars?
(Hint: Which planet still has lots and lots of active volcanos?)

GSI: INSIDE MARS – DIFFERENTIATION DEMONSTRATION

What happens when you fill a bottle with gravel, syrup, and beads and shake it? After everything has settled, color and label the layers you observe (crust, mantle, core).



What happened after the bottle was shaken?

Why?

How might Mars have gotten its layers?

GSI: INSIDE MARS – POZZLING PATTERNS

What I observe about volcanos on Mars:



They are bigger / smaller than volcanos on Earth.
(circle one)

There are more / fewer volcanos on Mars than on Earth.
(circle one)

They do / do not form chains.
(circle one)

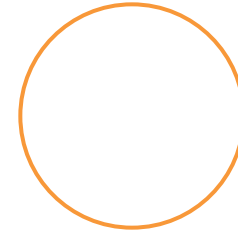
What might cause the differences in volcanos on Mars and volcanos on Earth?

GSI: INSIDE MARS – ICING ON THE PLATE

Why is Olympus Mons on Mars soooooo much taller than Earth's tallest volcano, Mauna Kea?

GSI: INSIDE MARS – RECIPE FOR A PLANET

What does Mars look like on the inside?
What layers does it have?



What does Earth look like on the inside?
What layers does it have?

