Name_____ Date_____

Brown Bag Lab

The bag in front of you represents the Earth. You will investigate what is inside the "Earth" just as geologist have done for hundreds of years.

1. **Guess** what is in the bag without touching it or any other method of investigation, only look at it.

2. You have dug a hole into the Earth, which represents smell, so **smell** your bag and tell me what is inside the bag.

3. You have noticed lava coming out of a volcano, which represents **one finger**. Gently poke at the bag and tell me what is in the bag.

4. You have developed seismographs, which represents one hand. Gently using **one hand** touch the bag and tell me what's inside.

5. You have developed computer systems and calculus to analyze data, which represents **picking** up the bag, gently **shaking** it, and **touching** it with **both hands**.

6. You have developed a world wide scientific community, talk to the groups around you and compare your lists, come up with the following:
   - √ Number of items in your bag _____
   - √ A list of those items in your bag

Now answer the questions on the back!

1. How did your understand of the bag change from the start to the end of the lab?

2. What allowed for this change?

3. How have scientists understanding of what is inside the Earth changed over time?

4. Do you know what is inside the bag? _____ (yes/no/maybe)

5. How correct do you think your list is, give me a percentage (%)?

6. Do you think we as humans know what the Earth's interior is, or have a good understanding?

7. Do you think are understanding of the Earth will change? Why or why not?

8. How do you think geologist know what is in the center of the Earth, in other words, what evidence do you think they have collected over time or what techniques do you think they use? I don't expect you to fully know the answer to this question, but guess.

Do NOT open your bag, we will have a class discussion about your questions, opening the bag will result in ruining the lab and will result in **failing the class** for the day.