

4. What can you conclude about the densities of these materials? (In other words, does the density of the clay change when you change the volume?) Please explain your answer completely. Yes

because when we had 9 as the volume we had 1.27 as the density. When we had 8 as the density we had 1.4375

5. Based on the density calculations, would the clay sink or float in water? Explain how you know.

The clay would sink because the clay has a bigger density than 1 the water density.

6. **Bonus question** (optional): Look at the visualization called "Scatter plot - full piece data." What can you learn from this chart? Try changing the "group selection" on the left to "large." Then try "small." Why are those two charts different from the "full?"

The small and large charts are different from the full chart because they only show a portion of the data. The small chart shows only the small pieces and the large chart shows only the large pieces. The full chart shows all the pieces.