Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Density**

**Question 1**

*What would you do in the event of a grease fire in the kitchen?*

**Question 2**

*Why would the response we saw in the video clip cause the fire to spread?*

**Question 3**

*Derive equations that can be used to solve for volume, V, and mass, m.*

**Question 4**

*Is density an intensive or extensive property of matter? Provide evidence to support your explanation. (Hint: Refer back to the density equation and think about how changes in amount may or may not change density.)*

**Answers to Problems**

*Remember to show your work and write your answers with the appropriate significant figures.*

**Exit Question**

*Use your knowledge of states of matter to explain what happens to the density of liquid water when it is heated or cooled. (Hint: Think about what water molecules do when heat is absorbed or released.)*