

**A PHYSICAL CHALLENGE** Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

**Background Knowledge:** Review and record the physical properties and descriptions for Metals, Non-Metals and Metalloids.

**Metals:** \_\_\_\_\_ **Non-Metals:** \_\_\_\_\_ **Metalloids:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Sample	Color	Luster (Shiny or Not)	Brittle or Malleable	Conductivity (Yes or No)	Mass ( )	Volume ( )	Denisty ( )	Circle "M, NM, Mett"	Name of Sample
<b>Ex</b>								Metal Non-Metal Mettalloids	
<b>A</b>								Metal Non-Metal Mettalloids	
<b>B</b>								Metal Non-Metal Mettalloids	
<b>C</b>								Metal Non-Metal Mettalloids	
<b>D</b>								Metal Non-Metal Mettalloids	
<b>E</b>								Metal Non-Metal Mettalloids	

## CONCLUSION QUESTIONS

Which lettered samples of elements are metals? Metalloids? Nonmetals? Give the sample letter and the identity.

Metals (1)	Metalloids (2)	Non-Metals (3)
4. Explain why you grouped each sample the way you did using their physical properties.		

5. Is there any generalization (basic ways of grouping) you can make about the **densities** of metals vs. nonmetals?

6. Are the other properties you did not report on or test in this activity that might distinguish a metal from a nonmetals?

7. What made it difficult to identifying some of the samples as being metals, metalloids or nonmetals? Explain/elaborate.