Performance-Based Assessment Task

NAME _____

Show all math work

STATION 1: Licorice with wrapper

Take all measurements with wrapper

PHYSICAL PROPERTIES **List 6 physical properties of the substance (include mass, volume, density)**	**PHYSICAL CHANGES: List 2 physical changes you can do to this substance.**
1. **2.** **3.** **4.** **5.** **6.**	**7.** **8.**
CHEMICAL PROPERTIES	**CHEMICAL CHANGES**
List three chemical properties of this substance: **9.** **10.** **11.**	**12.** What one chemical change can you create with the substance? **13.** Why do you think what you chose is a chemical change?

STATION 2: Diaper polymers

Find the density of the object—show your work. Round to the nearest tenth. Show your math work.

14. Mass **15. Volume** **16. Density**

If the mass of the polymer sample above was 1.1666g before adding the water, figure out how many times this sample holds its weight in water:

How much would 5.5 g of polymers weigh after adding water:

STATION 3: Blocks

Answer question 19 and 20 for the block station:

17. Each block has the same

a. mass **b**. volume **c**. density

18. What is the correct ranking for the blocks from least dense to the densest? (Use density formula): ***a. 1, 2, 3*** ***b. 2, 3, 1*** ***c. 3, 1, 2*** ***d. 3, 2, 1*** ***e. 1, 3, 2***

Performance-Based Assessment Scoring Guide

	Mastery (30 points)	Still Working for Mastery (15 points)	Comments
Observation of Physical and Chemical Properties	Correctly identifies six physical properties and three chemical properties of a substance.	Has identified some correct physical and chemical properties but some are incorrect or only listed a few.	
Identifying Chemical and Physical Changes of Matter	Accurately describes two physical and chemical changes of a substance.	Some physical and chemical changes are not described completely or are described inaccurately.	
Calculations for Mass, Volume, and Density	Correctly uses appropriate tools to measures mass, volume, and accurately calculates density.	Some calculations are incorrect and some tool use for measuring mass, volume, and density is incorrect.	
Understanding of Mass, Volume, and Density	Can differentiate among mass, volume, and density.	Exhibits misconceptions concerning one or all of the concepts of mass, volume, and density.	
Total			