FLINN SCIENTIFIC

Name_____

Periodic Activity of Metals Worksheet

Data Table

Physical Properties of Metals — Observations			
Lithium		**Magnesium**	
Sodium		**Calcium**	
Reactions of Metals with Water — Observations			
Lithium		**Magnesium**	
Sodium		**Calcium**	

Questions

1. What is the common name for the family of metals in (a) Group 1 and (b) Group 2 of the periodic table?

2. Rank the four metals used in this demonstration from most active to least active based on their reactivity with water.

3. The metals are arranged below according to their relative positions in the periodic table. (a) Draw a horizontal arrow across the top to show the direction in which the activity of a metal increases across a period (row) in the periodic table. (b) Draw a vertical arrow along the side to show the direction in which the activity of a metal increases within a group (family) in the periodic table.

	Group 1	*Group 2*
Period 2	Li	
Period 3	Na	Mg
Period 4		Ca

4. Look up the position of potassium metal in the periodic table and write in the symbol for potassium in the appropriate location in the arrangement of metals in Question #3. Based on the trend in metal activity observed in this activity, predict whether potassium metal is more or less reactive than sodium with water.

5. Write a balanced chemical equation for the reaction of (a) sodium metal and (b) calcium metal with water.