Name _____ Class _____ Date _____

THE Big IDEA ***Integrating Mathematics***

How is a chemical formula written?

Lesson Review

1. What is a valence electron? _____

2. What is an oxidation number? _____

3. What is the oxidation number of hydrogen? _____

4. What is a chemical formula? _____

5. What is the sum of the oxidation numbers in a compound? _____

6. How do oxidation numbers help you write chemical formulas? _____

7. The oxidation number of sodium is 1+. The oxidation number for chlorine is 1–. What is the formula for sodium chloride? _____

8. Chlorine's oxidation number is 1–. Magnesium's oxidation number is 2+. What is the formula when these two elements combine? _____

9. The oxidation number for hydrogen is 1+. Given that the formula for water is H_2O, what do you think is the oxidation number for oxygen? _____

Skill Challenge

Skills: *analyzing, inferring*

1. Based on the oxidation numbers, why are 2 hydrogen atoms needed for every oxygen atom in the formation of water? _____

_____

2. In ferrous oxide, or iron (II) oxide, the oxidation number of iron is 2+. What is the formula for ferrous oxide? _____

3. What two elements combine to form magnesium nitride? What are the oxidation numbers of each element? _____

4. When sulfur burns in air, sulfur dioxide is formed. If carbon has the same oxidation number as sulfur, what compound will be formed when carbon burns in air? _____