

Name: _____ Date: _____ Hour: _____

Guest Teacher To-Do List – Chemical Reactions

Part 1: Bill Nye, Chemical Reactions (____) ←

Checkmark when finished

As you watch the video, complete the tasks below. By doing so, you will collect evidence to help you answer what is ACTUALLY happening when Mg reacts with HCl.

1. Chemicals react to form _____ chemicals.
2. Examples include _____, your stomach growling, and candles
_____.
3. Oxygen will make iron _____.
4. Car engines and motorcycle engines are controlled by chemical _____.
5. Copper metals burn to make the color _____.
6. When a chemical reaction takes in more energy than it gives off it becomes
_____.
7. How is baking a cake an example of a chemical reaction?



Part 2: Chemical Reactions Web Quest (____)

*Using your assigned laptop and the websites found on the teacher page, complete the following tasks. These tasks will help you to collect further evidence to answer what is ACTUALLY happening when Mg reacts with HCl. **This is an individual activity, but you may speak at a voice level 1 to your table group if you need assistance. You will have the remainder of class.***

1. Observing Chemical Reactions

Based on what you observed in the video, what impact do you believe chemical reactions have on substances?

Chemical reactions are processes in which matter *chemically changes* because substances react to form new substances.

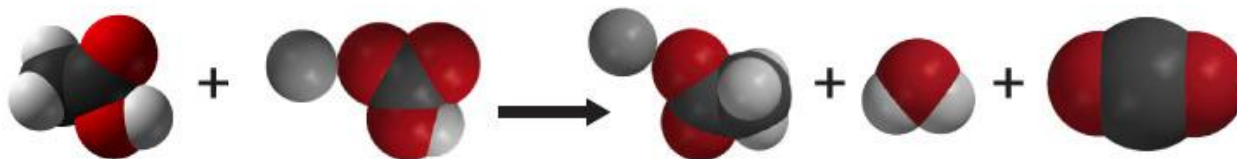
2. Chemical vs. Physical Changes

Defend the following claims with evidence from the video and support the claim with your reasoning:

Claim	Evidence	Reasoning
<i>Boiling water is an example of a physical change.</i>		
<i>Food that we eat chemically changes in the digestive system.</i>		

3. Adult Supervision and Assistance Required

Below you will see molecular models representing the reaction that took place:



How do the models show that matter *chemically changes* during a chemical reaction?

Are substances that cause a reaction to occur still present after the reaction? How do you know?

Using evidence from your research on chemical reactions, explain either in words or a model what is ACTUALLY happening when Mg reacts with HCl.