Decomposition of H_2O_2 Name_____

Grading Rubric Date _____ Period____ Score___ /4

LT: Use conservation of mass to determine products of a reaction

CATEGORY	4	3	2	1
Hypothesis/ Materials/ Procedure ___4	Exceptional detail	Hypothesis All materials and setup used in the experiment are clearly and accurately described. Procedures are listed in clear steps. Each step is numbered and is a complete sentence.	Most of the materials and the setup used in the experiment are accurately described. Procedures are listed in a logical order, but steps are not numbered and/or are not in complete sentences.	Many materials are described inaccurately or not described at all Procedures do not accurately list the steps of the experiment or no procedure given
Drawings/ Diagrams ___4	Exceptional detail	Clear, accurate diagrams are included and make the experiment easier to understand. Diagrams are labeled neatly and accurately.	Diagrams are included and are labeled.	Needed diagrams are missing important labels.
Observations/ Notes/Captions ___4	Exceptional detail /Additional observations Example ___Cup warms from reaction ___ Color of flame is brighter than when hydrogen burns ___Bubbles don't appear to be lighter than air	At least 4 observations are included which describe details of the event. Examples ____ Bubbles form ____ Gas in bubbles make match burn brighter ____Gas causes glowing splint to relight ____Bubbles appear to be flow over side of cup	2-3 observations are included which describe details of the lab.	0-1 observation is included which describe details of the lab
Analysis ___4	Extended discussion of products and conservation of mass. Example topic – Water (H2O) May not be a likely product because it wasn't hot enough to boil	___Level 1 – decomposition reaction explained ___Level 2 – how to identify O and H Observable products are clearly identified. Explain why / how you identified the product(s).You must CLEARLY state 3 reasons you used to decide including: ___Conservation of mass (it could only have H and O) ___ Flammable ___ Gas	One Item Missing	2 or more items missing
Conclusion ___4	In addition to the proficient requirements, paragraph includes insightful additions to the rationale to the discussion of the hypothesis, what was learned, and the "I wonder". Clear reference to scientific principles and data should be included.	___Topic sentence restates the purpose ___Acceptance/rejection of the hypothesis is clearly identified. ___A brief explanation of why the hypothesis was accepted/rejected. ___A logical "what was learned" statement related to the data/purpose. ___I wonder comment is a logical next step to further research that is related to the original purpose.	One Item Missing	2 or more items missing

____ /20 Divide your total by 5. Example: 19÷5=3.8

Here's a trick. Instead of dividing by 5, double the numerator (19X2=38), then move the decimal over 3.8