Chemistry 1
Flame Test Summary Name: _____

Period ____ Date _____

Step 1: Complete the lab (or watch the flame video to make-up).
Step 2: Using lecture notes and Lesson 17 in your textbook , answer #1-9 on the back side.
Step 3: Write a summary for the flame test lab. You will use similar skills that you would use when writing a paper for your English class. Use the answers to the questions on the back of this page as an outline.

1. A topic sentence that grabs the reader's attention.
2. The main body.
    a. The main goal of the flame test lab.
    b. A few sentences describing background information.
    c. Explanations of the scientific principles involved (atomic structure, energy absorption and emission)
    d. Observations from the lab to support your claims about the scientific principles.
3. A concluding sentence that connects back to your hook/topic sentence.

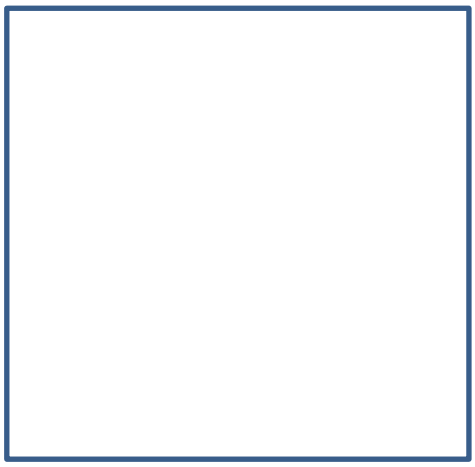
Rubric for Flame Test Summary
Students earning a "2" or "1" may revise one time to raise proficiency to a "3."

Report Aspects	4 "Highly Proficient"	3 "Proficient"	2 "Nearly Proficient"	1 "Beginning Proficient"
Writing Style:	☐ Summary has a relevant topic sentence. ☐ Summary has a closing sentence that relates well with the topic sentence. ☐ Summary is communicated in a well-written paragraph (or two) including complete sentences, correct spelling, grammar and punctuation.	☐ Summary has a relevant topic sentence. ☐ Summary has a closing sentence that relates well with the topic sentence. ☐ Summary is communicated in a paragraph (or two) including complete sentences, correct spelling, grammar and punctuation with only minor errors.	☐ Summary has a fairly relevant topic sentence. ☐ Summary has a closing sentence that may or may not relate well with the topic sentence. ☐ Summary is communicated in a paragraph (or two) including sentences, spelling, grammar and punctuation with some errors.	☐ Summary may or may not have a topic sentence. ☐ Summary has a closing sentence that does not relate with the topic sentence. ☐ Summary is communicated in a paragraph (or two) but includes sentence fragments, poor spelling, poor grammar and punctuation.
Concepts: ☐ Flame Test ☐ Atomic structure ☐ Energy absorption ☐ emission	☐ The chemistry concepts are accurately defined.	☐ The chemistry concepts are defined with minor error.	☐ The chemistry concepts are defined with some error.*	☐ The chemistry concepts are defined with major error.*
Evidence: **Concepts** are supported or explained with evidence from the article, lecture or textbook.	☐ The paragraph body includes very strong evidence and examples to support explanation.	☐ The paragraph body includes evidence and examples to support explanation.	☐ The paragraph body includes some evidence and examples to support explanation.*	☐ The paragraph body includes evidence and examples to support explanation but is not relevant.*

* may be met with correct responses to the supplied page of questions

1. Write a sentence or two that could introduce the idea of atoms absorbing energy and emitting it as light. Think of an example in everyday life. This is your "hook."

2. Explain where electrons are found in an atom. (Use the Bohr model of an atom.) You may find drawing a diagram helpful. Do electrons have more energy when they are close to the nucleus or far from the nucleus? Why?



3. Briefly explain the procedure you followed during lab (flame test, solution, Nichrome wire)

4. Use evidence from lab to support your claims about the energy absorption and emission. You should have two or three sentences here. (How did you excite the electrons? How did they release the energy you gave them? What did you see when energy was released?)

5. Which part of the compound was responsible for the flame color, the metal or the non-metal(s)? Give evidence from the lab to support your claim.

6. Write a sentence to conclude your introduction. This should tie back to your first sentence or "hook."

Works Cited

Stacy, Angelica M. "Lesson 15 Nuclear Quest" Living by Chemistry. Emeryville, CA: Key Curriculum, 2010. 86-89. Print.