CHEMISTRY MATTERS
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NOTE-TAKING GUIDE
UNIT 3, SEGMENT C

Name:

Date:

Main Ideas, Key Points, Questions:

After watching the video segment, write down key points, main ideas and big questions.

Objective(s):

- ***To explain the importance of the electron in understanding atomic behavior.***
- ***To carry out a flame test investigation to explain how quantum movements of electrons explain the colors given off by elements when heated.***

Notes:

During the video segment, use words, phrases or drawings to take notes.

Summary:

After watching the video segment, write at least three sentences explaining what you learned.
You can ask yourself: "If I was going to explain this to someone else, what would I say?"

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QUESTIONS TO CONSIDER: UNIT 3, SEGMENT C

Name:

Date:

After watching the video and performing any associated labs and/or experiments, you should be able to answer the following:

1. Thomson discovered the electron. Describe the characteristics of an electron.

2. What pattern do you see between the Bohr models shown and their position on the periodic table?

3. Draw or create a physical Bohr model of fluorine and neon.

4. Add an electron to the fluorine model to produce an anion.

5. How is a cation different from an anion?

6. What is a valence shell?

7. Use the term "quantum" to explain how adding heat energy to atoms in fireworks can cause specific colors to appear.

In video 3C, you are required to conduct a flame test lab. Please conduct all parts of the flame test lab before continuing.

8. How can an element's spectrum be used to identify that element?