



Name \_\_\_\_\_

Date \_\_\_\_\_

Date due \_\_\_\_\_

## **Science 10 – Assignment on the Early Search for Elements**

**Note:** Use the information from pages 163 – 168 in Science Probe Text and the Power Point Presentation “History of Investigating Matter” at \\sd67\district\SSS\Student-Data\Course Resources\Science\SCIENCE10 COLGUR\SC 10 PPT PROJECTS to answer the following questions:

1. Outline the contributions of each of the following people to our knowledge of elements and the structure of atoms:
  - a) Empedocles -
  
  
  
  
  
  
  
  
  
  
  - b) Democritus -
  
  
  
  
  
  
  
  
  
  
  - c) Aristotle -
  
  
  
  
  
  
  
  
  
  
  - d) Hennig Brandt -
  
  
  
  
  
  
  
  
  
  
  - e) Robert Boyle -
  
  
  
  
  
  
  
  
  
  
  - f) Henry Cavendish -

g) Joseph Priestley -

h) Antoine Lavoisier -

i) John Dalton -

2. The original “four elements” proposed for all matter were \_\_\_\_\_,  
\_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.
3. What was the belief about the “Philosopher’s Stone”? \_\_\_\_\_  
\_\_\_\_\_
4. \_\_\_\_\_ performed experiments to disprove the four element hypothesis.
5. Should scientific beliefs ever be challenged? \_\_\_\_\_ Explain your answer. \_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. What gas did Henry Cavendish produce in 1766? \_\_\_\_\_  
How did he produce it? \_\_\_\_\_
7. What two elements did Joseph Priestley isolate in 1774? \_\_\_\_\_  
and \_\_\_\_\_. He did this by decomposing the compound

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8. What did Cavendish do with hydrogen and oxygen? \_\_\_\_\_

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9. What is meant by a property? \_\_\_\_\_

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10. In 1808, John Dalton proposed the \_\_\_\_\_ theory.

11. List the four main points of Dalton's theory:

1.

2.

3.

4.

12. Explain why we no longer believe two of the points is Dalton's Atomic Theory.

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