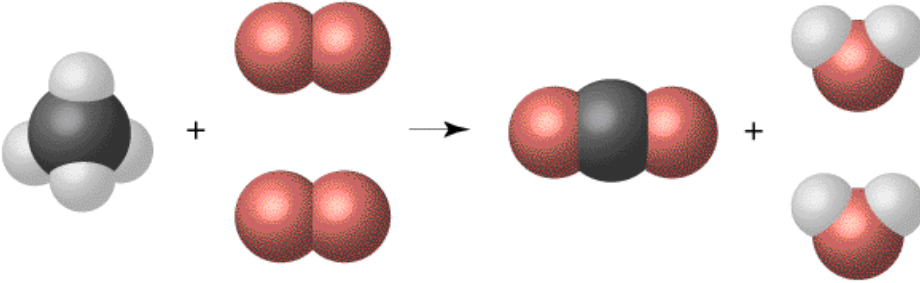


| Topic: Democritus and Dalton | Name: | Date: |
|--|--|-------|
| Questions/Main Ideas: | Notes: | |
| What is our modern definition of the atom? | | |
| Who was Democritus, and what did he wonder? | <i>Is there a limit to how many times a substance can be divided, and still be that substance? His answer:</i> | |
| Who was the first to actually be able to test Democritus' idea? | | |
| What are the ideas of Dalton's Atomic Theory? | <ol style="list-style-type: none"> 1. All elements are composed of tiny indivisible particles called _____. 2. Atoms of the same element are _____. The atoms of any one element are _____ from those of any other element. | |
| | <ol style="list-style-type: none"> 3. Atoms of different elements can chemically combine in _____ - _____ to form compounds. (Law of Multiple Proportions) | |
| | <ol style="list-style-type: none"> 4. Chemical reactions occur when atoms are _____, _____, or _____. Atoms of one element, however, are _____ changed into atoms of another element as a result of a chemical reaction. | |
| Complete the diagram to the right. Then, answer the question in the space below: | | |
| How did Dalton reason that compounds must be made up of atoms? |  | |
| | <p style="text-align: center;">methane molecule oxygen molecules carbon dioxide molecule water molecules</p> | |
| | <p style="text-align: center;">CH_4 + O_2 → CO_2 + H_2O</p> | |
| | <p style="text-align: center;">(C) (O) (C) (O)</p> | |
| | <p style="text-align: center;">(H) (H)</p> | |
| Summary and Question(s) I have: | | |
| | | |
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