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| *Grams, moles.*  CλeMis+ry: http://genest.weebly.com  Stop in for help every day at lunch and Tues &Thurs after school! |  | Name\_\_\_\_\_\_\_\_\_\_\_\_\_  Period\_\_\_\_\_\_\_\_\_\_\_\_\_ |

1. Write the name of a woman that you would like to see in one of our worksheets this month for women’s history month. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Assume that one mole of carbon atoms has a mass of 12.01 g.

What would be the mass of 55.55 moles of carbon atoms?

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| --- | --- | --- | --- |
|  | grams |  |  |
|  | moles |  |

1. How many carbon atoms are there in 0.00000004440 moles of carbon atoms?

|  |  |  |  |
| --- | --- | --- | --- |
|  | atoms |  |  |
|  | moles |  |

1. How many moles are there 560000000000000000000 carbon atoms?

|  |  |  |  |
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1. Use your periodic table to find the molecular weight of C2H6.
2. Use your periodic table to find the molecular weight of CaCO3

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| 1. For NH3… | | |
| How would you draw one molecule? | According to the periodic table, what is the mass of a mole of this molecule? | Find the mass of 4.05 moles of this molecule. |
|  |  |  |
| 1. For H2O2 | | |
| How would you draw one molecule? | According to the periodic table, what is the mass of a mole of this molecule? | Find the mass of 1,003,000 molecules of this substance. |
|  |  |  |
| 1. For pure, liquid bromine at room temperature | | |
| How would you draw one molecule? | According to the periodic table, what is the mass of a mole of this molecule? | Find the mass of 56.9 moles of this molecule. |

## Write a balanced equation for each of the following chemical reactions. Write the phases (solid, liquid, etc)

1. When HCl is added to solid sodium carbonate, the contents of the test tube immediately starts bubbling and gets warm. Carbon dioxide gas, water vapor and dissolved sodium chloride are formed.
2. Iron burns in air to form a black solid, iron (III) oxide.