Moles and Molar Mass

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Determining Molar Mass

For each of the following, write the chemical formula and determine the molar mass of the compound. Take all molar masses to two decimal places

|  |  |  |  |
| --- | --- | --- | --- |
| **Compound** | **Formula** | **Work** | **Final Molar Mass** |
| water |  |  |  |
| Ammonia |  |  |  |
| Sucrose |  |  |  |
| Ammonium chloride |  |  |  |
| Sulphur |  |  |  |
| Carbon monoxide |  |  |  |
| Silver chloride |  |  |  |

What is molar mass?

what is the formula used to calculate the number of moles of a substance?

# Determining Number of Moles/Mass

Using the compounds from the previous chart to help you:

|  |  |  |  |
| --- | --- | --- | --- |
| **Compound** | **Molar Mass** | **Mass** | **Number of Moles** |
| water |  | 28 grams |  |
| Ammonia |  |  | 1 mol |
| Sucrose |  | 300 grams |  |
| Ammonium chloride |  |  | 0.587 mol |
| Sulphur |  | 1 kg |  |
| Carbon monoxide |  |  | 2.236 mol |
| Silver chloride |  |  | 0.789 mol |

When you have finished this, please go to page 112 and do questions 6 & 7. Record your final answers below and submit this worksheet for grading.

1. Calculating the number of moles:
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Calculating the mass of each sample:
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_