REVIEW SHEET NOMENCLATURE EARLY ATOMIC THEORY

1. Write the atomic symbols for isotopes with the following characteristics. Express your answer as an isotope $$ .
2. 27 protons and 32 neutrons
3. a neon atom with twelve neutrons
4. a mass number of 24 and 13 neutrons
5. a titanium cation with 25 neutrons and 19 electrons
6. Silver has two isotopes. Silver-107 has an atomic mass of 106.91 amu and percent abundance of 51.84%. What is the atomic mass of silver-109 if it has a percent abundance of 48.16%
7. Explain the difference between a molecule and a formula unit. (Include information regarding the types of compounds that form each and why they do.)
8. Describe the experiment performed by Goldstein and Crooks which first indicated the existence of electrons. What did they do and how did the experiment demonstrate the existence and nature of electrons?
9. In what ways are isotopes of an element alike? In what ways are they different?
10. Complete the nomenclature table

Formula of Compound Type of Compound Name of Compound

(ionic, molecular, acid) (bonus for latin name, if

 appropriate)

|  |  |  |
| --- | --- | --- |
| FeS |  |  |
| SiO2 |  |  |
| (NH4)2O |  |  |
| Al2(CO3)3 |  |  |
| CoCl3 |  |  |
| Br3O8 |  |  |
| HCl (aq) |  |  |
| AgCN |  |  |
| HNO2 (aq) |  |  |