

Teacher's Tools[®] Chemistry

Prerequisites: The Atom: Example problem with animation feedback

1. Complete the following table using the Periodic Table where necessary to find the symbol of an element.

| Symbol | Charge | Protons | Neutrons | Electrons |
|-----------------------------|--------|---------|----------|-----------|
| | 0 | 9 | 10 | |
| ${}^{34}_{16}\text{S}^{2-}$ | | | | |
| | +3 | 23 | 28 | |

2. Magnesium consists of 3 isotopes with masses 23.98, 24.98 and 25.98. If the percent abundance of the first isotope is 78.7%, calculate the percent abundance of the other two isotopes.

(Atomic mass of Mg = 24.31)