

# Ap Chem Summer Assignment #2

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## Summer Assignment 2

**What is the charge on the following:**

1. The cation in CsCl has a charge of 1+, with Cs being the cation.
2. The sulfate ion has a charge of 2-
3. The barium ion has a charge of 2+
4. The nitrate ion has a charge of 1-

**How many protons, neutrons, and electrons are in:**

1. Uranium-235 has **92 protons**, since it has an atomic number of 92. It also has **143 neutrons**, since  $235 - 92 = 143$ . Lastly, it has **92 electrons**, since it has no charge so the number of protons must equal the number of electrons.
2. Uranium-238 has **92 protons**, since it has an atomic number of 92. It also has **146 neutrons**, since  $238 - 92 = 146$ . Lastly, it has **92 electrons**, since it has no charge so the number of protons must equal the number of electrons.

**Elements in the same vertical column in the periodic table have similar what?**

Elements in the same vertical column in the periodic table will be in the same group. Therefore, they will have the same amount of valence electrons.