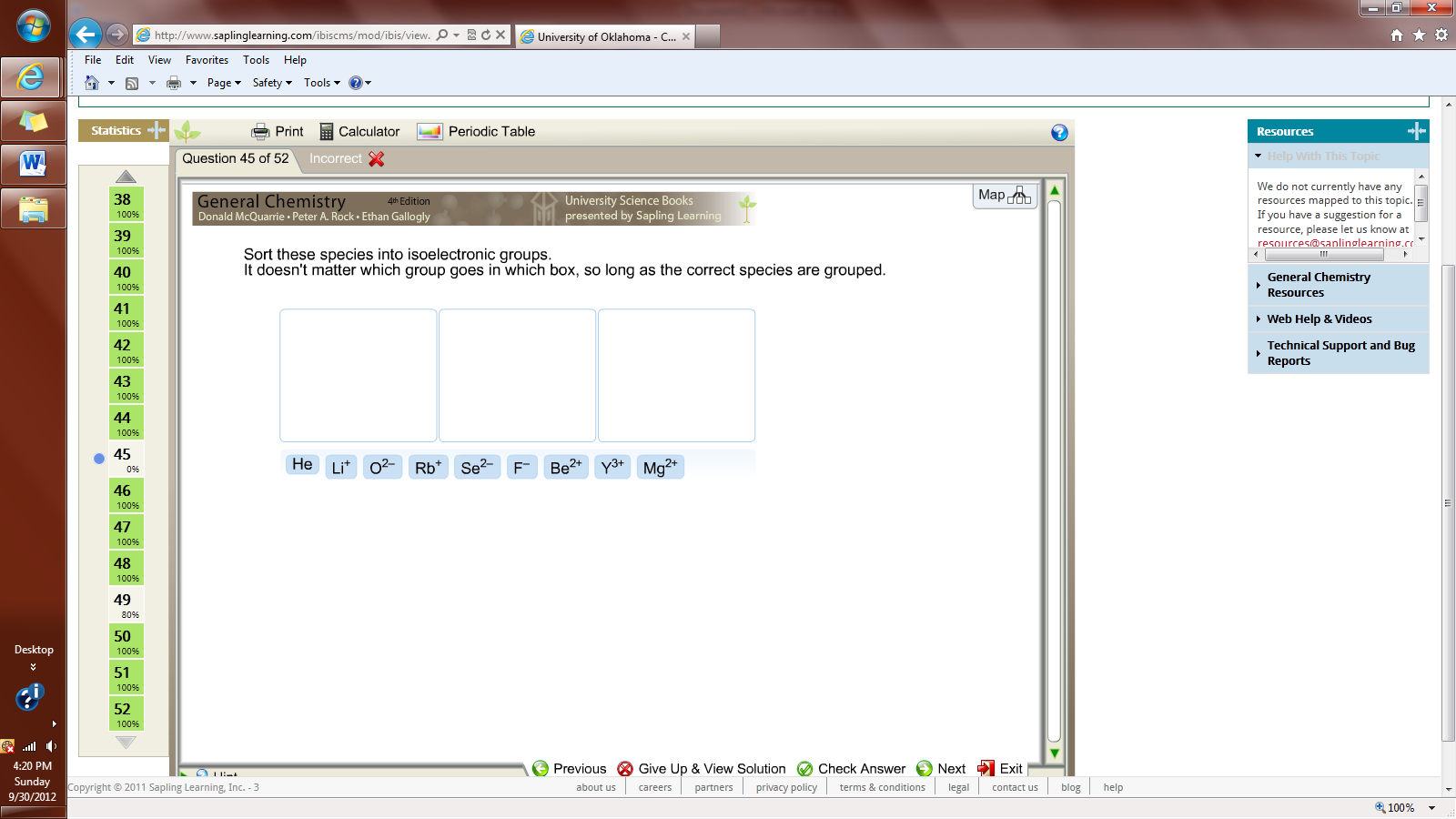
HWU4-45

QUESTION:



HINT:

Use a periodic table to determine the atomic number of the atom. For example, xenon's atomic number is 54. A neutral atom has the same number of electrons as protons. Therefore, Xe has 54 electrons.

Next, determine the number of electrons for each ion. Recall that a positive ion has fewer electrons than protons, and a negative ion has more electrons than protons. For example, iodine (I) has 53 protons and electrons. I– has gained one electron (negative charge), and therefore has 54 electrons.

Atoms and ions with the same number of electrons are isoelectronic. In this example, I– is isoelectronic with Xe.