Atoms and Atomic Numbers

Name the elements with the following number of protons:

108 protons _____ 10 protons _____

11 protons _____ 22 protons _____

56 protons _____ 8 protons _____

92 protons _____ 14 protons _____

25 protons _____ 32 protons _____

103 protons _____ 39 protons _____

For each of the following, identify the element based on the information given.

1. A certain atom has a nucleus containing five protons and six neutrons and has five electrons orbiting the nucleus.

This atom is a form of the element _____

2. The ocean contains a variety of minerals and ionic compounds. A scientist isolates a specific ion from a sample of ocean water and determines that it has 12 protons and 12 neutrons with 10 orbiting electrons.

This ion is a form of the element _____

3. A geologist finds a sample of an unknown element. Upon analysis of the element, she determines that it is composed of 23 protons, 27 or 28 neutrons with 23 orbiting electrons.

This sample is the element _____

4. A jeweler wants to market a new line of jewelry made from a precious metal with properties similar to platinum. The nucleus of an atom of the element he wants to use is composed of 46 protons and 61 neutrons.

This metal is a form of the element _____

5. Light bulb filaments are constructed out of a very ductile metal that can be pulled into a thin wire and coiled repeatedly. This element is contains atoms with 74 protons and 110 neutrons.

This metal is a form of the element _____

6. An ion of a certain element has a nucleus containing nine protons and ten neutrons and has ten electrons orbiting the nucleus.

This ion is a form of the element _____

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