

## Building Elements

### Fill in the blanks

**An atom is the smallest unit of a chemical element. Atoms contain electrons, protons and neutrons.**

*Fill in the blanks from the words in the box below:*

Atomic Number is the number of \_\_\_\_\_ in the nucleus, and they are a particle with a \_\_\_\_\_ charge.

Mass number is the number of protons + \_\_\_\_\_ inside the nucleus. Both of these particles have the same mass.

Electrons are a particle with a \_\_\_\_\_ charge. The electrical charge on an electron is exactly equal to and exactly opposite to the charge on a proton.

By adding or removing electrons from an atom, this creates an \_\_\_\_\_.

By adding or removing neutrons from an atom, this creates an \_\_\_\_\_.

isotope

protons

positive

negative

neutrons

ion

### The Periodic Table

**The periodic table can tell us useful information about the particles that make atoms and information about the properties of an element.**

*Use a Periodic Table to complete the following table:*

Element	Element Symbol	Number of protons	Number of neutrons	Mass Number
Hydrogen	H			1
Lithium		3		
Carbon	C		6	
Magnesium				24
Nickel		59		
Copper	Cu		35	
Zinc		30		
Gold				108
Uranium	U			238
Plutonium		94		242

