

The Atom

● The size of an atom	
● The 3 parts of an atom (label all 3 parts) (show in an atom diagram)	
● The nucleus is made up of one or more protons and neutrons	
● The electron cloud is outside of the nucleus (show in an atom diagram)	

The Proton

● The protons are the positively charged particles of the nucleus.	
● The mass of a proton is 1 atomic mass unit (amu)	
● The charge of a proton is positive	
● The location of a proton is in the nucleus (show in an atom diagram)	

The Neutron

● The neutrons are the particles of the nucleus that have no charge.	
● The mass of a neutron is 1 atomic mass unit (amu)	
● The neutron is neutral and has no charge	
● The location of a proton is in the nucleus (show in an atom diagram)	

The Electron

● The electrons are the negatively charged particles in an atom that are located in electrons cloud	
● An electron has almost zero mass	
● The charge of a electron is negative	
● The location of an electron is in the the electron cloud of an atom (show in an atom diagram)	

Isotopes

● Isotopes are elements that have the same number of protons but have different numbers of neutrons.	
● Atoms that are isotopes of each other are always the same element because the number of protons in each atom is the same. (Give at least 2 examples)	
● Mass number = number of protons + number of neutrons (Give at least 3 examples)	
● Name of the isotope = “ Element - Mass Number “ (Give at least 3 examples)	

Ions

● Normally number of electrons = number of protons	
● If the number of electrons not equal to the number of protons, then the atom is an ion.	
● If the number of electrons in an atom is more than the number of protons, then the atom is negatively charged.	
● If the number of electrons in an atom is less than the number of protons, then the atom is positively charged.	