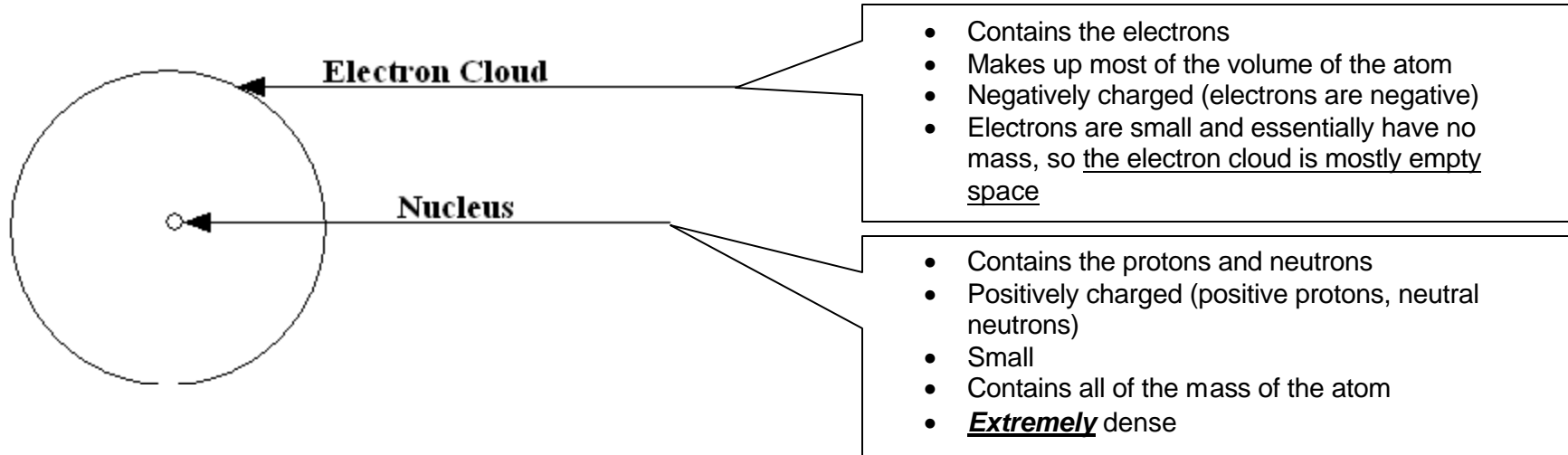


Atomic Structure



	<i>Where Found</i>	<i>Charge</i>	<i>Mass Number</i>
Proton	Nucleus	+1	1
Neutron	Nucleus	0	1
Electron	Electron Cloud	-1	0

Basic Electrostatics:
Opposite charges attract and identical charges repel

- Electrons and protons attract each other
- Protons repel other protons
- Electrons repel other electrons
- Neutrons are neutral and should neither repel nor attract any particles

Definitions

- ❑ Atom: the smallest particle of an element that retains the properties of that element
- ❑ Atomic number: the number of protons in the nucleus of an atom
- ❑ Mass number: the total number of protons and neutrons in the nucleus of an atom
- ❑ Isotopes: Atoms of the same element that differ in mass number (differing numbers of neutrons)

Nuclear Forces:
 Powerful short range forces in the nucleus that hold the nuclear particles (protons and neutrons) together. These forces overcome the electrostatic repulsion of protons.