Summary

* Scientists use chemical symbols as shorthand when naming elements
* Atoms are composed of small particles that have known charges
* The particles are located in predictable locations within the atom.

Atomic Mass

* The nucleus contains most of the mass of the atom
* The mass of the proton and neutron are approximately equal
* The mass of the electron is considered negligible when finding the mass of the atom
* The unit of measurement for atomic particles is the atomic mass unit (amu)
* The number of protons identifies the element

Isotopes

* Atoms of the same element with different numbers if neutrons are called isotopes

Organizing the Elements

* Mendeleev organized the elements using increasing atomic mass and physical and chemical properties
* Moseley corrected the problems in the periodic table by arranging the elements in order of increasing atomic number

The Atom and the Periodic Table

* The vertical columns in the periodic table are known as groups or families. Elements in a group have similar properties

Regions of the Periodic Table

* The periodic table is divided into metals, nonmetals and metalloids