Chem 103, Section F0F Unit I - An Overview of Chemistry Lecture 3

- The chemist's view of matter: atoms, elements, compounds & mixtures.
- Some observations that led to the atomic view of matter

 Dalton's postulates for the atomic view of matter

Lecture 3 - Atoms, Elements, Compounds & Mixtures

History:

- Throughout their history, humans have been interested in what makes up the world around them.
 - Early theories had the world made up of basic "elements" such as earth, water, air and fire.
- Ancient Greeks were particularly fascinated by these questions.
 - Democritus (460-470 BC) asked what would happen if you continued to divide an object in half
 - He proposed that you would eventually reach a point where the object could no longer be divided.
 - ► He referred to what was left as an "atom", which means "uncuttable"
 - Aristotle (384-322 BC) did not accept the concept of an atom.His influence held sway for the next 2000 years





Lecture 3 - Atoms, Elements, Compounds & Lecture 3 - Atoms, Elements, Compounds & Mixtures Mixtures History: Matter can be classified into three types, based on their 19th Century atomic makeup: John Dalton (1766-1844) reintroduced the atomic Elements theory of matter with his postulates. Matter composed of only one type of atom. Compounds • Matter composed two or more different elements that are chemically bound together and do not vary in composition Mixtures Matter composed two or more different elements or compounds that can vary in their parts by mass. Elements represent one example of a substance, which is matter whose composition if fixed











The End	