



# **Introduction to Atoms**

What is the smallest particle into which an element can be divided and still be the same substance?

- A. electron
- B. neutron
- C. proton
- D. atom

What is the smallest particle into which an element can be divided and still be the same substance?

- A. electron
- B. neutron
- C. proton
- D. atom

# How did the Greek Democritus describe atoms?

- A. large, soft particles
- B. small, hard particles that were dividable.
- C. small, hard particles-like a tiny marble
- D. large, hard particles

# How did the Greek Democritus describe atoms?

- A. large, soft particles
- B. small, hard particles that were dividable.
- C. small, hard particles-like a tiny marble
- D. large, hard particles

If an isotope of uranium, uranium-235, has 92 protons, how many protons does uranium-238 have?

- **A. 92**
- **B. 95**
- **C. 143**
- **D. 146**

If an isotope of uranium, uranium-235, has 92 protons, how many protons does uranium-238 have?

- **A. 92**
- **B. 95**
- **C. 143**
- **D. 146**

Which of the following is the smallest subatomic particle and has the least mass in the atom??

- A. nucleus
- B. proton
- C. neutron
- D. electron



Which of the following is the smallest subatomic particle and has the least mass in the atom??

- A. nucleus
- B. proton
- C. neutron
- D. electron

An atom of gold with 79 protons, 79 electrons, and 118 neutrons would have a mass number of

- A. 39
- B. 158
- C. 197
- D. 276

An atom of gold with 79 protons, 79 electrons, and 118 neutrons would have a mass number of

- A. 39
- B. 158
- C. 197
- D. 276

In Thomson's "plum pudding" model of the atom, the plums represent

- A. atoms
- B. protons
- C. neutrons
- D. electrons

In Thomson's "plum pudding" model of the atom, the plums represent

- A. atoms
- B. protons
- C. neutrons
- D. electrons

# What did Democritus, Dalton, Thomson, Rutherford, and Bohr all have in common?

- A. They each identified new elements.
- B. They each identified new isotopes of atoms.
- C. They each discovered something about what we know about atoms today.
- D. They each were born in Greece..

# What did Democritus, Dalton, Thomson, Rutherford, and Bohr all have in common?

- A. They each identified new elements.
- B. They each identified new isotopes of atoms.
- C. They each discovered something about what we know about atoms today.
- D. They each were born in Greece.

The sum of protons and neutrons  
in an atom

- A. Atomic number
- B. Mass number
- C. Atomic mass unit (amu)
- D. Electron cloud



The sum of protons and neutrons  
in an atom

- A. Atomic number
- B. Mass number
- C. Atomic mass unit (amu)
- D. Electron cloud

The number of protons in the nucleus of an atom

- A. Isotope
- B. Atomic number
- C. Atomic mass unit (amu)
- D. Mass number

The number of protons in the nucleus of an atom

- A. Isotope
- B. Atomic number
- C. Atomic mass unit (amu)
- D. Mass number

Particle that cannot be cut according to Democritus.

- A. atom
- B. nucleus
- C. isotope
- D. proton

Particle that cannot be cut according to Democritus.

- A. atom
- B. nucleus
- C. isotope
- D. proton

Region where electrons are likely  
to be found

- A. electron cloud
- B. nucleus
- C. isotope
- D. proton

Region where electrons are likely to be found

- A. electron cloud
- B. nucleus
- C. isotope
- D. proton

Atoms that have the same number of protons but different numbers of neutrons

- A. proton
- B. electron
- C. isotope
- D. neutron



Atoms that have the same number of protons but different numbers of neutrons

- A. proton
- B. electron
- C. isotope
- D. neutron

Subatomic particle that has  
a positive charge

- A. neutron
- B. electron
- C. isotope
- D. proton

Subatomic particle that has  
a positive charge

- A. neutron
- B. electron
- C. isotope
- D. proton

# Negatively charged particle discovered by J J Thomson

- A. nucleus
- B. electron
- C. proton
- D. atom

# Negatively charged particle discovered by Thomson

- A. nucleus
- B. electron
- C. proton
- D. atom

Particle in the center of an atom  
that has no charge

- A. neutron
- B. nucleus
- C. isotope
- D. electron

Particle in the center of an atom  
that has no charge

- A. neutron
- B. nucleus
- C. isotope
- D. electron

A unit of mass that describes the mass of an atom or molecule.

- A. atomic number
- B. atomic mass unit (amu)
- C. mass number
- D. electron cloud



A unit of mass that describes the mass of an atom or molecule.

- A. atomic number
- B. atomic mass unit (amu)
- C. mass number
- D. electron cloud

# Central region of the atom

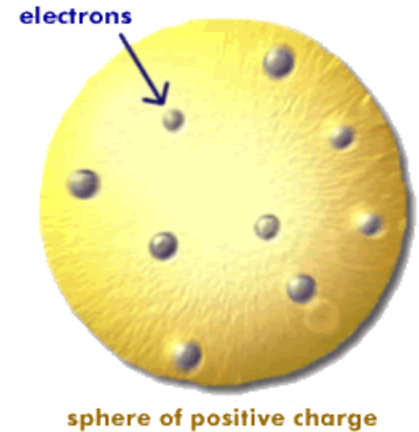
- A. isotope
- B. proton
- C. nucleus
- D. electron

# Central region of the atom

- A. isotope
- B. proton
- C. nucleus
- D. electron

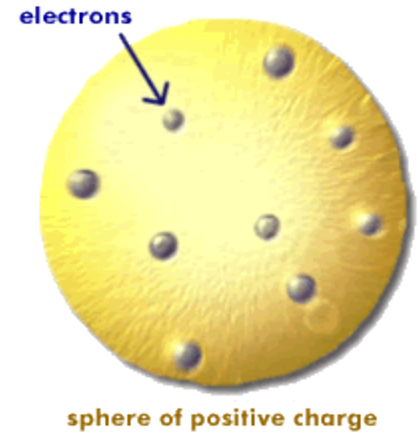
Who proposed  
this model of  
an atom?

- A. Bohr
- B. Thomson
- C. Rutherford
- D. Democritus



Who proposed  
this model of  
an atom?

- A. Bohr
- B. Thomson**
- C. Rutherford
- D. Democritus





# **Introduction to Atoms**

Nice to have met you...