

## Lesson 2 Protons, Neutrons, and Electrons—How Atoms Differ

**Skim** Lesson 2 in your book. Read the headings and look at the photos and illustrations. Identify three things you want to learn more about as you read the lesson. Record your ideas in your Science Journal.

### Main Idea

#### The Parts of the Atom

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#### Different Elements— Different Numbers of Protons

I found this on page \_\_\_\_\_.

#### Neutrons and Isotopes

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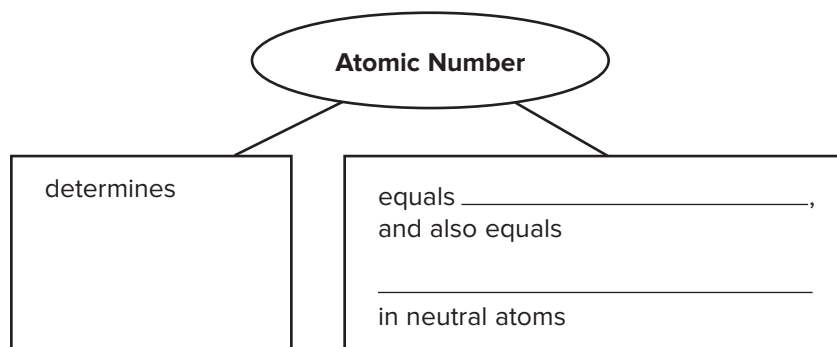
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### Details

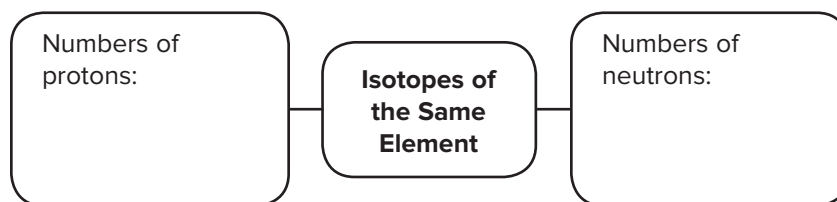
**Distinguish** parts of the atom.

Part	Electron	Proton	Neutron
Symbol			
Charge			
Location			
Relative Mass		1	

**Relate** details about atomic number.



**Differentiate** numbers of protons and neutrons in different isotopes of the same element.



**Contrast** the numbers of particles represented by an element's mass number and atomic number.

Atomic Number	Mass Number

## Main Idea

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### Radioactivity

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### Ions—Gaining or Losing Electrons

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## Details

**Define** average atomic mass.


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 **Differentiate** three types of nuclear decay that occur in radioactive elements.

Type	Change	Result
Alpha decay		
Beta decay		
Gamma decay		

 **Contrast** the formation of ions.

Positive Ion	Negative Ion
A neutral atom _____ _____ Result: _____ _____	A neutral atom _____ _____ Result: _____ _____

 **Synthesize It** Summarize why people were unsuccessful over 1,000 years ago when they tried to transform lead into gold. What process would they have needed to complete in order to have been successful?

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