

Warm-Up | Atoms



Lesson Question



Lesson Goals

Explore the of an atom.

Identify the of an atom.

Describe the masses, locations, and charges of .



Words to Know

Fill in this table as you work through the lesson. You may also use the glossary to help you.

	a very small part or piece of something
	the area of the atom surrounding the nucleus where electrons can be found
	the central part of the atom containing protons and neutrons
	to determine what something is

**Matter**

- Has mass
 - Mass – the amount of in an object
- Has volume
 - Volume – the amount of an object takes up

Slide

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Atoms

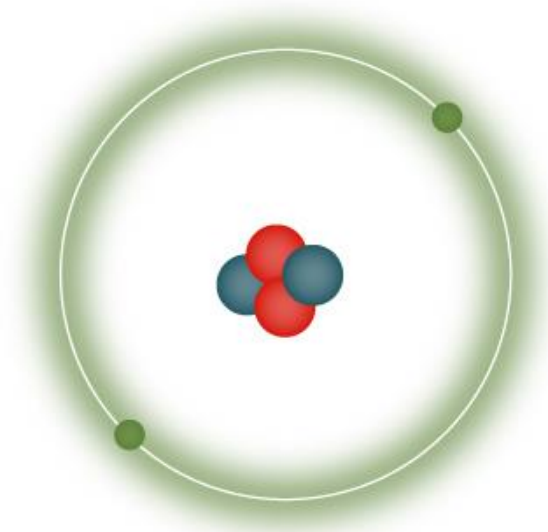
- An atom is the part of that cannot be into smaller parts by ordinary means.

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The Parts of an Atom

- – the central part of the atom
- Electron – the area of the atom surrounding the nucleus

Circle the nucleus of the atom. Put an X on the electron cloud.



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The Parts of an Atom: A Closer Look

- The electron cloud is found in the part of the atom.
- The electron cloud is mostly space.
- Electrons are one of the , or pieces, that make up an atom.
- The center of the atom is the .
- The nucleus is surrounded by the electron cloud.

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Words to Know

Fill in this table as you work through the lesson. You may also use the glossary to help you.

neutral	having <input type="text"/> charge
atomic mass unit	a standard unit of mass used for <input type="text"/> particles
electron	a <input type="text"/> -charged particle that orbits the nucleus of an atom

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Subatomic Particles

- The nucleus contains two sub-atomic particles: and .
- Protons and neutrons have the same mass: amu
- are found outside the nucleus.
- The of an electron is 1/2,000 amu.

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The Subatomic Particles: Summary

Particle	Location	Charge	Mass (amu)
	In the nucleus	Positive	
Neutron	In the <input type="text"/>	Neutral	1
Electron	In the electron cloud		1/2,000



Summary

Atoms



**Lesson
Question**

What is the structure of an atom?



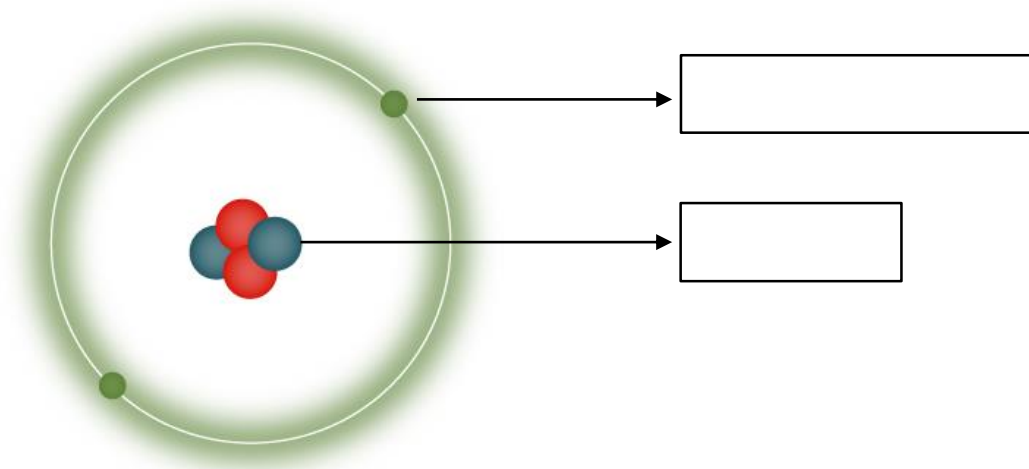
Answer

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Review: Key Concepts**STRUCTURE OF THE ATOM**

The two main parts of the atom are the nucleus and the area surrounding the nucleus, the electron cloud.



The three subatomic particles are protons, neutrons, and electrons.

Particle	Location	Charge	Mass (amu)
Proton	In the nucleus		1
Neutron		Neutral	1
	In the electron cloud	Negative	



Summary

Atoms

Use this space to write any questions or thoughts about this lesson.