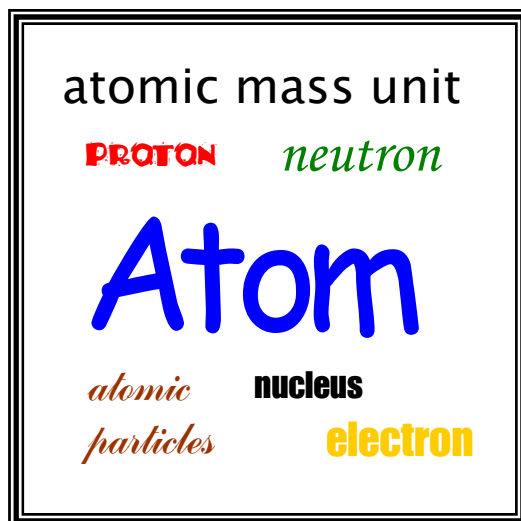


**Properties of Matter**  
**Particles of an Atom**  
**Promotion Benchmark 8 Lesson Review**  
**Student Copy**



**Vocabulary**

**Proton** – An atomic particle with a positive charge that is part of an atom’s nucleus.

**Neutron** – An atomic particle with no charge that is part of an atom’s nucleus.

**Electron** – An atomic particle with a negative charge that moves around the nucleus of an atom.

**Nucleus** – The center of an atom.

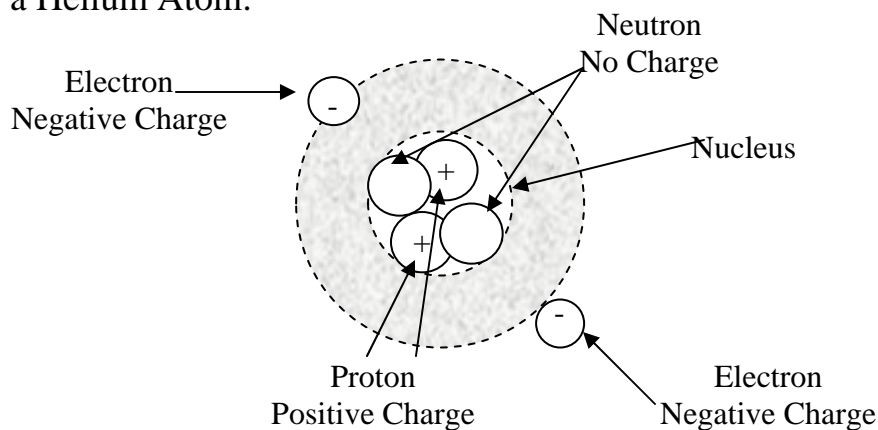
**Review for Promotion Benchmark 8:**  
*Identifies the location, charge, and relative size of the  
three basic particles of the atom*

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Atoms are the basic building blocks of matter that make up the objects around us. They are very tiny; in fact, they are too small to even be seen with a microscope. There are even smaller particles that make up an atom. These subatomic particles are the proton, the neutron, and the electron. The **proton** is an atomic particle with a positive charge that is part of an atom's nucleus. The **neutron** is an atomic particle that has no charge and can also be found in the atom's nucleus. The proton and neutron are relatively the same size and mass; each proton or neutron is 1 AMU (atomic mass unit). Finally, the **electron** is an atomic particle that has a negative charge. Unlike the proton and the neutron, the electron can be found outside the nucleus of an atom; it is the smallest particle in the atom. In fact, the electron has virtually no mass at all.

Model of a Helium Atom:



**What are the parts of an atom?**

**Proton**

**Neutron**

**Electron**

**Location**

**Location**

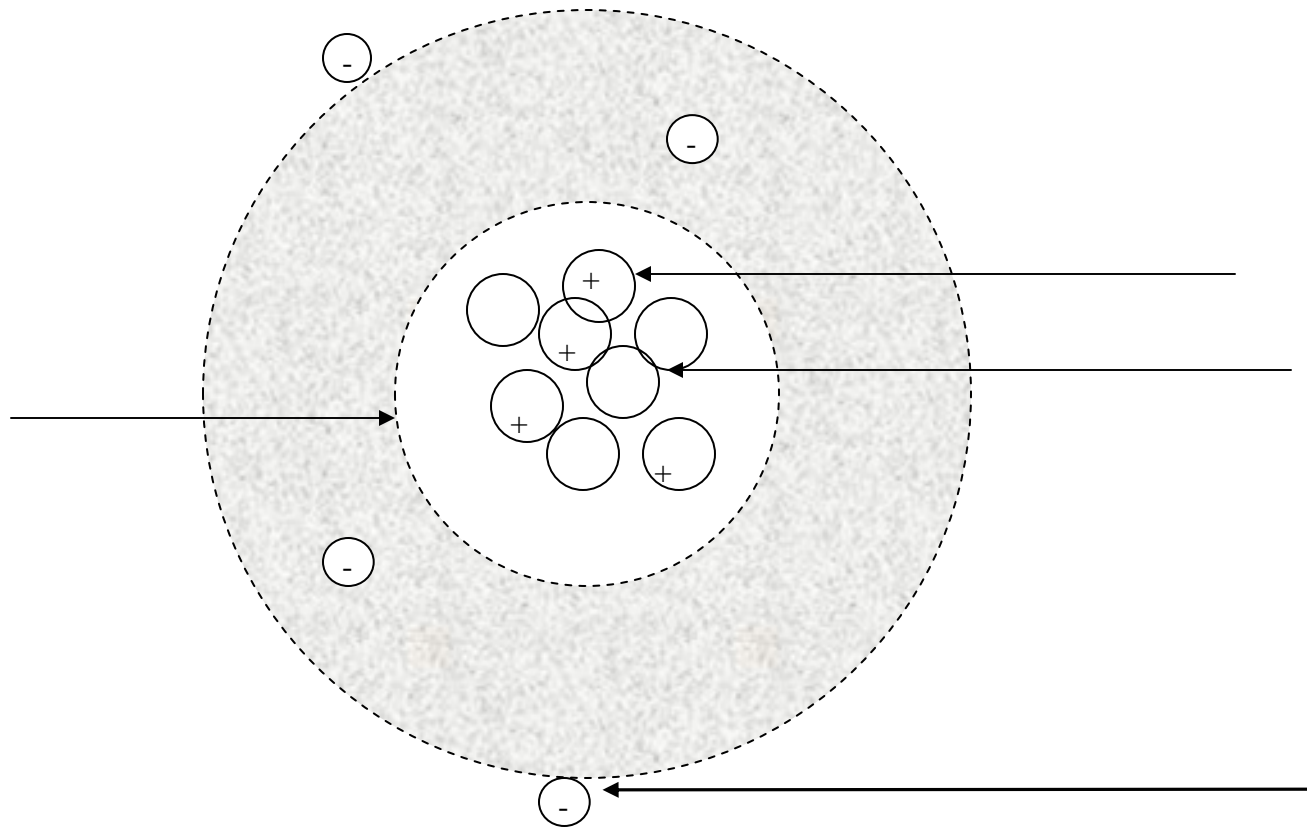
**Location**

**Charge**

**Charge**

**Charge**

**Directions:** Using the word bank, label each part of the atom and its charge.



**Word Bank**

**Proton**  
**Electron**  
**Negative**  
**Neutron**

**Neutron**  
**Positive**  
**No charge**

Which of the three atomic particles is the smallest? \_\_\_\_\_