

### 3-5 What is an atomic mass?

#### Lesson Review

Complete the following.

1. The total mass of the protons and neutrons in an atom is called the \_\_\_\_\_.
2. One amu is equal to the mass of one \_\_\_\_\_.
3. The element \_\_\_\_\_ has a mass number and an atomic number of 1.
4. The total number of \_\_\_\_\_ in an atom is determined by subtracting the atomic number from its mass number.
5. Neutrons and \_\_\_\_\_ have the same mass.
6. The total number of protons and neutrons in the nucleus of an atom is called the \_\_\_\_\_.
7. The mass of an atom is measured in \_\_\_\_\_.
8. Each \_\_\_\_\_ has its own mass number.
9. The element \_\_\_\_\_ has an atomic number of 8 and a mass number of 16.

#### Skill Challenge

*Skills: synthesizing, comparing*

Use the table below to answer the following questions.

Element	Atomic Number	Mass Number
Helium	2	4
Sodium	11	23
Iron	26	56
Gold	79	197
Lead	82	207

1. How many neutrons are in an atom of helium? \_\_\_\_\_
2. How many protons are in an atom of iron? \_\_\_\_\_
3. How many neutrons are in an atom of lead? \_\_\_\_\_
4. How many electrons are in an atom of sodium? \_\_\_\_\_

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Per: \_\_\_\_\_

### Atomic Structure

\*Use the Periodic Table

Directions: You can become more familiar with the atomic structure of some common substances by completing the chart below. For each substance, you have been given enough information to fill in all the blanks.

Substance	Symbol	Atomic Number	Mass Number	Number of Protons	Number of Neutrons	Number of Electrons
Helium	He	2	4			
Magnesium	Mg	12			12	
Zinc	Zn	30	65			
Bromine	Br		80			35
Aluminum	Al			13	14	
Uranium	U				146	92
Sodium	Na	11			12	
Krypton	Kr				48	36
Calcium	Ca		40	20		
Silver	Ag			47	61	

$$\left( \begin{array}{l} A\# = \#P = \#e \\ m = P + N \\ \text{or} \\ E + N \end{array} \right) \quad \begin{array}{l} A\# = \#p \\ m - p \\ \#p = \#e \end{array}$$