

NAME : _____

CLASS : _____

DATE : _____

1. What is atomic mass?

total number of electrons of an element

total number of protons and neutrons
of an element

the average atomic mass of an
element

the total number of protons of an
element

2. What is the atomic mass of uranium-238?

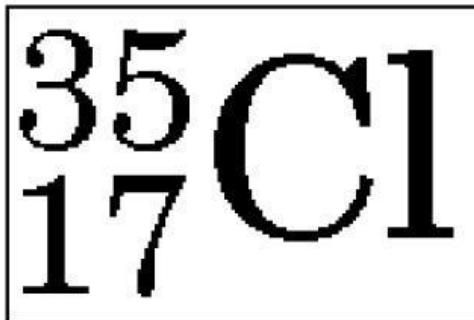
92

146

238

8

3.



What is the number of neutrons in this atom?

35

17

18

52

4. Isotopes are atoms of the same element that have different ...?

neutrons

charges

numbers of electrons

atomic numbers

5. What is percent abundance?

the percentage by mass of each element in a compound

the percentage of how often an element's isotope naturally appears on the earth

the percentage of protons relative to neutrons in an atom

the percentage of how often an element is found on the earth compared to other elements

6. Choose the response that is 15% converted into decimal format

1500

0.15

15.0

15%

7. Which is the formula for calculating average atomic mass for an element having two isotopes?

$$(m_1 \times p_1) + (m_2 \times p_2)$$

$$m_1 \times p_1 \times m_2 \times p_2$$

$$\frac{m_1 \times p_1}{m_2 \times p_2}$$

$$m_1 + p_1 + m_2 + p_2$$

8.

Isotope	Mass (amu)	Abundance	Average Mass
x	10.013	19.8%	
y	11.009	80.2%	
Average Atomic Mass			?

The table shows the two isotopes of an unknown element. What is the average atomic mass of the unknown element?

5.40 amu

10.5 amu

10.8 amu

11.0 amu

9.



Rubidium has two common isotopes, rubidium-85 and rubidium-87. If the abundance of rubidium-85 is 72.2% and the abundance of rubidium-87 is 27.8%, what is the average atomic mass of rubidium?

85.556 amu

86 amu

172 amu

7,481.645 amu

10. What makes an element unique?

the number of electrons

the number of neutrons

the charge of the element

the number of protons

11.



Which has more neutrons?

neither

carbon - 12

carbon - 13

12.



How many protons?

36

17

18

19

13.

Carbon	← A
6	← B
C	← C
12.011	← D

The box for an element from the periodic table is shown. Which is the atomic mass?

A

B

C

D

14.

Carbon	← A
6	← B
C	← C
12.011	← D

The box for an element from the periodic table is shown. Which is the atomic number?

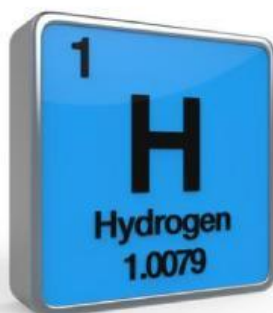
A

B

C

D

15.



What does the 1.0079 stand for?

atomic number

hydrogen

atomic mass

mass number

16.

Isotope	Mass	% Abundance
^{24}Mg	23.99 amu	78.99
^{25}Mg	24.99 amu	10.00
^{26}Mg	25.99 amu	11.01

Magnesium exists as the three isotopes shown. What is the average atomic mass of magnesium?

20.74 amu

22.56 amu

18.39 amu

24.31

17.

1

H

Hydrogen

1.00794

What does the 1.00794 stand for?

Hydrogen

atomic number

atomic mass

atomic explosion