

NAME : _____

CLASS : _____

DATE : _____

1. The positive particles of an atom are

electrons

positrons

neutrons

protons

2. the central region of an atom where its neutrons and protons are is its

nucleus

electron cloud

core

center

3. an atom with atomic number 6 would have how many protons

6

12

3

cannot be determined

4. What is the atomic number for an element with three protons?

2

1

3

6

5. In the modern periodic table elements are arranged by:

atomic mass

atomic number

valence electrons

number of isotopes

6. How many neutrons in C-14?

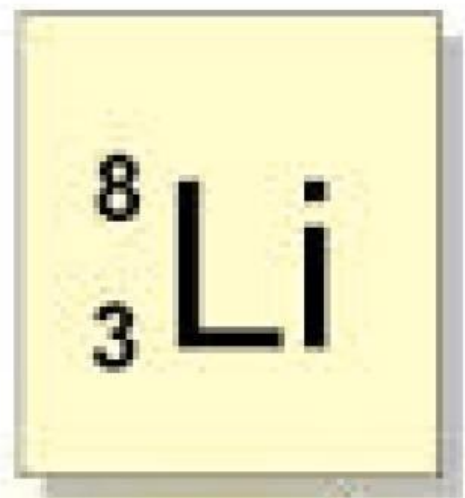
6

7

14

8

7.



How many neutrons does the isotope of lithium have?

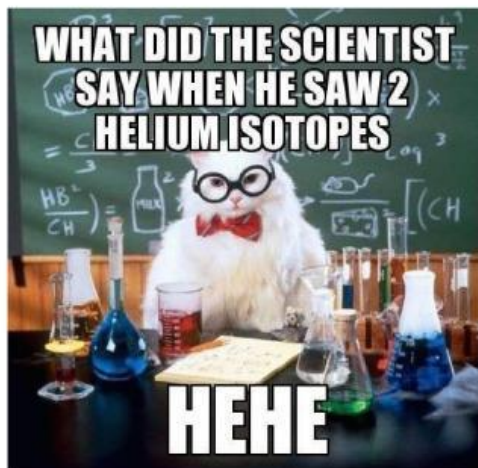
8

3

4

5

8.



What is an isotope?

A charged atom

Two atoms of the same element with different amounts of neutrons

Two atoms of the same element with different amounts of protons

A neutral atom

9. Which two components of an atom contribute to the mass?

Protons and neutrons

Protons and electrons

neutrons and electrons

10. Which part of an atom is used to identify it?

number of protons

number of neutrons

number of electrons

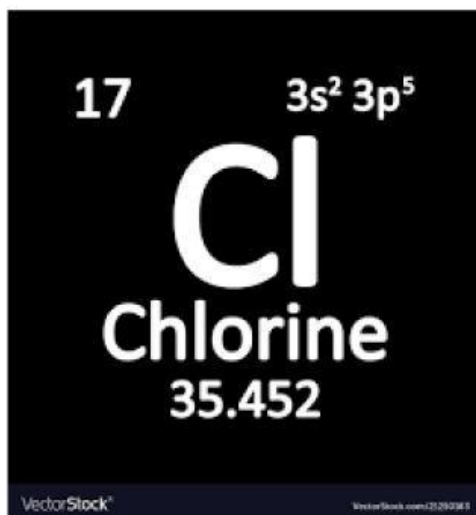
11. When you two atoms with different masses, Carbon-12 and Carbon-13 for example, what type of atom do you have?

Neutral atom

Ion

Isotope

12.



What is the atomic number?

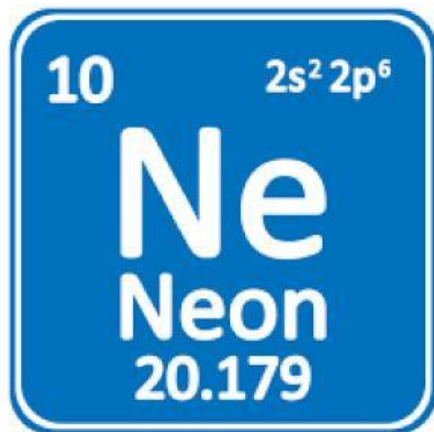
35

18

17

52

13.



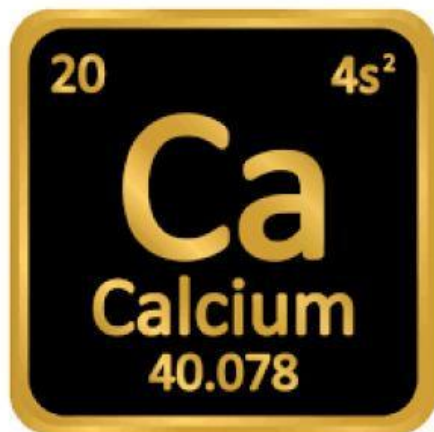
VectorStock®
What is the atomic mass of Neon?

10

20

30

14.



VectorStock®
How many neutrons does calcium have?

20

40

60

0

15.

Properties of Protons, Neutrons, and Electrons			
	Electron	Proton	Neutron
			
Symbol	e ⁻	p	n
Charge	1 ⁻	1 ⁺	0
Location	electron cloud around the nucleus	nucleus	nucleus
Relative mass	1/1,840	1	1

True or False - Protons and Neutrons have about the same mass.

True - They have about the same mass

False - They do not have about the same mass

16. An atom is considered an isotope if it has extra:

Protons

Neutrons

Electrons

Orbitals

17. Isotopes are atoms that have different

Mass numbers

Element names

Atomic Numbers

18. Two neutral atoms that have the same atomic number and different mass numbers are

Ions

Isotopes

Alpha particles

Different elements

19. Which phrase describes two atoms that are isotopes

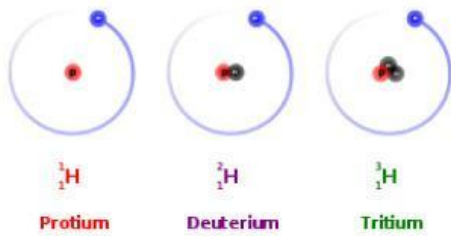
Same mass number, same atomic number

Same mass number, different atomic number

Different mass number, same atomic number

Different mass number, different atomic number

20.



Different isotopes have...

different masses

different atomic numbers

different electrons

different protons

21.



What is the atomic mass of the pictured isotope?

2

4

6

Hehehehe

22.



What is the atomic mass of the pictured isotope?

17

35

18

What a "clorious" isotope!

23.



What is the name of the pictured isotope?

Chlorine-Schmorine

Chlorine-17

Chlorine-35

Chlorine-18

24.



What is the name of the pictured isotope?

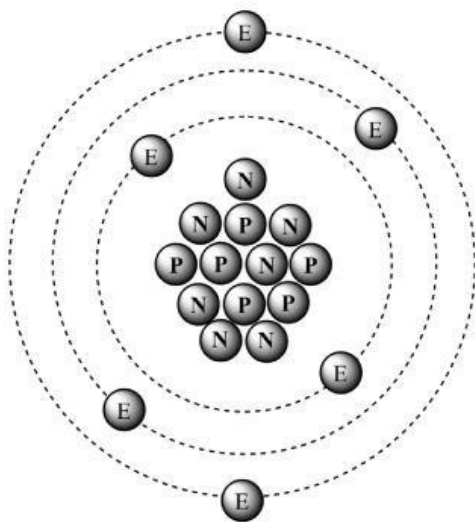
Copper-29

Copper-63

Copper-34

CopperWopperHopperBopper

25.



What is the name of the pictured isotope?

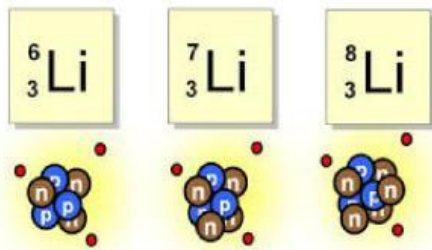
Carbon-12

Carbon-13

Carbon-14

Carbon-15

26.



which atom has 4 neutrons?

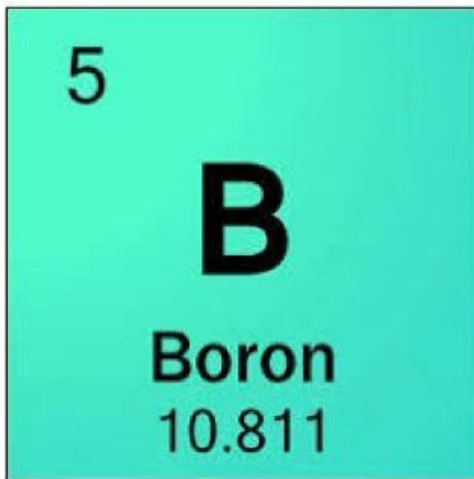
Li-6

Li-7

Li-8

they have the same # of neutrons

27.



How many neutrons does B (Boron) contain?

5

11

6

10.811

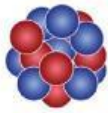
28.



carbon-12
98.9%
6 protons
6 neutrons



carbon-13
1.1%
6 protons
7 neutrons



carbon-14
<0.1%
6 protons
8 neutrons

Carbon has an atomic number of 6 and an atomic mass of 12. Which elements are considered isotopes of carbon?

Carbon-12

Carbon-13

Carbon-14

Both Carbon-13 and Carbon-14

29. Which answer choice describes the subatomic particles and their respective charges?

p⁻ e⁺ n

p⁺ e n⁻

p⁺ e⁻ n

p⁻ e⁺ n