

Keywords

proton
neutron
electron
nucleus

Test date: _____

Review Guide for Unit 5:

ATOMS

and their structure...

Study and you shall pass!!!

This tells you the number of protons in an atom	
Protons are	
Neutrons are	
Electrons are	
The number of protons is equal to what	
In the nucleus you'll find	
The protons and neutrons added together equals what	
Outside the nucleus you'll find	
An atom with a charge is called an	
The smallest part of an element that can be identified as that element. (Can't be cut into a smaller piece)	
Where the electrons move around in energy levels around the nucleus.	
This is the unit of measure scientist use to measure the mass of an atom.	
Atoms of the same element that have the same number of protons as the other atoms of the element but a different number of neutrons.	
The number of protons and neutrons in the nucleus of an atom.	
How do you find the atomic mass of an element?	

Never trust an atom... They make up everything!



Word Bank

- ELECTRONS
- ATOM
- NEGATIVE
- ADD PROTONS & NEUTRONS
- ISOTOPE
- ATOMIC #
- PROTONS & NEUTRONS
- MASS #
- POSITIVE
- ELECTRON CLOUD
- NEUTRAL
- ATOMIC MASS #
- ION
- ATOMIC MASS UNIT (AMU)
- # OF ELECTRONS

Name: _____

Date: _____

16
S
2-8-6 32.06

5
B
2-3 10.81

3
Li
2-1 6.941

12
Mg
2-8-2 24.305

Atomic # = _____

Atomic # = _____

Atomic # = _____

Atomic # = _____

Atomic Mass = _____

Atomic Mass = _____

Atomic Mass = _____

Atomic Mass = _____

of Protons = _____

of Protons = _____

of Protons = _____

of Protons = _____

of Neutrons = _____

of Neutrons = _____

of Neutrons = _____

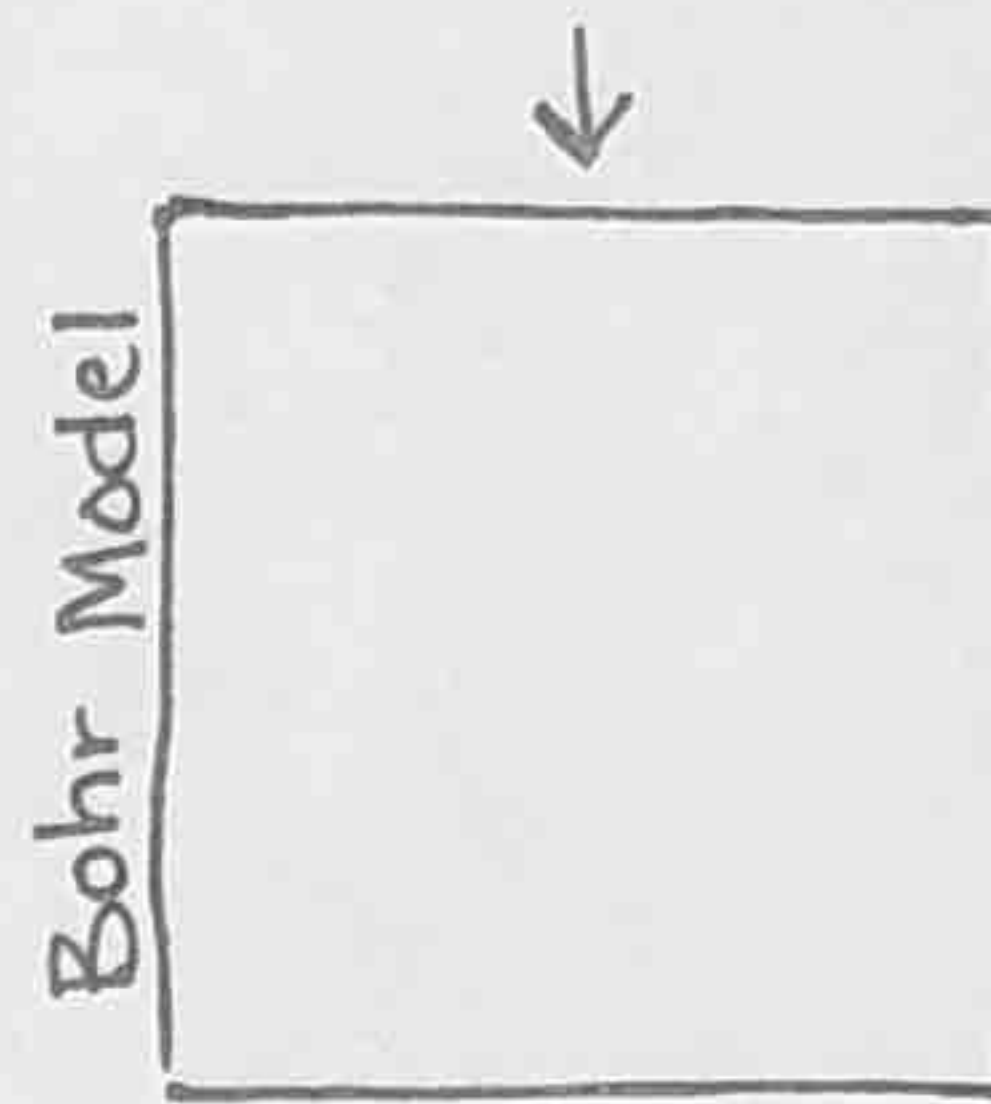
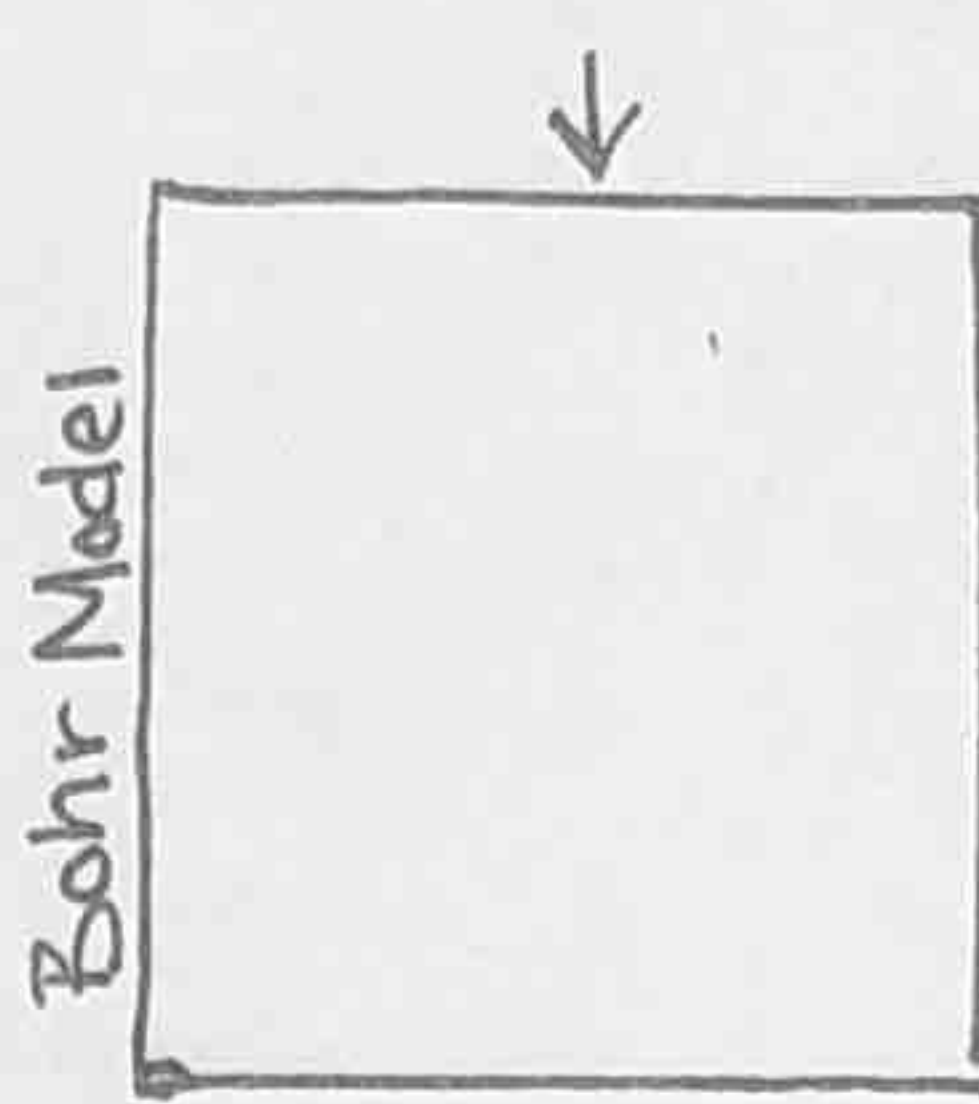
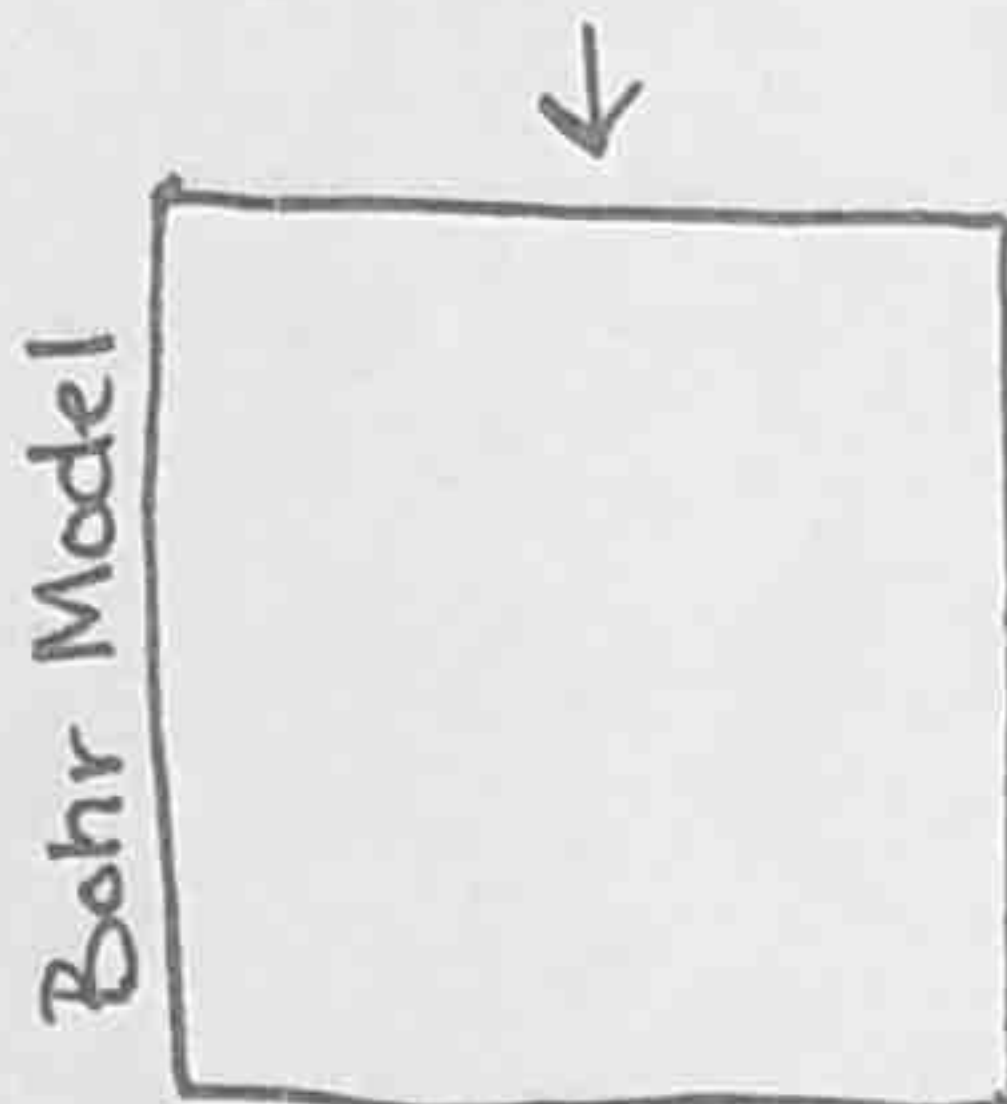
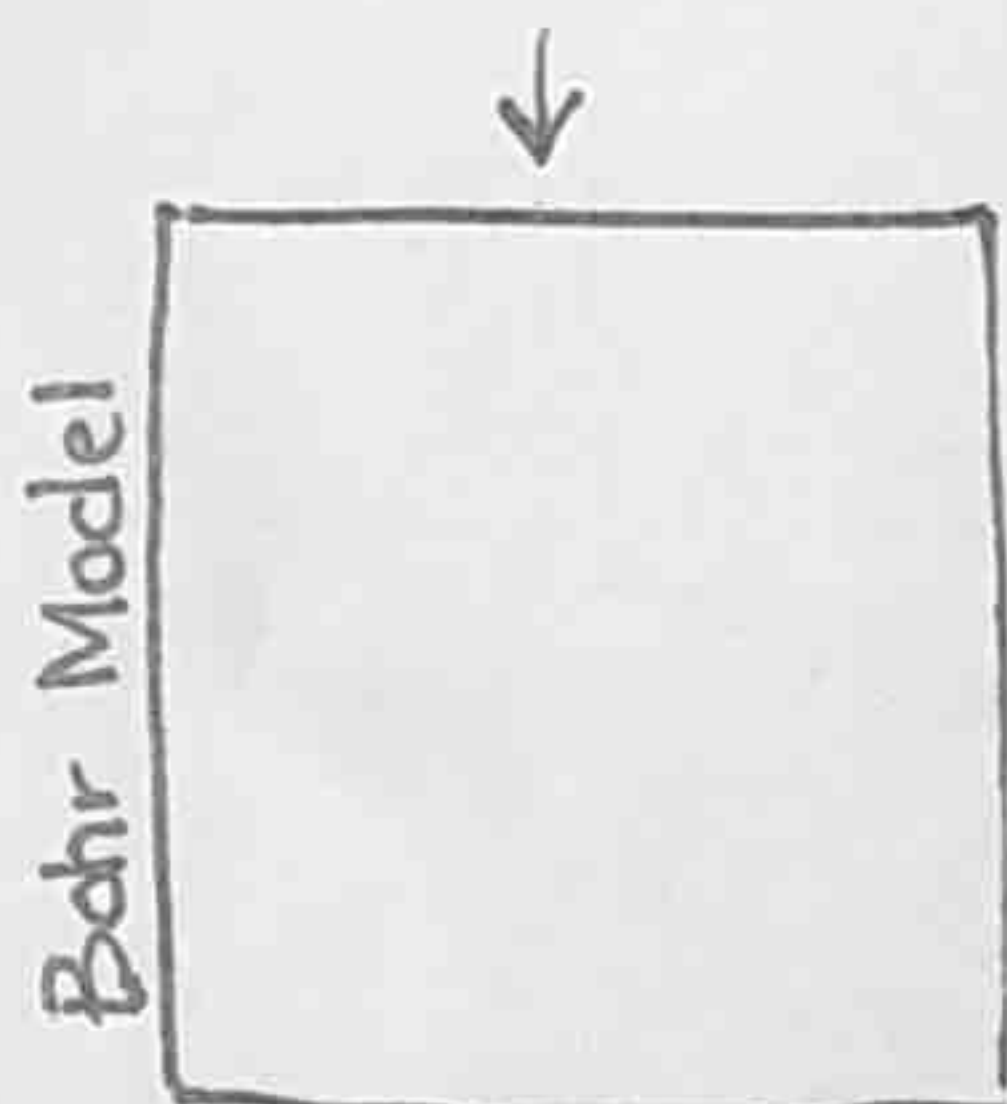
of Neutrons = _____

of Electrons = _____

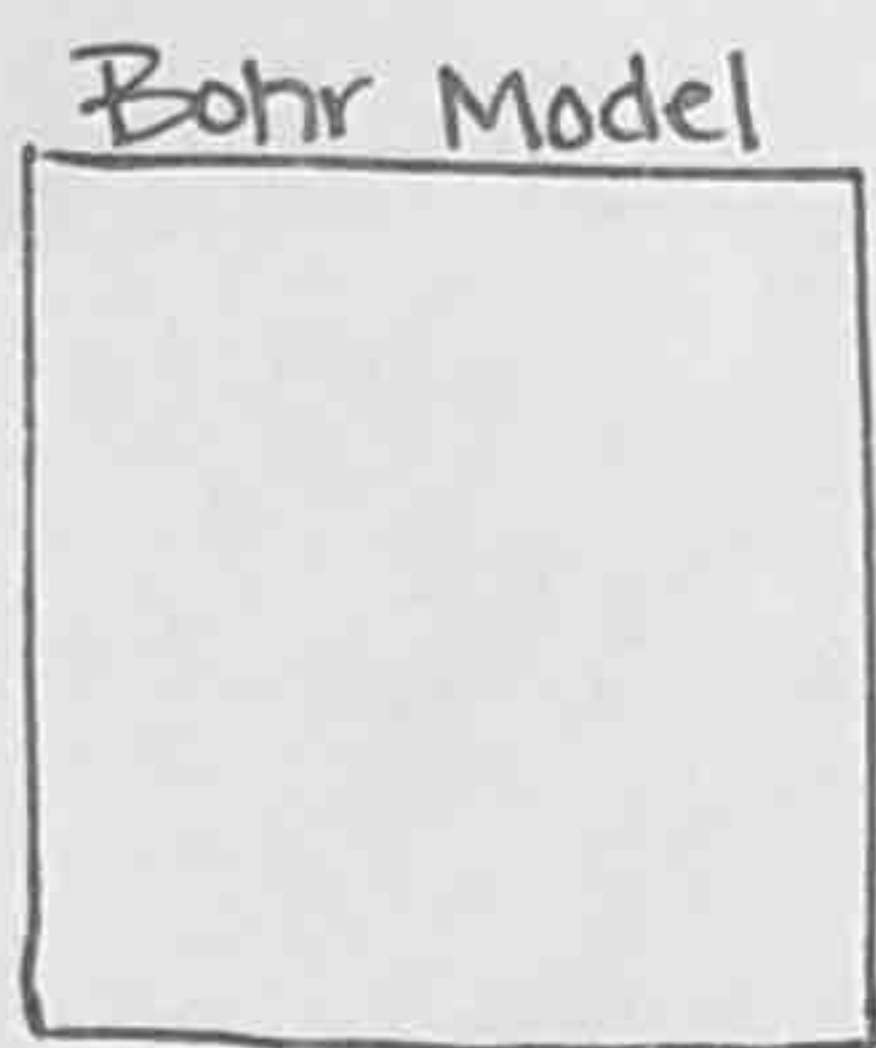
of Electrons = _____

of Electrons = _____

of Electrons = _____



9
Fluorine
2-7 18.998



Atomic # = _____

Atomic Mass = _____

of Protons = _____

of Neutrons = _____

of Electrons = _____

HA!
HA!



THIS LESSON IS REALLY BOHRING.

	Proton	Neutron	Electron
1. Has an electric charge			
2. Found in the nucleus			
3. Positively charged			
4. Moves in energy levels			
5. Negatively charged			

□ Electrons have a charge of -1
□ This means they are _____ charged

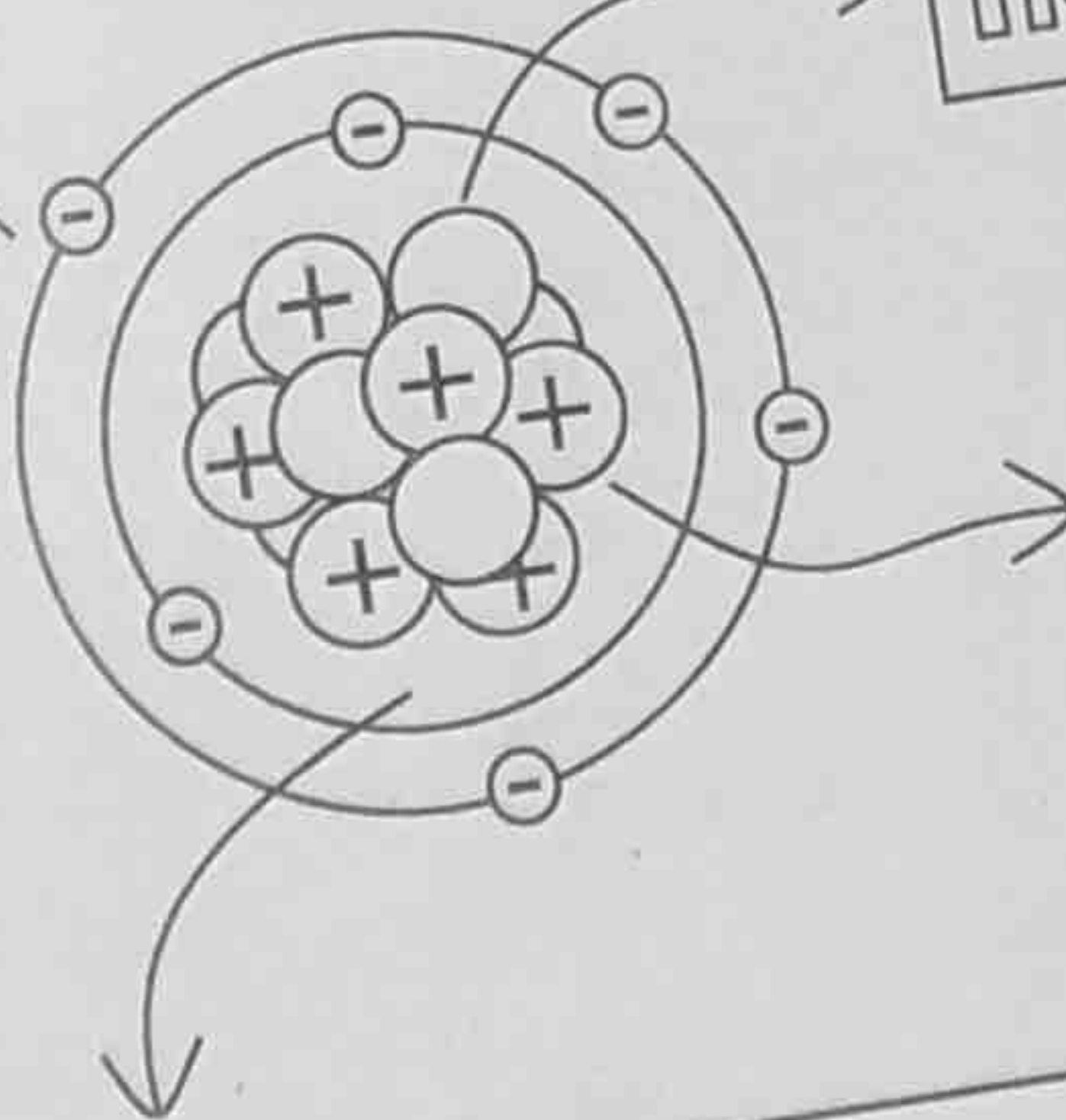
electron ⊖

□ Neutrons have a charge of 0
□ This means they are _____ charged

neutron ○

proton ⊕

□ Protons have a charge of +1
□ This means they are _____ charged



nucleus

□ The nucleus is made up of _____ and _____

REMEMBER:

- Atomic Mass = Protons + Neutrons.
- Atomic Number = # of Protons and Electrons.
- # of Protons = # of Electrons.
- Atomic Mass - Atomic # = # of Neutrons.

* Important!

Label Me...

8
O
Oxygen
15.999

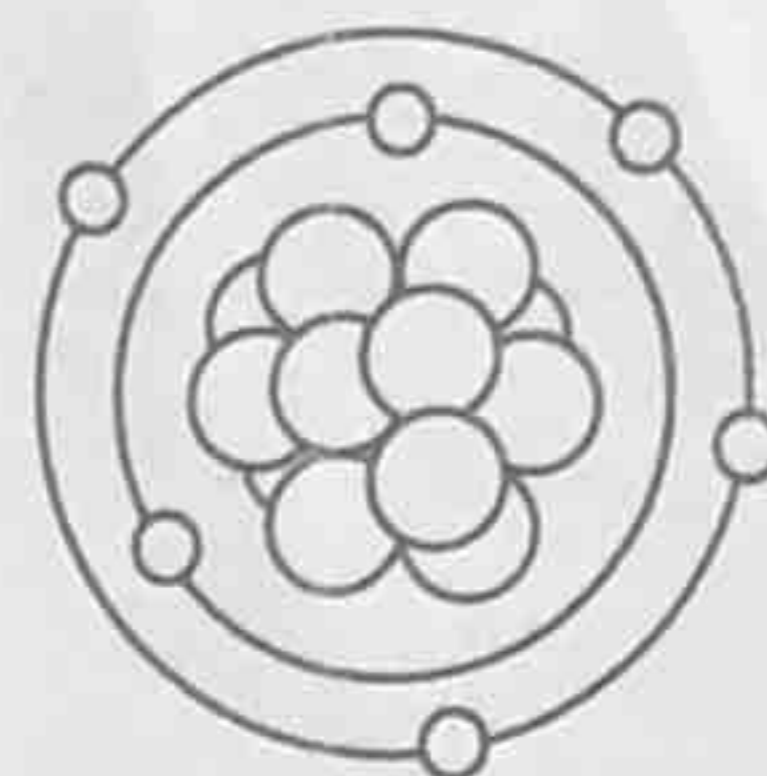
- Keywords**
- proton
 - neutron
 - electron
 - nucleus

KEY

test date: _____

Review Guide for Unit 5:

ATOMS



and their structure ...

Study and you shall pass!!!

This tells you the number of protons in an atom	Atomic #
Protons are	Positive
Neutrons are	Neutral
Electrons are	Negative
The number of protons is equal to what	# of Electrons (and atomic #)
In the nucleus you'll find	Protons + Neutrons
The protons and neutrons added together equals what	Atomic mass
Outside the nucleus you'll find	Electrons
An atom with a charge is called an	Ion
The smallest part of an element that can be identified as that element. (Can't be cut into a smaller piece)	Atom
Where the electrons move around in energy levels around the nucleus.	Electron Cloud
This is the <u>unit</u> of measure scientist use to measure the mass of an atom.	AMU <small>Atomic Mass Unit</small>
Atoms of the same element that have the same number of protons as the other atoms of the element but a different number of neutrons.	Isotope
The number of protons and neutrons in the nucleus of an atom.	Mass #
How do you find the atomic mass of an element?	Add Protons and Neutrons

Never trust an atom... They make up everything!



Word Bank

- ELECTRONS
- ATOM
- NEGATIVE
- ADD PROTONS & NEUTRONS
- ISOTOPE
- ATOMIC #
- PROTONS & NEUTRONS
- MASS #
- POSITIVE
- ELECTRON CLOUD
- NEUTRAL
- ATOMIC MASS #
- ION
- ATOMIC MASS UNIT (AMU)
- # OF ELECTRONS

Name: _____

Date: _____

16
S
Sulfur
2-8-6 32.06

5
B
Boron
2-3 10.81

3
Li
Lithium
2-1 6.941

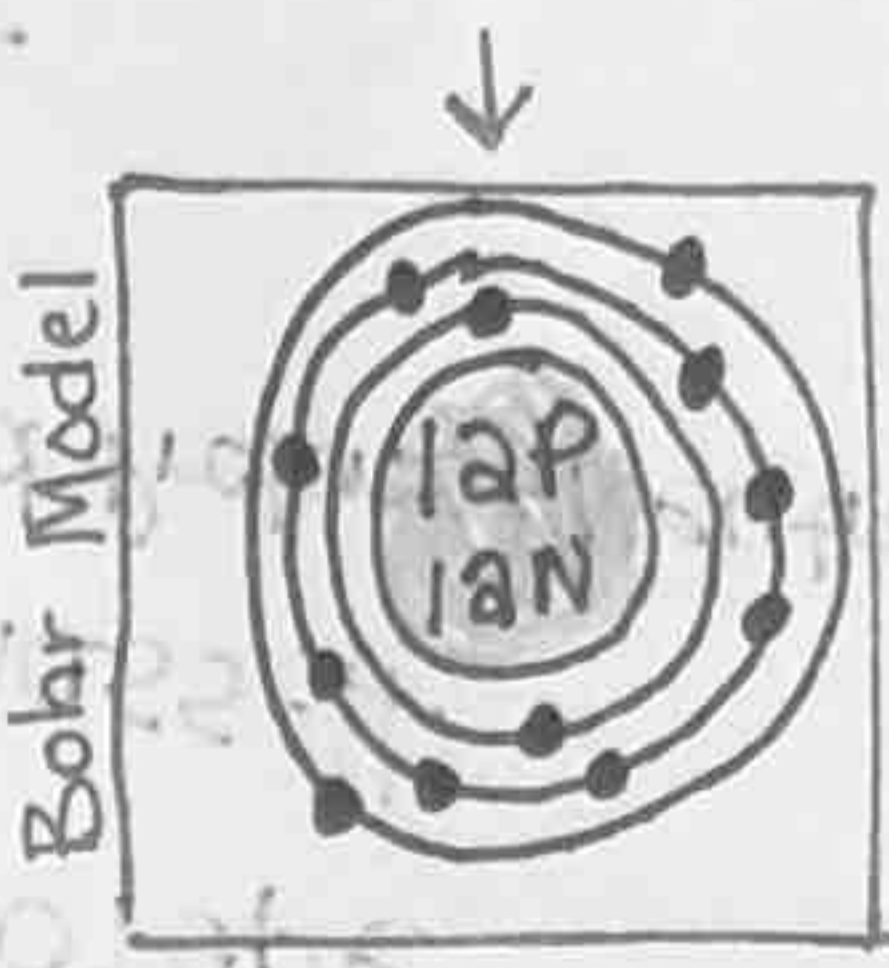
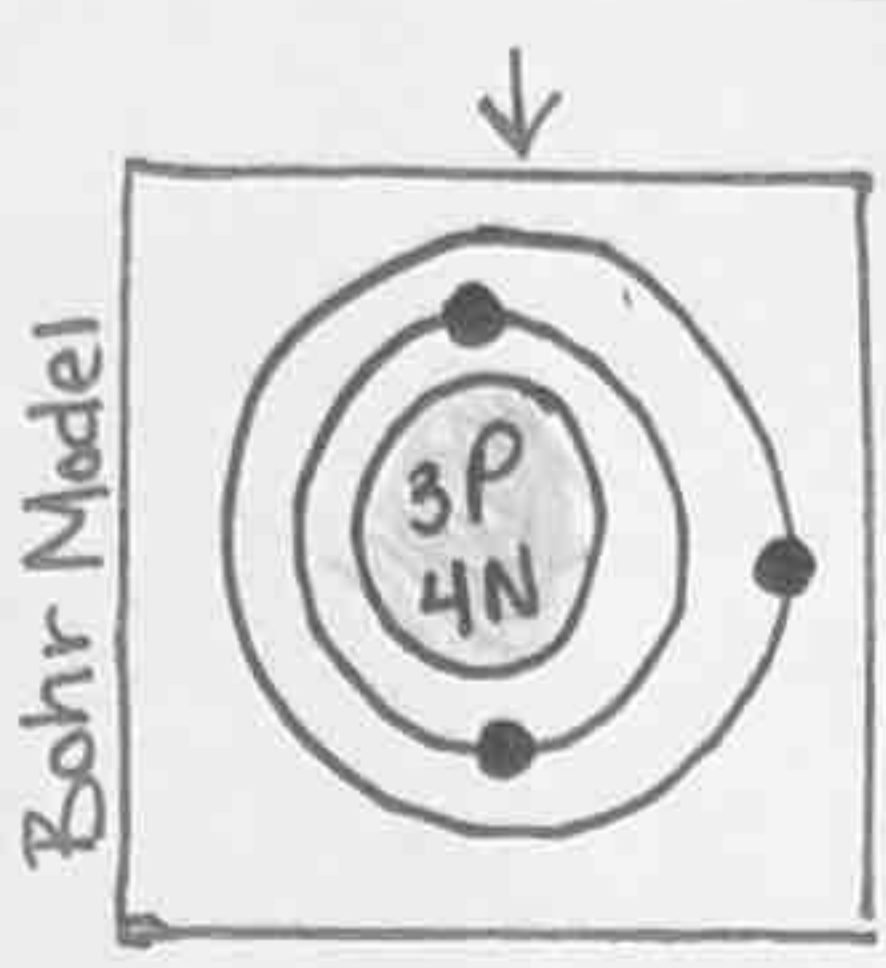
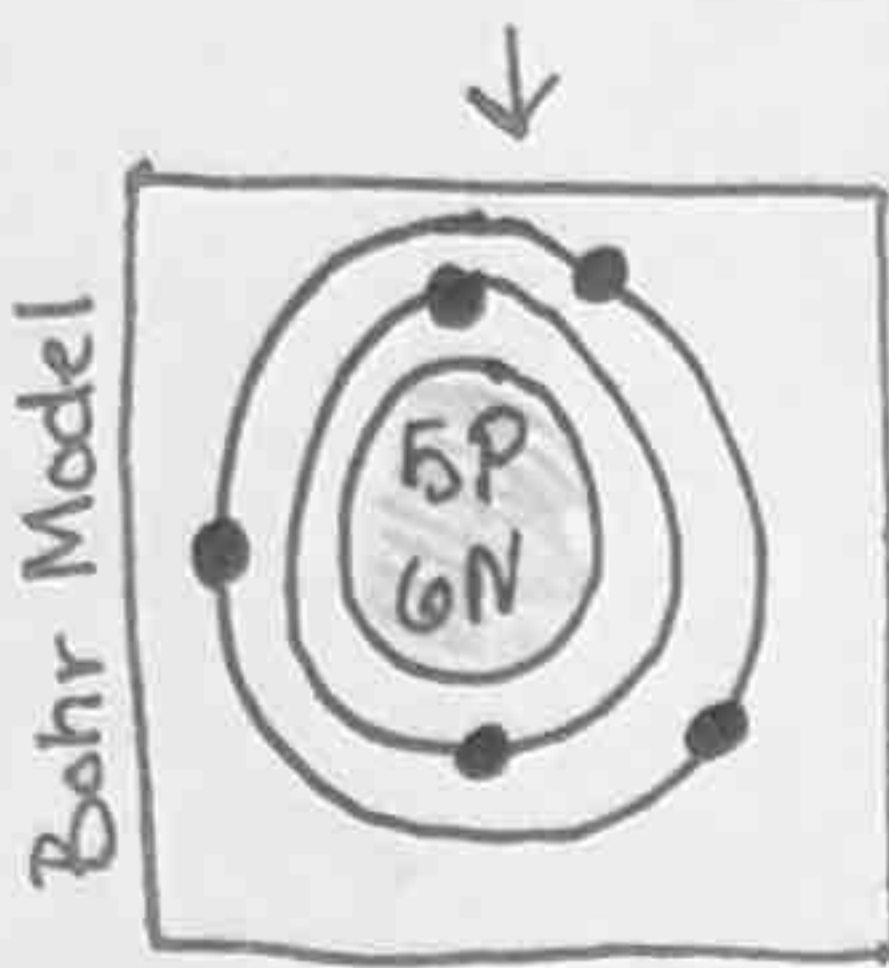
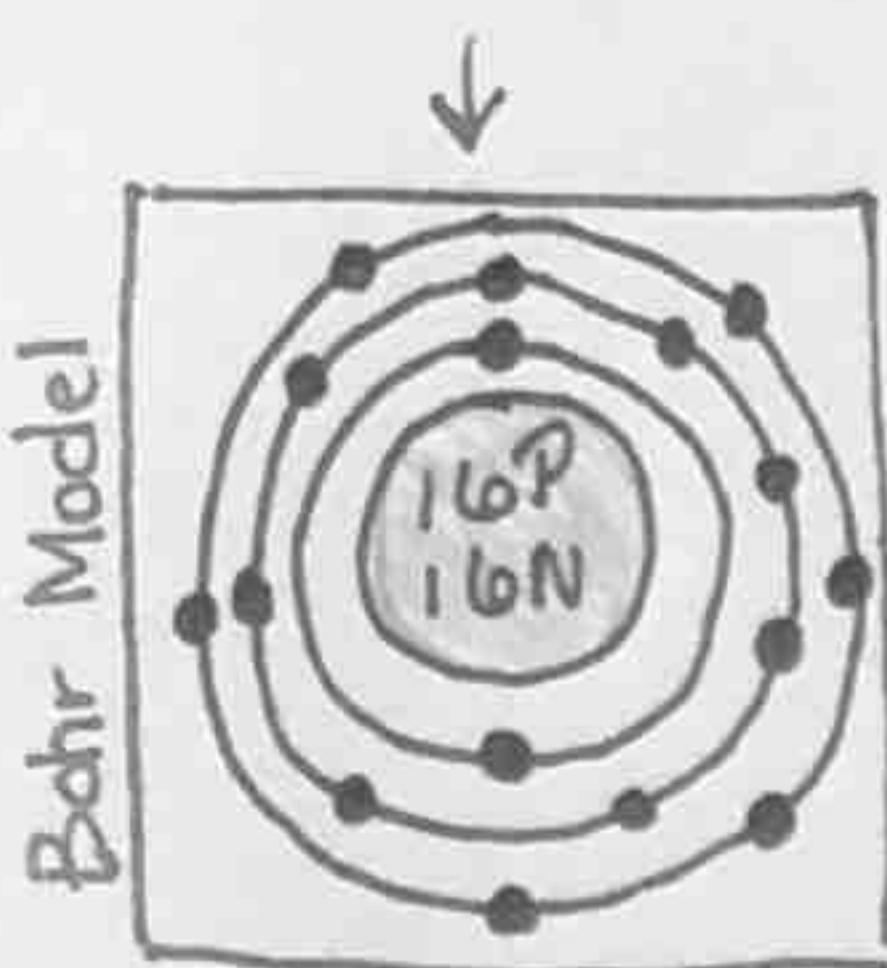
12
Mg
Magnesium
2-8-2 24.305

* Atomic # = 16
Atomic Mass = 32.06
* # of Protons = 16
of Neutrons = $32 - 16 = 16$
* # of Electrons = 16

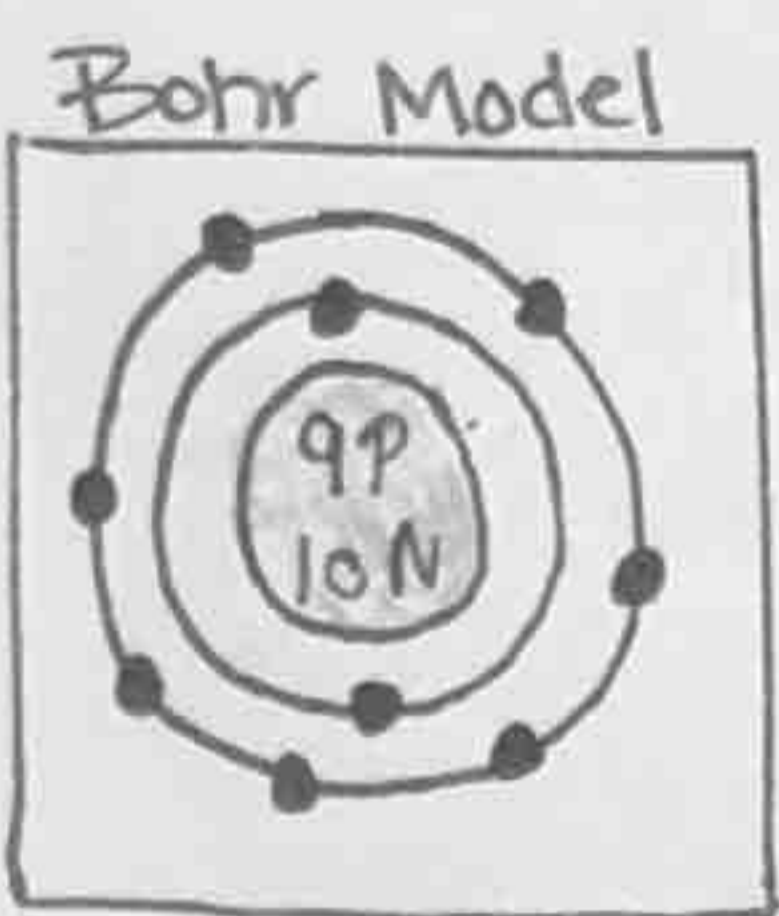
* Atomic # = 5
Atomic Mass = 10.81
* # of Protons = 5
of Neutrons = $11 - 5 = 6$
* # of Electrons = 5

* Atomic # = 3
Atomic Mass = 6.941
* # of Protons = 3
of Neutrons = $7 - 3 = 4$
* # of Electrons = 3

* Atomic # = 12
Atomic Mass = 24.305
* # of Protons = 12
of Neutrons = $24 - 12 = 12$
* # of Electrons = 12



9
F
Fluorine
2-7 18.998



HA!
HA!



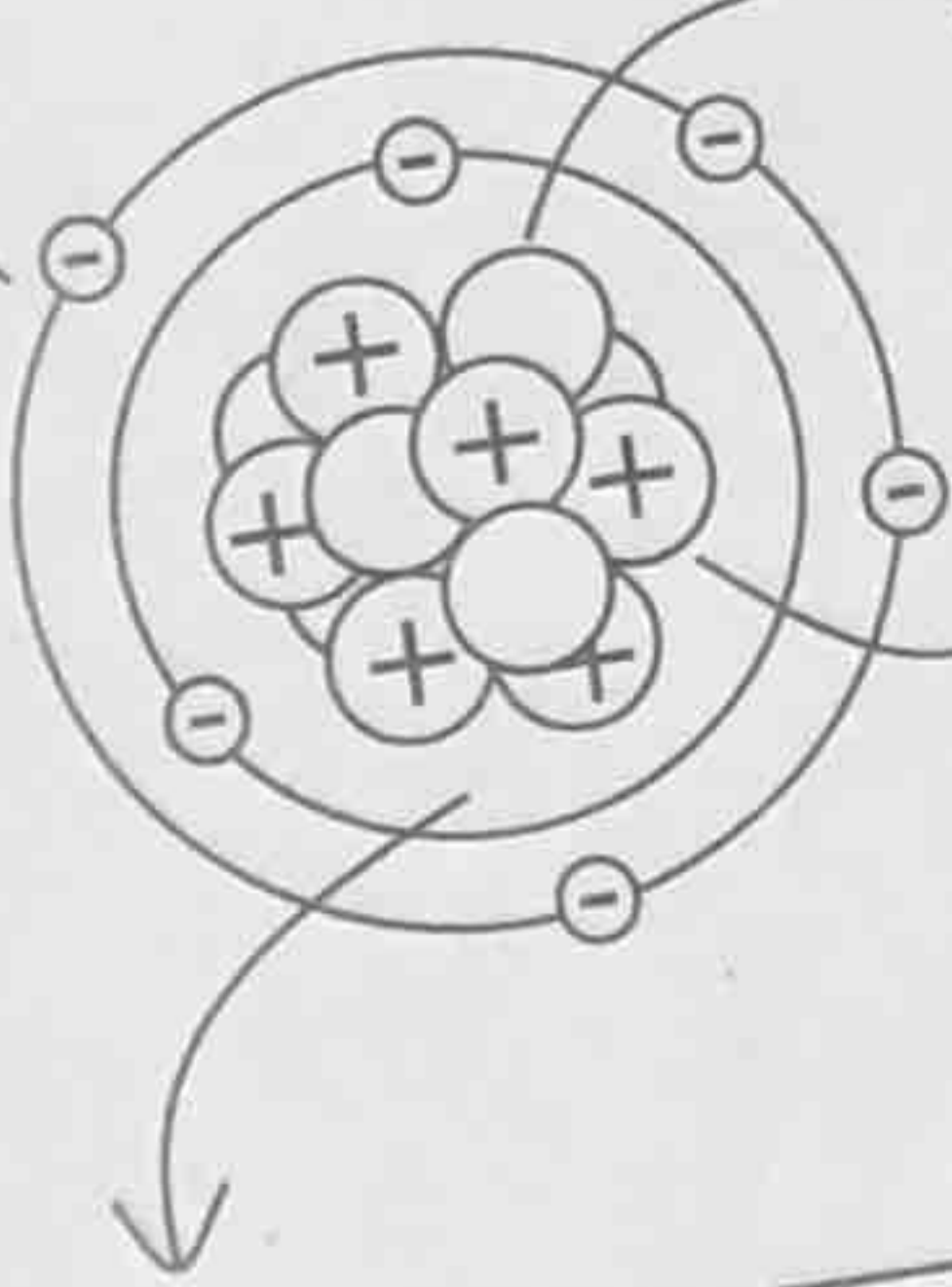
* Atomic # = 9
Atomic Mass = 18.998
* # of Protons = 9
of Neutrons = $19 - 9 = 10$
* # of Electrons = 9

	Proton	Neutron	Electron
1. Has an electric charge	✓ +		✓ -
2. Found in the nucleus	✓	✓	
3. Positively charged	✓		
4. Moves in energy levels			✓
5. Negatively charged			✓

□ Electrons have a charge of -1
□ This means they are Negatively charged
electron ⊖

□ Neutrons have a charge of 0
□ This means they are Neutral
neutron ○

proton ⊕
□ Protons have a charge of +1
□ This means they are positively charged



nucleus
□ The nucleus is made up of protons and neutrons

REMEMBER:

- Atomic Mass = Protons + Neutrons.
- Atomic Number = # of Protons and Electrons.
- # of Protons = # of Electrons.
- Atomic Mass - Atomic # = # of Neutrons.

* Important!

Label Me... ↓

8	← Atomic #
O	← Symbol
Oxygen	← Name
15.999	← Atomic Mass