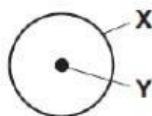


ATOMIC STRUCTURE HW 2

- 1 Which statement about the atom is **not** correct?
- A A nucleus contains electrons, neutrons and protons.
 - B A nucleus contains most of the mass of the atom.
 - C Protons have positive charge.
 - D Neutrons have no charge.

- 2 In the simple model of an atom, **X** orbits around **Y**.



What are **X** and **Y**?

	X	Y
A	electron	nucleus
B	neutron	electron
C	nucleus	proton
D	proton	neutron

- 3 Which particle has the smallest mass?
- A electron
 - B hydrogen ion
 - C neutron
 - D proton

- 4 Which particle is positively charged?
- A electron
 - B neutral atom
 - C neutron
 - D proton

- 5 What is the nucleon number of a sodium atom $^{23}_{11}\text{Na}$?
- A 11
 - B 12
 - C 23
 - D 34

- 6 Aluminium has the symbol $^{27}_{13}\text{Al}$.
- Which is a correct line of data for an atom of aluminium?

	number of		
	protons	electrons	neutrons
A	13	14	14
B	13	13	14
C	13	14	27
D	14	13	27

- 7 What is the definition of nucleon (mass) number?

- A the mass in grams of an atom
- B the number of electrons in an atom
- C the number of nuclei in a molecule
- D the total number of protons and neutrons in an atom

- 8 Which table correctly identifies the locations of protons, neutrons and electrons in an atom?

A

	inside nucleus	outside nucleus
electrons	✓	
neutrons	✓	
protons		✓

B

	inside nucleus	outside nucleus
electrons		✓
neutrons		✓
protons	✓	

C

	inside nucleus	outside nucleus
electrons	✓	
neutrons		✓
protons		✓

D

	inside nucleus	outside nucleus
electrons		✓
neutrons	✓	
protons	✓	

- 9 What are the numbers of neutrons, protons and electrons in a neutral atom of $^{235}_{92}\text{U}$?

	number of neutrons	number of protons	number of electrons
A	92	143	143
B	92	235	235
C	143	92	92
D	235	92	92

10 Which electronic structure represents a fluorine atom?

