

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

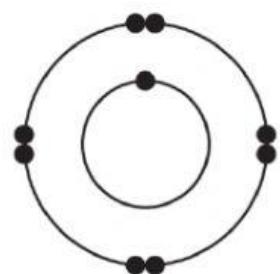
	inside nucleus	outside nucleus
electrons		✓
neutrons	✓	
protons	✓	

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

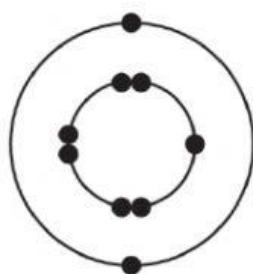
	number of neutrons	number of protons	number of electrons
A	92	143	143
B	92	235	235
C	143	92	92
D	235	92	92

10 Which electronic structure represents a fluorine atom?

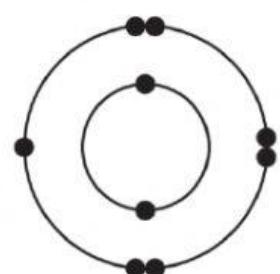
A



B



C



D

