HoardQ

Subject: Chemistry

Topics: •Atomic structure

Difficulty: Easy

Multiple Choice Questions

Q1) The de Broglie wavelength of a tennis ball of mass 60g moving with a velocity of 10m/s is approximately (Planck's constant, h = 6.63×10-34 Js)

Options:

1) 10-31 m

2) 10-16 m

3) 10-25 m

4) 10-33 m

True/False

Q1) Isotopes of an element have the different atomic numbers

Q2) The number of protons and electrons in a neutral atom is the same.

Match the following

Q1) Match the atomic number with their blocks

Column A	Column B

62	f
47	d
56	s
53	p

Q2) Match the following

Column A	Column B
O	7
N	8
CL	12
Mg	17

Solutions

Multiple Choice Questions

1) Option 4

Solution:

Given m = 60 g

v = 10 m/s

;² Ò ,ö×`

= 6.6×10-34/(60×10-3×10) = 10-33 m

True/False

1) False

Solution:

Isotopes are atoms of the same element, which have same atomic number but different mass numbers

2) True

Solution:

It says that number of protons and electrons in a neutral atom are same which is true since if there were more protons or more electrons the atom would develop a charge and thus not be neutral.

Match the following

1)

Column A	Column B
62	d

47	p
56	f
53	s

2)

Column A	Column B
O	7
N	8
CL	12
Mg	17