

CHM101 TMA1 List of Questions

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Q1 Arrange the following metals in an increasing order of their boiling point Li,Cs,Rb,K

- ☐ Li,Cs,Rb,K
- ☐ Cs,K,Rb,Li
- ☐ Rb,Cs,K,Li
- ☐ Li,K,Rb,C

Q2 Arrange the following alkali metals in order of their atomic number,Na,K,Li,

- ☐ Na,Li,K
- ☐ K,Li,Na
- ☐ Li,K,Na
- ☐ Li,Na,K

Q3 According to-----,electronegativity is equated to the force of attraction between an atom and the electron separated by a distance equal to the covalent radius of the atom.

- ☐ Boisbaudran
- ☐ Alfred-Rochow
- ☐ Mulliken-Jaffe
- ☐ Pauling

Q4 Which of these metals can their compounds be used in photography ?

- ☐ Ca
- ☐ Na
- ☐ K
- ☐ Cs

Q5 All these are types of metal lattices except-----

- ☐ hexagonal
- ☐ cubic close packed
- ☐ body-centred cubic
- ☐ hexagonal

Q6 Which of these statements is not true of metallic elements?

- ☐ They form acidic oxides
- ☐ they are malleable
- ☐ they have lustre
- ☐ they are ductile

Q7 _____ is a requirement in the electrolysis of beryllium chloride

- ☐ Sodium Chloride
- ☐ calcium
- ☐ chlorine
- ☐ beryllium

Q8 In the extraction of calcium from fused calcium chloride,-----is used as the anode

- ☐ zinc
- ☐ graphite

- ☐ iron
- ☐ copper

Q9 All these are uses of Beryllium except

- ☐ used in making atomic fuel containers
- ☐ used for making hand tools
- ☐ used for making aircraft
- ☐ used as window material in X-ray apparatus

Q10 Calcium oxide is a constituent of all but one of the following

- ☐ mortar
- ☐ glass
- ☐ portland cement
- ☐ barium

Q11 On exposure to air alkaline earth metals lose their silvery luster because-----

- ☐ they become dirty
- ☐ they are over shadowed
- ☐ a layer of oxide is formed on their surface
- ☐ they react with carbon (IV) in the atmosphere

Q12 All the alkaline earth metals form ionic compounds except

- ☐ beryllium
- ☐ calcium
- ☐ magnesium
- ☐ strontium

Q13 Calcium compounds give out a characteristic -----flame colouration

- ☐ brick red
- ☐ crimson red
- ☐ apple green
- ☐ lemon green

Q14 The hydrogen energies of alkaline earth metal ions are much greater than those of alkali metals because-----

- ☐ they are larger
- ☐ they are smaller with decreased cationic charge
- ☐ they are smaller with increased cationic charge
- ☐ they have decreased ionic charge

Q15 Which of these statements is not true of alkaline earth metals?

- ☐ Density decreases down the group from Be to Ca
- ☐ They are less dense than alkali metals
- ☐ Density increases after Ra
- ☐ They have more mass packed into a smaller volume

Q16 The first ionization energy of alkaline earth metals is more than that of corresponding alkali metals because----

- ☐ the alkaline earth metals have higher nuclear charge and are smaller in size
- ☐ the alkali metals have higher nuclear charge and are smaller in size

- ☐ the alkali metals have no nuclear charge
- ☐ the alkaline earth metals have a large size

Q17 _____ is extremely rare and it is a radioactive element

- ☐ magnesium
- ☐ raduim
- ☐ beryllium
- ☐ strontium

Q18 _____ is the second most abundant metallic element in sea water

- ☐ copper
- ☐ magnesuim
- ☐ chloride
- ☐ lithium

Q19 Which of these statements is not true of lithium?

- ☐ The salts are less thermally stable than those of the of other alkali metals
- ☐ Lithium reacts spontaneously with water
- ☐ Lithium does not form solid bicarbonate trioxide or peroxide
- ☐ Lithium forms stable salts with anions of high charge density

Q20 The strong cohesive forces present in the lithium atom gives rise to all but one of the following

- ☐ homonuclear bond energy
- ☐ softness
- ☐ relatively higher melting point
- ☐ relatively higher boiling point