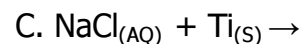
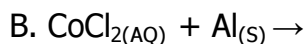
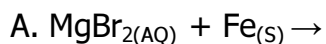


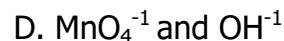
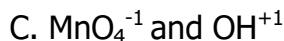
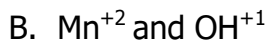
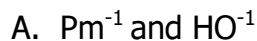
Midterm Practice Quiz

Number 1-21 down one side of a sheet of loose leaf. Choose one answer to each question. Answer these as quickly as you can; maximum time is 20 minutes.

1. Which reaction will occur spontaneously?



2. What are the symbols and charges on the permanganate ion and the hydroxide ion?



3. What substance boils at 70°C at 30 kPa?

A. propanone

B. ethanol

C. water

D. ethanoic acid

4. What is the vapor pressure of ethanol at 90°C?

A. 40 kPa

B. 90 kPa

C. 101.3 kPa

D. 150 kPa

5. Which 2 elements have properties similar to beryllium?

A. Li + Mg

B. Ba + H

C. Ca + Sr

D. B + Li

6. Which of these isotope pairs have 7 neutrons?

A. N-14 and O-16

B. C-12 and C-13

C. Al-13 and B-13

D. C-13 and N-14

7. Which metal will not react with $\text{HCl}_{(\text{AQ})}$?

A. Ag

B. Ti

C. Sn

D. Zn

8. Which ion has 10 total electrons?

A. Ne°

B. Sc^{+3}

C. F^{-1}

D. Sn^{+4}

9. Which ion has 27 total electrons?

A. Cu^{+2}

B. Co^{+2}

C. Co^{+3}

D. Zn^{+3}

10. Which element makes ionic compounds with halogens?

A. Fe

B. Si

C. C

D. S

11. What substance has the lowest freezing point?

A. Cu

B. Si

C. Na

D. Li

12. What is the molar mass of chiolite, which has a strange formula of $\text{Al}_3\text{F}_{14}\text{Na}_5$?

14. Which species has equal number of electrons as argon?

A. I^{-1}

B. Na^{+1}

C. Al^{+3}

D. P^{-3}

15. Which isotope listed are the average weighted atomic masses based upon?
 A. H-1 B. He-4 C. C-12 D. Au-197
16. Which element listed has the highest density? A. Pd B. Pb C. Sn D. Ag
17. How much energy must be removed to make 3.00 grams of water change temperature from 275 Kelvin down to 274 Kelvin?
 A. 4.18 Calories B. 12.54 Joules C. 12.54 Calories D. 12.54 calories
18. Which ionic compound dissolves best in water?
 A. AgCl B. CaSO₄ C. Mg₃(PO₄)₂ D. (NH₄)₂S
19. Which of these is the only correct tabulation of protons, neutrons & electrons for platinum?
 A. 78p⁺ 78e⁻ 195n⁰ B. 195p⁺ 195e⁻ 117n⁰
 C. 78p⁺ 78e⁻ 78n⁰ D. 78p⁺ 78e⁻ 117n⁰
20. Which choice has the atoms in mass order (small to large)?
 A. Cl, Ar, K B. Na, Mg, Al C. Co, Ni, Cu D. Fe, Co, Ni
21. Which element in the compound chiolite (from # 12) is matched to its correct % composition by mass in this compound?
 A. Al - 81.0% B. F - 63.6 % C. Na - 23.0% D. F - 57.6%

Answers below (upside down)

D	B	D	D	B	A	C	D	462 g/mole	C
21	20	19	18	17	16	15	14	12	11
A	A	C	A	D	C	D	C	D	B
10	9	8	7	6	5	4	3	2	1