

حلول مجلد الإعادة / كيمياء الكويز الثاني

#### **Question No. 24**

What is the coefficient of chlorine gas after balancing the following equation?  $Fe(s) + Cl_2(g) \rightarrow FeCl_3(s)$ 

- 0 3 2 0 4
- 0 1



The ionization energy of silicon is lower than the ionization energy of \_\_\_\_\_\_

Asp

- sodium
- phosphorus
- aluminum
- magnesium



M1:

#### **Question No. 22**

Solid aluminum and gaseous oxygen react in a combination reaction to produce Al<sub>2</sub>O<sub>3</sub>

 $4Al(s) + 3O_2(g) \rightarrow 2Al_2O_3(s)$ The maximum amount of  $Al_2O_3$  that can be produced from 2.5 g of Al and 2.5 g of  $O_2$  is \_\_\_\_\_g.

- ◎ 4.7
- 07.4
- 5.3
- 9.4











In which of these substances are the atoms held together by polar covalent bonding?







## Question No. 7

What volume (mL) of a 3.45 M lead nitrate solution must be diluted to make 450 mL of 0.99 M solution of lead nitrate?

🔍 129 mL

○ 101 mL

O 109 mL

○ 56 mL



In the reaction below, what is the theoretical yield in moles for NO when 3 moles of  $NH_3$  react with 3 moles of  $O_2$ ?



# The type of bond in I2 is a (an) ..... bond

- Metallic
- Polar covalent
- Nonpolar covalent
- Ionic



The molarity (M) of an aqueous solution containing 22.5 g of sucrose  $(C_{12}H_{22}O_{11})$  in 35.5 mL of solution is \_\_\_\_\_

0.0657

3.52

0 1.85

0.104



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## Use the periodic table to answer the following question: The formula CCL has a molar mass of \_\_\_\_g/mol.



# The most correct name for the compound NI3 is:

- mononitrogen triiodide
- nitrogen iodide
- triiodo nitrogen
- nitrogen triiodide

Total questions in exam: 25	Answered: 8					
Question No. 13				**		an Angel
What is the final molar final volume of 0.2 L?	ity of HNO3 soluti	on, if 300 mL (	of 2M HNC	) was diluted	toa	
◎ 3.0 M ◎ 5.0 M	$\sim$					
<ul> <li>○ 4.0 M</li> <li>○ 6.0 M</li> </ul>			an an an Araban An Anna an Angalan an Angalan An Angalan an Angalan Angalan an Angalan			

## Question No. 23



- 2
  6
  4
- 0 8





How many moles and how many atoms of zinc (Zn) are in a sample weighing 34.9 g?

0.533 mol, 8.85 ×10<sup>-25</sup> atoms
 1.87 mol, 3.10 × 10<sup>-24</sup> atoms
 0.533 mol, 3.21 ×10<sup>23</sup> atoms
 1.87 mol, 1.13 × 10<sup>24</sup> atoms



What is the molecular formula of a compound that has a molar mass of 300 g/mol and its empirical formula is CH<sub>2</sub>O?

MA

- O C<sub>2</sub>H<sub>4</sub>O<sub>2</sub>
- C₄H<sub>\$</sub>O₄
- C<sub>3</sub>H<sub>6</sub>O<sub>3</sub>
- C10H20O10

Which of these substances gives a weak electrolyte when dissolved in water?

- weak base
- ionic salt
- strong acid
- strong base



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Question No. 1	4 Maria	add your	Alter	Art In	10 14	Es.	
	molecular form mulaof NO2.		ling and the second	14111	here .	$t_{k_{T_{2}}}$	
NO2	a construction		ia <sup>na</sup> la	Q.,			
◎ N2O3			di ser				
N2O4		dian.	i diga sala				

# The name of the chemical compound FeCO<sub>3</sub> is:

- iron carbonate
- iron(II) carbonate
- ◎ iron(III) carbonate
- iron(I) carbonate



مطراقلي Save & Next

Which of these substances gives a weak electrolyte when dissolved in water?

- weak base
- ionic salt
- strong acid
- strong base

Find out the molecular formula of a compound that has a molar mass of 138.0 g/mol and an empirical formula of NO2.

@ N3O6

• NO<sub>2</sub>

N2O3

@ N2O4



# The molar mass of $Ca_3(PO_4)_2$ is equal to:

◎ 310 g/mol

O 250 g/mol

O 134 g/mol

O 215 g/mol





The number of CO<sub>2</sub> molecules that are produced from burning of 57.11 g of C<sub>g</sub>H<sub>1g</sub> (Molar mass = 114.22 g/mol) according to the following equation:  $2 C_g H_{1g(1)} + 25 O_{2(g)} \rightarrow 16 CO_{2(g)} + 18 H_2O_{(g)}$ 

2.41 x 10<sup>24</sup> molecules.

6.02 x 10<sup>23</sup> molecules.

<sup>©</sup> 8 molecules.

16 molecules.

The substance that causes the oxidation of another substance is called:



لأنه مفروض اختار اختزال و مو موجود بالخياري فالعامل المؤكسد هو نفسه اللي صارله اختزال

WWESHON NO. 8

For a given reaction

 $V_2O_5(s)$  + 5 Ca(l)  $\rightarrow$  2 V(l) + 5 CaO(s)

When 10 moles of  $V_2O_5$  are mixed with 10 moles of Ca, which is the limiting reactant according to the above equation?



The number of CO<sub>2</sub> molecules that are produced from burning of 57.11 g of C<sub>8</sub>H<sub>18</sub> (Molar mass = 114.22 g/mol) according to the following equation:  $2 C_8H_{18(1)} + 25 O_{2(g)} \rightarrow 16 CO_{2(g)} + 18 H_2O_{(g)}$ 

- $\odot$  2.41 x 10<sup>24</sup> molecules.
- $\odot$  6.02 x 10<sup>23</sup> molecules.
- $\odot$  8 molecules.
- $\bigcirc$  16 molecules.



As you move from the top to the bottom of the periodic table:

- $\boldsymbol{\Theta}$  ionization energy decreases and atomic radius decreases
- () ionization energy increases and atomic radius increases
- ionization energy decreases and atomic radius increases

The substance that causes the oxidation of another substance is called

- © cathode
- reducing agent
- anode
- O oxidizing agent


Total questions in exam: 25   Answered: 0						
Question No. 2						
Write the name for FeS						
<ul> <li>iron(I) sulfide</li> <li>iron(II) sulfate</li> <li>iron(I) sulfate</li> <li>iron(II) sulfide</li> </ul>						

The substance that causes the oxidation of another substance is called

- cathode
- $\odot\,$  reducing agent
- $\odot$  anode
- $\bar{\bigcirc}\,$  oxidizing agent





**Question No. 24** 

The number of CO<sub>2</sub> molecules that are produced from burning of 57.11 g of C<sub>8</sub>H<sub>18</sub> (Molar mass = 114.22 g/mol) according to the following equation:  $2 C_8H_{18(1)} + 25 O_{2(g)} \rightarrow 16 CO_{2(g)} + 18 H_2O_{(g)}$ 

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0.104

What is the molecular formula of a compound that has a molar mass of 300 g/mol and its empirical formula is CH<sub>2</sub>O?

- C<sub>2</sub>H<sub>4</sub>O<sub>2</sub>
- <sup>⊙</sup> C₄H<sub>8</sub>O₄
- O C3H6O3
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- Metallic
- Polar covalent
- O Nonpolar covalent
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# Use the periodic table to answer the following question: The formula CCL has a molar mass of g/mol.

O 140

O 150

9 146

154

# The most correct name for the compound NI3 is:

- $\odot$  mononitrogen triiodide
- $^{\bigcirc}$  nitrogen iodide
- $\odot$  triiodo nitrogen
- $\odot$  nitrogen triiodide





# Total questions in exam: 25 | Answered: 8

### **Question No. 8**

All of the following elements occurs naturally as diatomic molecu

- Chlorine
- Iluorine
- neon
- iodine

Total questions in exam: 28	I Answered: 8	an a						
Question No. 13		a de la composición d		1111	A. Malanta	llan Sa	I Angel	erra i Alapare Alexan
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© 6.0 M								



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11

 $4 \text{ NH}_3 + 5 \text{ O}_2 \rightarrow 4 \text{ NO} + 6 \text{ H}_2\text{O}$ 

- 2.4 mol
- 2.8 mol
- 2.6 mol
- 3.0 mol

# Total questions in exam: 25 | Answered: 8



Total questions in exam: 26   Answered: 7	
Question No. 6	
What coefficient is placed in front of O2 to complete the balancing of the following equation?	
$C_5H_8 + ? O_2 \rightarrow 5CO_2 + 4H_2O$	
07	
O 3	
O 1	
O 5	









### Total questions in exam: 25 | Answered: 0

