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ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION • Subject Physical science Worksheet-7 Class 7 Date 18.05.2020 • **Chapter : Atoms, Molecules and Radicals** • Answer the following questions (MCQ) : (1×15) • Question1 Q. What is the empirical formula of the following molecular formula: C_3H_6 answer choices C_3H_6 CH_2 C_2H_4 CH_3 Question2 Q. What is the molecular formula if the empirical formula is C₂H₅ and the molecular molar mass is 58.14 g/mol? answer choices C_2H_5 C_4H_{10} $C_1H_{2.5}$ C_4H_8 Question 3 Q. What is the empirical formula for the following molecular formula: C₆H₁₄ answer choices $C_{6}H_{14}$ C_3H_7 CH_2 CH₃ Question 4 Q. What is the molecular formula if the empirical formula is CH₂O and the molecular molar mass is 180.18? answer choices CH_2O $C_2H_4O_2$ $C_4H_8O_4$ $C_6H_{12}O_6$ Question 5 Q. What is the empirical formula for the following molecular formula: C_5H_{12} answer choices C_5H_{12} CH_3 CH_2 $C_{2.5}H_{6}$ Question 6 Q. Which pair has the same empirical formula? answer choices

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NaCrO<sub>4</sub> and Na<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>
C<sub>2</sub>H<sub>4</sub>O<sub>2</sub> and C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>
C<sub>3</sub>H<sub>6</sub>O<sub>3</sub> and C<sub>2</sub>H<sub>6</sub>O<sub>2</sub>
CH<sub>4</sub> and C<sub>2</sub>H<sub>6</sub>
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Question 7

Q. A 4.50g sample of which of the following would have the greatest mass of oxygen? answer choices Na₂O (molar mass = 62g/mol) Li₂O (molar mass = 30g/mol) MgO (molar mass = 40g/mol) SrO (108g/mol)

Question 8

Q. A compound is determined to contain 14g of nitrogen and 32g of oxygen. The empirical formula of the compound is: answer choices

NO NO₂ N₂O

NO₃

Question 9

Q. How many moles of carbon are in 88g of propane, C₃H₈.
answer choices
2.0
16.0
6.0
96.0

Question 10

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Q. 2H<sub>2</sub>O
How many H<sub>2</sub>O molecules are present?
answer choices
1
4
2
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8

Question 11

Q. What do we call a chemical substance made up of 2 or more different types atoms bonded together? answer choices formula atom subscript compound.

Question1 2 Q. All ______ are made up of two or more atoms bonded together. answer choices atoms molecules electrons elements Question 13 Q. Bonds between atoms in a molecule form as a result of the sharing of? answer choices formulas electrons atoms chemicals Question 14 Q. A recipe for a chemical substance is called a _____ answer choices coefficent chemical formula Oxygen Atom Question1 5 Q. H₂O₂← ? This number tells the number of atoms present. answer choices coefficient molecule subscript atom

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