MATURITNÉ OKRUHY Z PREDMETU CHÉMIA

šk. rok: 2023/2024

VŠEOBECNÉ POMÔCKY:

Chemical Charts:
- Acid-Base Strengths
- Reduction Potentials
- Bond Energies
- Solubility
- pH Indicators
- Periodic Table

Calculator
pH meter
pH paper
Water
Basic solution
Acidic solution

OKRUHY:

Question 1
- **Task A**: Moles and Chemical Equations
- **Task B**: Electrochemistry – Voltaic Cell
- **Task C**: Metallic Bonding

Question 2
- **Task A**: Redox Reactions
- **Task B**: Mechanism of Organic Reactions
- **Task C**: Atomic Structure

Question 3
- **Task A**: Polymerization
- **Task B**: Electrons in Atom
- **Task C**: Data Analysis – Calorimetry

Question 4
- **Task A**: Oxygen Family – p^4 elements (Chalcogens)
- **Task B**: Chemical Bonding
- **Task C**: Thermochemistry: Bond Energies

Question 5
- **Task A**: Organic Acids and Bases
- **Task B**: Thermochemistry: Enthalpy Change
- **Task C**: Design an Experiment – Esterification of Carboxylic Acid

Question 6
- **Task A**: Reactions of Alkanes – Radical Substitution S_R
- **Task B**: Redox Reactions
- **Task C**: Electronic Structure of Atoms

Question 7
- **Task A**: Hydrocarbons
- **Task B**: Rates of Reaction
- **Task C**: Atomic Structure

Question 8
- **Task A**: Aromatic Compounds
- **Task B**: Acids and Bases
- **Task C**: Electrolysis – Preparation of Pure Metals

Question 9
- **Task A**: Nitrogen Family – p^3 elements
- **Task B**: Stoichiometry
- **Task C**: Alkenes

Question 10
- **Task A**: Carbonyl Compounds
- **Task B**: Chemical Reactions
- **Task C**: Fractional Distillation of Crude Oil

Question 11
- **Task A**: pH Value
- **Task B**: Atomic Structure
- **Task C**: Haloalkanes

Question 12

- **Task A**: Electronic Structure of Atoms
- **Task B**: Alkali Earth Metals – s^2 elements
- **Task C**: Addition on Double Bond

Question 13

- **Task A**: Halogens – p^5 elements
- **Task B**: Chemical Bonding
- **Task C**: Proteins

Question 14

- **Task A**: Covalent Bonding
- **Task B**: Alkanes
- **Task C**: Polarity and Intermolecular Forces

Question 15

- **Task A**: Solubility
- **Task B**: Thermochemistry
- **Task C**: Data Analysis – Hydrocarbon fuels

Question 16

- **Task A**: Water
- **Task B**: Rates of Reaction
- **Task C**: Oxidation of alcohols

Question 17

- **Task A**: Chemical Reactions
- **Task B**: Periodic Table
- **Task C**: Alcohols

Question 18

- **Task A**: Alkali Metals – s^1 elements:
- **Task B**: Measurement and Problem Solving
- **Task C**: Amines

Question 19

- **Task A**: Proteins
- **Task B**: Sulphur
- **Task C**: Separating mixtures

Question 20

- **Task A**: Noble gases
- **Task B**: Chemical Equilibrium
- **Task C**: Carbohydrates

Question 21

- **Task A**: Alkaline Earth Metals – s^2 elements:
- **Task B**: Carbohydrates
- **Task C**: Design an Experiment – Acids and Bases

Question 22

- **Task A**: Introduction to Organic Chemistry
- **Task B**: Thermochemistry
- **Task C**: Periodic Trends – Ionisation Energy

Question 23

- **Task A**: Ionic Bonding
- **Task B**: The Mole Concept
- **Task C**: Carbohydrates

Question 24

- **Task A**: Carboxylic Acids
- **Task B**: Halogen – p^5 elements:
- **Task C**: Enzymes

Question 25

- **Task A**: Lipids
- **Task B**: Stoichiometry
- **Task C**: Periodic Trends

Question 26

- **Task A**: Vitamins
- **Task B**: Acids and bases
- **Task C**: Chemical Equilibrium

Question 27

- **Task A**: Nucleic Acids
- **Task B**: Stoichiometry
- **Task C**: Design an Experiment – Measuring pH

Question 28

- **Task A**: Stoichiometry
- **Task B**: Enzymes
- **Task C**: Hybrid Orbitals

Question 29

- **Task A**: Stoichiometry
- **Task B**: Stereochemistry
- **Task C**: Design an Experiment – Preparation of Hydrogen Gas

Question 30

- **Task A**: Carbon
- **Task B**: Bonds in organic chemistry
- **Task C**: Design an Experiment – Preparation of Oxygen Gas

Haanova 28 · 851 04 Bratislava
tel.: 0907 115 967 · e-mail: tajomnik@bilgym.sk · www.bilgym.sk
Bankové spojenie: Tatra banka, a. s. Bratislava, kód banky 1100, IBAN: SK13 1100 0000 0026 2505 8017 · IČO: 30848008 · DIČ: 2021863998