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1. Formation of \_\_\_\_ gas by the action of dilute sulphuric acid on zinc. 2
- ☒ Hydrogen ☐ Oxygen ☐ Nitrogen ☐ None of these
2. Magnesium Ribbon burns with a dazzling white flame and changes into a white powder (True/False) 2
- Answer: True
3. Magnesium oxide is formed due to reaction between 2
- Answer: Magnesium + Oxygen ( $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$ )
4. What happens when milk is left at room temperature during summers? 2
- ☐ It freezes  
☒ It curdles due to bacterial action  
☐ It evaporates completely  
☐ It turns into butter
5. What happens to an iron nail when left exposed to a humid atmosphere ? 2
- ☐ It remains unchanged ☐ It melts ☒ It rusts due to oxidation ☐ It becomes shinier
6. What process occurs when grapes get fermented ? 2
- ☐ Photosynthesis  
☐ Evaporation  
☒ Chemical change leading to alcohol formation  
☐ Freezing
7. How do we know a chemical reaction has taken place ? 2
- ☐ There is always a change in color  
☐ The substance always turns into a gas  
☒ The identity of the original substance changes  
☐ The state of matter remains the same
8. What is one common characteristic of all the given situations (milk curdling, iron rusting, food digestion, etc) ? 2
- ☐ They all involve a physical change  
☐ They all are reversible changes  
☒ They involve the formation of new substances  
☐ All of Above
9. Which of the following is an example of a physical change ? 2
- ☐ Burning of Magnesium ribbon  
☐ Digestion of food  
☒ Melting of ice  
☐ Fermentation of Grapes

10. The rusting of iron in a humid atmosphere is due to: 2
- ☒ Reaction with oxygen and water
  - ☐ Reaction with nitrogen in the air
  - ☐ High temperature exposure
  - ☐ The presence of Carbon Dioxide
11. When food gets cooked, what kind of change occurs ? 2
- ☐ Only a physical change
  - ☐ Only a chemical change
  - ☒ Both Physical and Chemical Change
  - ☐ No changes occurs
12. What is the main reason for using sandpaper before burning magnesium ribbon ? 2
- ☐ To make it more shinier
  - ☒ To remove the oxide layer for better burning
  - ☐ To make it easier to hold
  - ☐ To increase the weight of the ribbon
13. What is the product formed when magnesium burns in the presence of oxygen ? 2
- ☐ Magnesium chloride
  - ☐ Magnesium carbonate
  - ☒ Magnesium oxide
  - ☐ Magnesium Hydroxide
14. Which of the following is not an indication of chemical reaction ? 2
- ☐ Evolution of gas
  - ☐ Formation of precipitate
  - ☒ Melting of a solid into liquid
  - ☐ Change in color
15. Which type of reaction occurs during respiration ? 2
- ☐ Exothermic reaction
  - ☐ Endothermic reaction
  - ☐ Redox reaction
  - ☒ Both Exothermic and Redox reaction
16. Which of the following reaction occurs during the burning of magnesium ? 2
- ☐ Magnesium undergoes reduction
  - ☒ Magnesium undergoes oxidation
  - ☐ A neutralization reaction occurs
  - ☐ A displacement reaction occurs
17. What is the primary gas required for the combustion of magnesium ? 2
- ☐ Nitrogen ☒ Oxygen ☐ Carbon dioxide ☐ Hydrogen

18. In the activity described why is magnesium ribbon held with tongs ? 2
- ☐ Because it is too small to hold with fingers
  - ☒ Because it reacts violently and is very hot when burnt
  - ☐ To avoid contamination
  - ☐ To ensure even burning
19. What is the color of the flame when magnesium burns ? 2
- ☐ Blue ☐ Red ☒ White ☐ Green
20. What kind of reaction is fermentation ? 2
- ☐ Physical ☒ Chemical ☐ Nuclear ☐ None of Above
21. Which of the following is an example of an irreversible reaction 2
- ☐ Dissolving salt in water
  - ☐ Evaporation of water
  - ☒ Cooking food
  - ☐ Freezing of water
22. What type of reaction takes place when iron rust ? 2
- ☒ Oxidation ☐ Neutralization ☐ Reduction ☐ Polymerization
23. What happens when a chemical reaction occurs ? 2
- ☐ The total mass changes
  - ☐ The number of atom decreases
  - ☒ The identity of the original substance changes
  - ☐ The substance undergoes only a state change
24. What is the purpose of adding an arrows in a word equation ? 2
- ☐ To seperate reactants from products
  - ☒ To indicate the direction of the reaction
  - ☐ To show the type of chemical reaction
  - ☐ To represent the equation
25. Which change can help determine whether a chemical reaction has taken place ? 2
- ☐ Change in color ☐ Evolution of gas ☐ Change in state ☒ All of above
26. What is the product formed when zinc reacts with dilute sulphuric acid ? 2
- ☒ Hydrogen gas ☐ Magnesium Oxide ☐ Zinc oxide ☐ Lead nitrate
27. In the reaction between magnesium and oxygen, what are the reactants ? 2
- ☐ Magnesium and potassium iodide
  - ☐ Zinc and dilute sulphuric acid
  - ☒ Magnesium and oxygen
  - ☐ Potassium iodide and lead nitrate

28. What is the purpose of using a word-equation to represent a chemical reaction ?

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- ☐ To make it easier to read
- ☐ To show the direction of the reaction
- ☐ To separate reactants from products
- ☒ To simplify the equation

29. In the reaction between potassium iodide and lead nitrate, what is the product formed ?

2

- ☐ Hydrogen gas   ☐ Magnesium oxide   ☒ Lead iodide   ☐ Zinc oxide

30. What is the significance of using a plus sign (+) between reactants in a word equation ?

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- ☐ To indicate the type of chemical reaction
- ☒ To separate reactants from products
- ☐ To show the direction of the reaction
- ☐ To represent the equation

31. Why is it important to handle acid with care when performing an activity involving chemical reactions ?

2

- ☐ Because it can cause skin irritation
- ☐ Because it can release toxic fumes
- ☒ Both a and b
- ☐ Neither of Above

32. What is the difference between a word-equation and a chemical equation ?

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- ☐ A word-equation uses symbols, while a chemical equation uses words.
- ☐ A word-equation shows reactants on the LHS, while a chemical equation shows products on the RHS
- ☐ There is no difference between the two
- ☒ A word equation represents physical change and chemical equation represents chemical change