

غير مصرح بالكتابة  
في هذه الصفحة

مركز الدراسات  
2025



محافظه القاهرة  
مديرية التربية و التعليم  
توجيه عام العلوم

النموذج الاسترشادي الثاني

مادة : ..... العلوم لغات .....

الفصل الدراسي الثاني 2025 / 2026 م

مسودة

اللهم اني استاذي

**Group 4 from (25-32):**

**\*Correct the underlined words:**

25. The reaction of oils with caustic soda is considered a fast reaction.  
 26. Mendel's first law is known as the Law of Independent Assortment.  
 27. Insulin hormone is secreted when blood sugar levels decrease

**\*Mention the important (function ) of each of the following:**

28. Adrenaline hormone.

29. Dynamo (Electric Generator).

30. Catalyst.

**\*Compare between each of the following:**

31.

Point of comparison	Inherited Traits	Acquired Traits
Definition		

32.

Point of comparison	Connecting cells in Series	Connecting cells in Parallel
Value of resulting Electromotive Force (EMF)		

انتهت الاسئلة

**Group 3 from (17-24):**

**\*Write the scientific term:**

17. The trait that disappears in all members of the first generation in Mendel's experiments ( )
18. The flow of electric charges through a metallic wire in a closed circuit. ( )
19. The change in the concentration of reactants and products per unit of time. ( )

**\*Mention the scientific reason:**

20. Mendel covered the stigmas of pea plant flowers while conducting his genetic experiments.

21. Alternating Current (AC) is generally preferred over Direct Current (DC).

22. A Rheostat is used in some electrical circuits.

**\*Solve the following problems:**

23. If the work done to transfer an electric charge of 300 Coulombs between two points is 66,000 Joules, calculate the potential difference between them.

24. A cross occurred between a pure tall-stemmed pea plant (TT) and a short-stemmed pea plant (tt). Illustrate this on a genetic basis and mention the ratios of the second generation

**Group 2 from (9-16):**

**\*Complete:**

9. The unit ..... is used to measure the amount of radiation absorbed by the human body.
10. The color of Blue Copper Hydroxide solution changes to ..... color when heated.
11. The current intensity passing through a conductor is ..... proportional to the potential difference across its terminals at a constant temperature.

**\* What is meant by**

**12. Chemical Activity Series.**

.....  
.....

**13. Electrical Resistance.**

.....  
.....

**14. Hormones.**

.....  
.....

**\* Illustrate using balanced symbolic chemical equations:**

**15. The reaction between hydrochloric acid and sodium hydroxide.**

.....  
.....

**16. Thermal decomposition of sodium nitrate.**

.....  
.....

**Group 1 from (1-8)**

**\* Choose the correct answer:**

1. When heating Red Mercury Oxide, ..... gas is evolved

- (a) Nitrogen                      (b) Hydrogen                      (c) Oxygen                      (d) Carbon Dioxide

2. The device used to measure electrical resistance is the .....

- (a) Ammeter                      (b) Voltmeter                      (c) Ohmmeter                      (d) Rheostat

3. Which of the following is a recessive genetic trait in human?

- (a) Straight hair    (b) Presence of dimples    (c) Wide eyes    (d) Detached earlobe

**\* What happens when....?**

4. Replacing aluminum filings with a piece of copper of the same mass when reacting with HCl acid?  
.....

5. Connecting a wire between two conductors that have the same electrical potential?  
.....

6. A decrease in the secretion of the Thyroxine hormone in the human body?  
.....

**\* Explain the following statements:**

7. The Pituitary gland is called the "Master Gland" or the main gland.  
.....

8. A red precipitate is formed when adding magnesium to a copper sulphate solution.  
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