

Markhor Junior Contest ®

Pioneer Level (Class VII & VIII) Science 2018

There are 25 questions, and each question carries two marks.

1. **Who is often called the “Father of Modern Science”?**
 - a) Aristotle
 - b) Newton
 - c) Galileo Galilei**
 - d) Einstein
2. **Which example best represents how technology applies STEM knowledge?**
 - a) Writing a hypothesis about plant growth
 - b) Solving a math equation on paper
 - c) Creating an app that tracks exercise**
 - d) Explaining the water cycle
3. **Who invented the electric battery, making continuous flow of electricity possible?**
 - a) James Watt
 - b) Alessandro Volta**
 - c) Benjamin Franklin
 - d) Thomas Edison
4. **In which cell organelle does cellular respiration mainly take place?**
 - a) Chloroplast
 - b) Ribosome
 - c) Mitochondrion**
 - d) Endoplasmic reticulum
5. **In a grassland food chain: Grass → Grasshopper → Frog → Snake → Hawk, the frog is at which trophic level?**
 - a) First trophic level
 - b) Second trophic level
 - c) Third trophic level**
 - d) Fourth trophic level
6. **A Punnett square shows:**
 - a) Exact offspring
 - b) Probability of traits**
 - c) Mutation rate
 - d) DNA structure

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7. Which of the following diseases is caused by bacteria?
 - a) Polio
 - b) Ringworm
 - c) Cholera**
 - d) Dengue

8. Herd immunity happens when:
 - a) Only sick people are vaccinated
 - b) Only doctors have immunity
 - c) A large portion of the population is vaccinated, protecting everyone**
 - d) No one gets vaccinated

9. The main source of energy for most ecosystems is:
 - a) Wind
 - b) Soil
 - c) Sunlight**
 - d) Water

10. Water pollution from fertilizers mainly causes:
 - a) Acid rain
 - b) Ozone depletion
 - c) Eutrophication (algal blooms)**
 - d) Soil erosion

11. Which human activity releases the most carbon dioxide?
 - a) Swimming
 - b) Sleeping
 - c) Burning fossil fuels**
 - d) Drinking water

12. Why is it important to use resources sustainably?
 - a) To waste more resources
 - b) To finish them quickly
 - c) To ensure resources are available for future generations**
 - d) To make life harder

13. Sustainable farming focuses on:
 - a) Overusing fertilizers
 - b) Deforestation
 - c) Protecting soil, water, and biodiversity**
 - d) Increasing pesticides

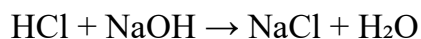
14. The number of protons in an atom is also called:
 - a) Mass number
 - b) Atomic number**
 - c) Neutron number
 - d) Valence number

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15. Which group contains the noble gases?

- a) Group 1
- b) Group 2
- c) Group 16
- d) Group 18**

16. The reaction:



is an example of:

- a) Combustion
- b) Neutralization**
- c) Displacement
- d) Oxidation

17. Which ion is responsible for the acidic nature of a solution?

- a) OH^- ion
- b) H^+ ion**
- c) Na^+ ion
- d) Cl^- ion

18. Which separation method is used for separating sand from water?

- a) Distillation
- b) Chromatography
- c) Filtration**
- d) Evaporation

19. The unit of force is:

- a) Joule
- b) Watt
- c) Newton**
- d) Pascal

20. The SI unit of power is:

- a) Joule
- b) Newton
- c) Pascal
- d) Watt**

21. The distance between two crests in a wave is called:

- a) Frequency
- b) Amplitude
- c) Wavelength**
- d) Speed

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22. A convex lens is also called a:

- a) Diverging lens
- b) Converging lens**
- c) Flat lens
- d) Neutral lens

23. When an acid reacts with a base, it usually produces:

- a) Salt and water**
- b) Oxygen and hydrogen
- c) Carbon dioxide only
- d) Energy only

24. Which of the following is a property of metals?

- a) Malleable and good conductor
- b) Soft and flexible like clay
- c) Easily evaporates
- d) Transparent

25. A car is moving at a constant speed on a straight road. Which statement is true?

- a) The engine exerts no force.
- b) The net force on the car is zero.
- c) Friction is greater than the engine force.
- d) The car will automatically speed up.