

## Class 10 Science - Most Repeated Questions and MCQs

### Frequently Asked Descriptive Questions:

1. What is the law of conservation of energy? Explain with an example.  
(■■■■■■ ■■■■■■■■ ■■ ■■■■■ ■■■■■ ■■? ■■ ■■■■■■■■ ■■ ■■■■ ■■■■■■■■)
2. Explain the process of photosynthesis in plants.  
(■■■■■■ ■■ ■■■■■■■■ ■■■■■■■■■■ ■■ ■■■■■■■■■■■■ ■■■■■■■■)
3. What is an ecosystem? Describe its components.  
(■■■■■■■■■■■■■■■■ ■■■■■■ ■■■■■ ■■? ■■■■■ ■■■■■■ ■■ ■■■■■■ ■■■■■■)
4. Define and explain the differences between metals and non-metals.  
(■■■■■ ■■ ■■■■■■ ■■ ■■■■■■■■■■ ■■■■ ■■ ■■■■■ ■■■■ ■■■■■ ■■■■■■■■)
5. What are acids, bases, and salts? Give examples of each.  
(■■■■■, ■■■■■■ ■■ ■■■■ ■■■■■ ■■■■? ■■■■■■■■■■ ■■ ■■■■■■■■ ■■■■■)
6. Explain Mendel's laws of inheritance with examples.  
(■■■■■■ ■■ ■■■■■■■■■■■■ ■■ ■■■■■■■■ ■■ ■■■■■■■■ ■■ ■■■■ ■■■■■■■■)
7. Describe the structure of an atom and explain the distribution of electrons.  
(■■■■■■■ ■■ ■■■■■■■■ ■■ ■■■■■■■■ ■■■■ ■■ ■■■■■■■■■■■■■■■■■ ■■ ■■■■■■ ■■■■■■■■)
8. What is the difference between potential and kinetic energy?  
(■■■■■■■■■ ■■■■■■ ■■ ■■■■ ■■■■■■ ■■■■ ■■■■■ ■■■■ ■■?)
9. Explain Ohm's law and its applications.  
(■■ ■■ ■■■■ ■■ ■■■■ ■■■■■■■■■■■■ ■■■■■■■■)
10. What is a chemical reaction? Give examples and explain types of reactions.  
(■■■■■■■■■■■ ■■■■■■■■■■■■ ■■■■■ ■■? ■■■■■■■■ ■■■■ ■■ ■■■■■■■■■■■■■■■ ■■ ■■■■■■■■ ■■■■■)
11. Describe the human digestive system and its parts.  
(■■■■■ ■■■■■ ■■■■■■ ■■ ■■■■■ ■■■■■■ ■■ ■■■■■■■ ■■■■■■)
12. What are fossil fuels, and why are they considered non-renewable?  
(■■■■■■■■■ ■■■■■ ■■■■■ ■■■■, ■■ ■■■■■■■■ ■■■■■■■ ■■■■■■ ■■■■■ ■■■■■ ■■■■■ ■■?)
13. Explain the difference between series and parallel circuits.  
(■■■■■■■■■■■ ■■ ■■■■■■■■ ■■■■■■ ■■■■ ■■■■■ ■■■■■■■■)
14. What is the greenhouse effect? How does it affect the environment?  
(■■■■■■■■■■■ ■■■■■■■■ ■■■■■ ■■? ■■ ■■■■■■■■■■ ■■ ■■■■■ ■■■■■■■■■■ ■■■■■ ■■?)
15. Define evolution and explain Darwin's theory of natural selection.  
(■■■■■■■ ■■ ■■■■■■■■■■ ■■■■ ■■ ■■■■■■■■■■■■ ■■■■ ■■ ■■■■■■■■■■ ■■■■■■■■■■ ■■ ■■■■■■■■■■)

### Frequently Asked MCQs:

Which of the following is a non-metal that is a good conductor of electricity?

(A) Sulfur (B) Phosphorus (C) Graphite (D) Bromine

Answer: (C) Graphite

Explanation: Explanation: Graphite, an allotrope of carbon, is a non-metal that conducts electricity due to

What is the main component of biogas?

(A) Methane (B) Carbon dioxide (C) Nitrogen (D) Hydrogen

Answer: (A) Methane

Explanation: Explanation: Biogas mainly consists of methane, which makes it a useful fuel as methane is

The unit of electric power is:

(A) Joule (B) Watt (C) Coulomb (D) Ohm

Answer: (B) Watt

Explanation: Explanation: The watt is the SI unit of power, defined as one joule per second.

Which of the following can decompose organic matter and recycle nutrients back into the environment?

(A) Producers (B) Consumers (C) Decomposers (D) Parasites

Answer: (C) Decomposers

Explanation: Explanation: Decomposers like fungi and bacteria break down dead organisms and return nutrients to the soil.

The atomic number of an element represents the number of:

(A) Electrons (B) Protons (C) Neutrons (D) None of the above

Answer: (B) Protons

Explanation: Explanation: The atomic number of an element is defined as the number of protons in its nucleus.

Which gas is produced when hydrochloric acid reacts with zinc?

(A) Oxygen (B) Nitrogen (C) Hydrogen (D) Carbon dioxide

Answer: (C) Hydrogen

Explanation: Explanation: When zinc reacts with hydrochloric acid, hydrogen gas is released according to the reaction:  $Zn + 2HCl \rightarrow ZnCl_2 + H_2$ .

Which part of the brain controls balance and coordination in humans?

(A) Cerebrum (B) Cerebellum (C) Medulla (D) Hypothalamus

Answer: (B) Cerebellum

Explanation: Explanation: The cerebellum is responsible for balance, coordination, and precise motor movements.

Which of the following is a renewable source of energy?

(A) Coal (B) Natural Gas (C) Petroleum (D) Solar Energy

Answer: (D) Solar Energy

Explanation: Explanation: Solar energy is renewable, meaning it is naturally replenished, unlike fossil fuels.

The reaction  $2H_2 + O_2 \rightarrow 2H_2O$  is an example of a:

(A) Decomposition reaction (B) Combination reaction (C) Displacement reaction (D) Redox reaction

Answer: (B) Combination reaction

Explanation: Explanation: This reaction is a combination reaction because two elements (hydrogen and oxygen) combine to form a single compound (water).

Which of the following can be used to control soil erosion?

(A) Deforestation (B) Terrace farming (C) Excessive irrigation (D) Overgrazing

Answer: (B) Terrace farming

Explanation: Explanation: Terrace farming reduces the speed of water runoff, helping to prevent soil erosion.