

CLASS-VIII

SCIENCE

CHAPTER-6

Very Short Answer Questions

**Question 1.**

**Name the most common fuel used in homes.**

**Answer:**

Liquefied Petroleum Gas. (LPG)

**Question 2.**

**Name the most common fire extinguisher.**

**Answer:**

Water

**Question 3.**

**What are the states in which a fuel may exist?**

**Answer:**

A fuel may exist in solid, liquid or gaseous state.

**Question 4.**

**Name any two combustible substances.**

**Answer:**

Charcoal, wood

**Question 5.**

**Does magnesium produce heat and light during its combustion?**

**Answer:**

Yes, it does.

**Question 6.**

**What acts as a fuel for our body?**

**Answer:**

Food

**Question 7.**

**Give two examples of non-combustible substances. .**

**Answer:**

Water, sand

**Question 8.**

**How are heat and light produced in the sun?**

**Answer:**

In the sun, heat and light are produced by nuclear reactions.

**Question 9.**

**Where were matchsticks first used?**

**Answer:**

Egypt

**Question 10.**

**What are the three essential requirements for combustion?**

**Answer:**

Fuel, air (to supply oxygen) and heat (to raise the temperature of the fuel beyond the ignition temperature).

**Question 11.**

**What is the ignition temperature of phosphorus?**

**Answer:**

25°C





★ Answer:

★ The lowest temperature at which a fuel catches fire is called its ignition temperature.

★ **Question 25.**

★ **How does a matchstick catch fire?**

★ Answer:

★ By rubbing a matchstick against a rough surface (friction), it attains its ignition temperature and thus catches fire.

★ **Question 26.**

★ **Why is sodium kept immersed in kerosene?**

★ Answer:

★ Sodium has very low ignition temperature, i.e., it catches fire on coming in contact with air, so it is kept in kerosene.

★ **Question 27.**

★ **What are combustible and non-combustible substances?**

★ Answer:

★ Substances which undergo combustion are said to be combustible, whereas non-combustible substances are those which don't burn.

★ **Question 28.**

★ **What are inflammable substances? Give examples.**

★ Answer:

★ The substances which have very low ignition temperature and can easily catch fire with a flame are called inflammable substances; e.g., LPG, petrol, alcohol, etc.

★ **Question 29.**

★ **What is rapid combustion?**

★ Answer:

★ When a substance burns instantly and produces a huge amount of heat and light, the combustion is called rapid combustion; e.g., the instant burning of LPG in a gas stove.

★ **Question 30.**

★ **Define spontaneous combustion.**

★ Answer:

★ A type of combustion in which the substance suddenly catches fire without the supply of heat or friction externally is called spontaneous combustion; e.g., forest fires.

★ **Question 31.**

★ **Define explosion.**

★ Answer:

★ A type of combustion during which a huge amount of heat and light is evolved with a boom, along with the production of gas, is known as explosion; e.g., the exploding of fireworks, i.e., crackers, etc.

★ **Question 32.**

★ **What is flame?**

★ Answer:

★ Flame is a region where the burning or combustion of gaseous substances take place.

★ **Question 33.**

★ **Define fuel.**

★ Answer:

★ Those substances which provide energy on burning are called 'fuels'; e.g., coal, petroleum, LPG, etc.

★ **Question 34.**

★ **Give two examples each of solid fuels, liquid fuels and gaseous fuels.**

★ Answer:

★ Solid fuels – Wood, cow dung, etc.





★ Liquid fuels – Kerosene, petrol, etc.

★ Gaseous fuels – Hydrogen, methane, etc.

★ **Question 35.**

★ Give two examples of fuels that are used to generate electricity.

★ Answer:

★ Two examples of fuels that are used to generate electricity are petrochemicals and coal.

★ **Question 36.**

★ Define calorific value.

★ Answer:

★ The amount of heat produced on burning one kilogram of fuel completely is called its calorific value.

★ **Question 37.**

★ 60 kg of fuel was completely burnt for an experiment. The amount of heat energy was found to be 1,80,000 kJ. Calculate the calorific value of the fuel.

★ Answer:

★ Amount of fuel burnt = 60 kg

★ Amount of heat produced = 1,80,000 kJ

★ Calorific value of the fuel =  $\frac{\text{Heat produced}}{\text{Amount of fuel}}$

★ =  $\frac{1,80,000}{60} = 3,000 \text{ kJ/kg}$

★ ☑ Calorific value of the fuel is 3,000 kJ/kg.

★ **Question 38.**

★ Define dark zone of a flame.

★ Answer:

★ The innermost zone of a flame around the wick is called its dark zone. It is the least hottest zone comparatively to other.

★ **Question 39.**

★ Mention any three characteristics of a good fuel.

★ Answer:

★ Any three characteristics of a good fuel are following:

- ★ • It has high calorific value.
- ★ • It is very easy to transport.
- ★ • It is cheap, affordable and economic.

★ **Question 40.**

★ What is global warming?

★ Answer:

★ An increase in the average temperature of the earth's atmosphere, especially a sustained increase that causes climatic changes, is termed as 'global warming'.



## Multiple Choice Questions

★ **Question 1.**

★ Which of the following fuels is used for running automobiles?

★ (a) CNG

★ (b) Petrol

★ (c) Both (a) and (b)

★ (d) Wood





★ **Question 2.**

★ **Magnesium burns to form**

- ★ (a) calcium carbonate
- ★ (b) magnesium oxide
- ★ (c) calcium oxide
- ★ (d) magnesium sulphate

★ **Question 3.**

★ **Coal burns to produce**

- ★ (a) calcium bicarbonate
- ★ (b) magnesium
- ★ (c) carbon dioxide
- ★ (d) oxygen

★ **Question 4.**

★ **Name the chemical process in which a substance reacts with oxygen to give out heat.**

- ★ (a) Reaction
- ★ (b) Junction
- ★ (c) Combustion
- ★ (d) All of these

★ **Question 5.**

★ **The substance that undergoes combustion is said to be**

- ★ (a) burning
- ★ (b) flame
- ★ (c) charcoal
- ★ (d) combustible

★ **Question 6.**

★ **Combustible substances are also known as**

- ★ (a) inflammable
- ★ (b) flaming
- ★ (c) illuminous
- ★ (d) non-flammable

★ **Question 7.**

★ **Which of the following is a combustible?**

- ★ (a) Stone piece
- ★ (b) Wood
- ★ (c) Glass
- ★ (d) None of these

★ **Question 8.**

★ **In the sun, light and heat are produced by**

- ★ (a) chemical reactions
- ★ (b) nuclear reactions
- ★ (c) burning reactions
- ★ (d) bunsen burner

★ **Question 9.**

★ **Lowest temperature at which a substance catches fire is known as**

- ★ (a) lowest temperature
- ★ (b) burning temperature
- ★ (c) ignition temperature
- ★ (d) flaming temperature

★ **Question 10.**

★ **Long, long ago, which of the following trees was used to produce matchsticks?**

- ★ (a) Mango







★ **Question 19.**

★ **'Firework' is an example of**

- ★ (a) rapid combustion
- ★ (b) explosion
- ★ (c) spontaneous combustion
- ★ (d) slow combustion

★ **Question 20.**

★ **The calorific value of hydrogen' is**

- ★ (a) 50,000 kJ/kg
- ★ (b) 55,000 kJ/kg
- ★ (c) 1,50,000 kJ/kg
- ★ (d) 6,000 kJ/kg

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