

Fire, Friend and Foe

[Comprehension Check]

Question 1. Mark the correct answer in each of the following.

- (i) Early man was frightened of
(a) lightning and volcanoes.
(b) the damage caused by them.
(c) fire.

Answer: (c) fire

- (ii) (a) Fire is energy.
(b) Fire is heat and light.
(c) Fire is the result of a chemical reaction.

Answer: (c) Fire is the result of a chemical reaction.

Question 2. From the options given below choose the one with the correct order of the following sentences.

- (i) That is fire.
(ii) A chemical reaction takes place.
(iii) Energy in the form of heat and light is released.
(iv) Oxygen combines with carbon and hydrogen.

- a. (i) (ii) (iii) (iv) b. (ii) (iii) (i) (iv)
c. (iv) (iii) (ii) (i) d. (iv) (ii) (iii) (i)

[Working with the text]

Question 1. What do you understand by the 'flash point' of a fuel?

Answer: Every fuel has a specific temperature point on which it starts burning. This specific temperature point is called the flash point or 'kindling temperature' of the fuel.

Question 2. (i) What are some common uses of fire?
(ii) In what sense is it a “bad master”?

Answer: (i) Some common uses of fire are:

- It is used to produce electricity
- It is used for cooking.
- It is also used to heat our home in winters.

(ii) Fire is a “bad master” because if it is not under control then it can create huge damage to our lives, properties, etc.

Question 3. Match items in Column A with those in Column B.

A	B
(i) fuel	Lighted matchstick
(ii) oxygen	Air
(iii) heat	Coal
	Burning coal
	Wood
	Smoldering paper
	Cooking gas

Answer:

A	B
(i) fuel	Smoldering paper
(ii) oxygen	Air
(iii) heat	Lighted matchstick
	Wood
	Cooking gas
	Coal
	Burning coal

Question 4. What are the three main ways in which a fire can be controlled or put out?

Answer: Three main ways are:

1. Stop the supply of the fuel
2. Stop the supply of oxygen
3. Cool down the heat

Question 5. Match the items in Box A with those in Box B

A

- (i) To burn paper or a piece of wood,
- (ii) Small fires can be put out
- (iii) When water is spread on fire,
- (iv) A carbon dioxide extinguisher is the best thing
- (v) Space left between buildings

B

- it absorbs heat from the burning material and lowers the temperature.
- reduces the risk of fire.
- with a damp blanket.
- we heat it before it catches fire.
- to put out an electrical fire.

Answer:

(i) To burn paper or a piece of wood,	we heat it before it catches fire.
(ii) Small fires can be put out	with a damp blanket.
(iii) When water is spread on fire,	it absorbs heat from the burning material and lowers the temperature.
(iv) A carbon dioxide extinguisher is the best thing	to put out an electrical fire.
(v) Space left between buildings	reduces the risk of fire.

Question 6. Why does a burning candle go out when you blow on it?

Answer: A burning candle goes out when you blow on it because when we blow air, we remove the hot air around the flame bringing down its temperature below the flash point.

Question 7. Spraying water is not a good way of putting out an oil fire or an electrical fire. Why not?

Answer: If water is sprayed onto an oil fire, the oil will float to the top of the water and continue to burn. This can be very dangerous because water can flow quickly, carrying the burning oil with it and spreading the fire. Water should also not be used on fires caused by electrical appliances. The person spraying water might receive an electric shock and be killed

Question 8. What are some of the things you should do to prevent a fire at home and in the school?

Answer: Turn off the gas supply of the stove after use. All electrical appliances must be kept far from flammable things like furniture, etc.

[Working with language]

Question 1. Read the following sentences.

To burn paper or a piece of wood, we *heat* it before it *catches* fire. We generally *do* it with a lighted match. Every fuel *has* a particular temperature at which it *burns*.

The verbs in italics are in the simple present tense. When we use it, we are not thinking only about the present. We use it to say that something happens all the time or repeatedly, or that something is true in general.

Find ten examples of verbs in the simple present tense in the text 'Fire: Friend and Foe' and write them down here. Do not include any passive verbs.

Answer: (To be done by student)

Question 2: Fill in the blanks in the sentences below with words from the box. You may use a word more than once.

Carbon cause fire smother

- (i) Gandhiji's life was devoted to the _____ of justice and fair play.
- (ii) Have you insured your house against _____?
- (iii) Diamond is nothing but _____ in its pure form.
- (iv) If you put too much coal on the fire at once you will _____ it.
- (v) Smoking is said to be the main _____ of heart disease.
- (vi) When asked by an ambitious writer whether he should put some _____ into his stories, Somerset Maugham murmured, "No, the other way round".
- (vii) She is a _____ copy of her mother.
- (viii) It is often difficult to _____ a yawn when you listen to a long speech on the value of time.

Answer: (i) Gandhiji's life was devoted to the **cause** of justice and fair play.
(ii) Have you insured your house against **fire**?
(iii) Diamond is nothing but **carbon** in its pure form.
(iv) If you put too much coal on the fire at once you will **smother** it.
(v) Smoking is said to be the main **cause** of heart disease.
(vi) When asked by an ambitious writer whether he should put some **fire** into his stories, Somerset Maugham murmured, "No, the other way round".
(vii) She is a **carbon** copy of her mother.
(viii) It is often difficult to **smother** a yawn when you listen to a long speech on the value of time.

Question 3: One word is italicized in each sentence. Find its opposite in the box and fill in the blanks.

Spending | shut | destroy | subtract | increase

- (i) You were required to keep all the doors *open*, not _____.
- (ii) PUPIL: What mark did I get in yesterday's Maths test?
TEACHER: You got what you get when you *add* five and five and _____ ten from the total.
- (iii) Run four kilometres a day to *preserve* your health. Run a lot more to _____ it.
- (iv) If a doctor advises a lean and lanky patient to *reduce* his weight further, be sure he is doing it to _____ his income.
- (v) The world is too much with us; late and soon,
Getting and _____ we lay waste our powers.

Answer:

- (i) You were required to keep all the doors *open*, not **shut**.
- (ii) PUPIL: What mark did I get in yesterday's Maths test?
TEACHER: You got what you get when you *add* five and five and **subtract** ten from the total.
- (iii) Run four kilometres a day to *preserve* your health. Run a lot more to **destroy** it.
- (iv) If a doctor advises a lean and lanky patient to *reduce* his weight further, be sure he is doing it to **increase** his income.
- (v) The world is too much with us; late and soon. *Getting* and **spending** we lay waste our powers.

Question 4: Use the words given in the box to fill in the blanks in the sentences below.

across | along | past | through

- (i) The cat chased the mouse _____ the lawn.
- (ii) We were not allowed to cross the frontier. So we drove _____ it as far as we could and came back happy.
- (iii) The horse went _____ the winning post and had to be stopped with difficulty.
- (iv) It is not difficult to see _____ your plan. Anyone can see your motive.
- (v) Go _____ the yellow line, then turn left. You will reach the post office in five minutes.

Answer:

- (i) The cat chased the mouse **across** the lawn.
- (ii) We were not allowed to cross the frontier. So we drove **along** it as far as we could and came back happy.
- (iii) The horse went **past** the winning post and had to be stopped with difficulty.
- (iv) It is not difficult to see **through** your plan. Anyone can see your motive.
- (v) Go **along** the yellow line, then turn left. You will reach the post office in five minutes.