

Chapter – 8

Fire: Friend and Foe

Comprehension Check

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

Answer:

- (i)
 - (c) fire.
- (ii)
 - (c) Fire is the result of a chemical reaction.

2. From the boxes 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)

Answer:

The correct order is: Oxygen combines with carbon and hydrogen. A chemical reaction takes place. Energy in the form of heat and light is released. That is fire.

Working with the Text

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

Answer:

'Flash point' of a fuel is the temperature at which the fuel begins to burn. This temperature is different for different substances. 'Flash point' is also called 'kindling temperature' of the fuel.

2.

(A) What are some common uses of fire?

Answer:

The common uses of fire are as follows:

1. Fire is used for cooking.
2. Fire is also used to keep our home warm during winters.
3. Fire is also used to generate electricity through coal.
4. Fire is used to light up the surroundings.
5. Fire is used to burn the waste materials.

(B) In what sense is it a "bad master"?

Answer:

It is true that fire is very useful to us but it can also be a "bad master" if it gets out of our control. When a fire gets out of control thousands of shops and homes get damaged, vast areas of forests are also devastated and hundreds of people are injured or killed. If fire causes

so much of devastation to the environment and to the mankind then it can be considered as a "bad master" because it does whatever it wants and it becomes really hard to get a control on it.

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
	smouldering paper
	Cooking gas.

Answer:

The matched terms are as follows:

A	B
----------	----------

(i) Fuel	Coal, Wood, Cooking Gas
(ii) oxygen	Air
(iii) heat	Lighted matchstick, Burning Coal, Smouldering paper

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

Answer:

As we know that there are three essential components of the fire are as follows:

1. Fuel
2. Oxygen
3. Heat

Therefore, the fire can be controlled by taking away one of these three things or all the three things away. Here are the methods to put away fire:

By taking away the fuel. If the fire has no fuel to feed on, no burning can take place. It is one of the most common methods to die out a fire in a simple and easy way.

Fire can also be put out by preventing the supply of oxygen. A small fire can be put out with a damp blanket or a sack. Hence, no supply of oxygen means no fire.

Another way of putting out the fire is removing the heat if, the heat is brought down below the flash point, the fuel stops burning. Spraying water is an effective method to bring down the flash point.

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

Box - 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

Box - 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) Spaces left between buildings	reduces the risk of fire.

--	--

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

Answer:

When a burning candle is blown out the hot air around it is removed and its temperature is brought down below the flash point. Hence, the candle goes out as there is no appropriate amount of heat which is required to keep the candle burning.

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

Answer:

Spraying water on an oil fire is not a good way of putting out the fire because oil being lighter than water will float on it and continues to burn. It can be very dangerous because water can flow out quickly carrying the burning oil which can be disastrous. Similarly, water should not be used on fires caused by electrical appliances because water is a good conductor of electricity and the person spraying water on the fire can get an electric shock which can be fatal. In case of an oil fire or an electrical fire, fire extinguisher works best. It is effective and safe to use.

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

Answer:

The things that can be done to prevent fire at home and in school are as follows:

1. Spaces should be left between buildings to reduce the risk of fire.
2. Every building must ensure observance of fire prevention norms.

3. There should be a proper supply of water if in case, fire breaks out water can be used to put it out.
4. Easily flammable materials should not be kept near the fireplace.
5. Sand buckets and fire extinguishers must be available in school and home to ensure safety.

Working with Language

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:

The verbs required are as below:

Comes combines absorbs blow means allow catches lowers stops cuts burns.

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

3.

4. (i) Gandhi'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) Gandhi'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.

3. One word is italicised 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 kilometre 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.

Greeting 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 kilometre 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.

Greeting and spending we lay waste our powers.

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 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 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.

Speaking and Writing

1. Look at the following three units. First, re-order the items in each unit to make a meaningful sentence. Next, re-order the sentences to make a meaningful paragraph. Use correct punctuation marks in the paragraph.

- (i) and eighteen fire tenders struggled/the fire began on Monday/to douse the blaze till morning
- (ii) in a major fire/over 25 shops/were gutted
- (iii) but property/was destroyed/worth several lakhs/no casualties were reported

Answer:

The fire began on Monday and eighteen fire tenders struggled to douse the blaze till morning.

In a major fire, over 25 shops were gutted.

No casualties were reported but property worth several lakhs was destroyed.

In a major fire, over 25 shops were gutted. No casualties were reported but property worth several lakhs was destroyed. The fire began on Monday and eighteen fire tenders struggled to douse the blaze till morning.

Meadow Surprises – Working with the Poem

1. Read the lines in which the following phrases occur. Then discuss with your partner the meaning of each phrase in its context.

- (i) velvet grass
- (ii) drinking straws
- (iii) meadow houses
- (iv) amazing mound
- (v) fuzzy head

Answer:

(i) **velvet grass:** it refers to the soft and smooth grass of the meadow which is as soft as a velvet.

(ii) **drinking straws:** drinking straws here means that the butterflies are drinking the nectar from the flowers and it appears as they are using a straw for it.

(iii) **meadow houses:** meadow houses are those several different types of houses built in the meadow. These houses are habitat to many animals, birds, and insects living there like burrows, nests, holes, and mounds.

(iv) **amazing mound:** Here the mound is called amazing because the ants have made it so beautifully, as they want a good and perfect place to live.

(v) **fuzzy head:** Fuzzy heads refers to the heads of the yellow flower that has a beautiful texture and shines brightly.

2. Which line in the poem suggests that you need a keen eye and a sharp ear to enjoy a meadow? Read aloud the stanza that contains this line.

Answer:

The line is “you may discover these yourself, if you look and listen well”. It means that if you hear the poem carefully with interest then you may also feel and experience whatever has been described in the poem.