

ENGLISH

CHAPTER 8: FIRE: FRIEND AND FOE



FIRE: FRIEND AND FOE

~Summary~

-by Dorothy Hinshaw Patent

The lesson "Fire: Friend and Foe" talks about the pros and cons of fire. Three components are involved while **creating** fire. They are **fuel**, **oxygen**, and **heat**. Fire is created when the three components are brought together. Examples of fuel are **wood**, **coal**, **cooking gas**, and **petrol**. Oxygen, on the other hand, is found abundantly in the air. Heat is the initial stage of the fire. For instance, fire has a lot of **uses**, such as to cook food, **warm** houses, create electricity, light lamps and candles, etc. We use fire at our homes every day. Fire had also helped the **early human** settle down and lead a more civilised life.

Fire is also a source of **destruction** when it goes out of control. Fire kills hundreds of lives, ruins thousands of homes and shops, and destroys vast areas of **forests** every year. Hence, we should always keep the fire under **control**. As the saying goes, fire is a good servant but a bad **master**.

While there are three **components** needed to create fire, there are also three ways in which we can put out fire. We can put out the fire by stop adding fuel into it. The second method involves the oxygen. When we throw a wet blanket or **sack** on the fire, the fire will stop as the oxygen is blocked. The third method involves the heat. Spraying or pouring **water** can bring the temperature down below the **flashpoint**. In the case of oil or electrical fire, we should use carbon dioxide **extinguisher** instead of water.

Earlier, when we didn't have firefighters, the common people fought fire together by forming a **human chain**. However, we have professional people to fight and control fire. They are called the **firefighters**. They have various skills, such as to put off fire, **rescue** lives, give first aid, etc.

Though fire is pure science, people from many parts of the world still **worship** fire. The reason being that fire is both the source of life as well the source of destruction. If not treated with caution, fire will turn deadly. Fire can be a great friend, but, when taken lightly, it can be a dangerous **enemy**.

~Conclusion~

Patrick's story shows how a person can achieve success by being hard-working and self-dependent. It is revealed at the end that the elf man was only a figment of Patrick's imagination. In reality, the transformation is caused by Patrick's own efforts. This answers the titular question "Who did Patrick's homework?" and teaches the value of self-help.

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NCERT SOLUTIONS**Questions (Page No. 118)
(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. Choose the right answer.
 - 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 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: d. (iv) (ii) (iii) (i)

Questions (Page No. 119-120) (Working with the text)

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

Answer: Every fuel has a specific temperature at which it starts to burn. This specific temperature is called the flash point or kindling temperature of the fuel.

Question 2.

a. What are some common uses of fire?

b. In what sense is it a "bad master"?

Answer:

a. 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.

b. Fire is a "bad master" because if it is not under control, it can create huge damage to lives, properties, forests, 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

	Cooking gas
	Coal
	Wood
(ii) oxygen	Air
(iii) heat	Lighted matchstick
	Burning coal

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

Answer: Three main ways in which a fire can be controlled or put out are:

- a. Stop the supply of the fuel
- b. Cool down the heat
- c. Stop the supply of oxygen

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: Spraying water is not a good way of putting out an oil fire or an electric fire. This is because, if water is sprayed on an oil fire, oil will come on the top layer of water and will still burn. As water flows quickly, it can take oil with it and thus increase the area where the fire can spread.

If water is sprayed on an electric fire, the person might get an electric shock and get killed.

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

Answer: In order to prevent a fire at home and in the school, the following things can be done:

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

Questions (Page No. 120-122) (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: 1...fire is the result of a chemical reaction.

2. Energy in the form of heat and light is released in this process.

3. When the oxygen in the air combines with carbon and hydrogen in a fuel, a chemical reaction takes place.

4. Oxygen comes from the air.

5. Every fuel has a particular temperature at which it begins to burn.

6. For instance, we use it to cook our food, warm our homes in winter and to generate electricity.

7...if fire gets out of control it can be very dangerous.

8. Vast areas of forest are also destroyed and hundreds of people are killed or injured.

9. It absorbs heat from the burning fuel and lowers the temperature.

10. The blanket of water also cuts off the supply of oxygen, and the fire is extinguished.

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

a. carbon cause fire smother

b. Gandhiji's life was devoted to the _____ of justice and fair play.

- c. Have you insured your house against _____?
- d. Diamond is nothing but _____ in its pure form.
- e. If you put too much coal on the fire at once you will _____ it.
- f. Smoking is said to be the main _____ of heart disease.
- g. When asked by an ambitious writer whether he should put some _____ into his stories, Somerset Maugham murmured, "No, the other way round".
- h. She is a _____ copy of her mother.
- i. It is often difficult to _____ a yawn when you listen to a long speech on the value of time.

Answer:

- a. Gandhiji's life was devoted to the **cause** of justice and fair play.
- b. Have you insured your house against **fire**?
- c. Diamond is nothing but **carbon** in its pure form.
- d. If you put too much coal on the fire at once you will **smother** it.
- e. Smoking is said to be the main **cause** of heart disease.
- f. When asked by an ambitious writer whether he should put some **fire** into his stories, Somerset Maugham murmured, "No, the other way round".
- g. She is a **carbon** copy of her mother.
- h. 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

- a. You were required to keep all the doors open, not _____.
- b. 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.

- c. Run four kilometres a day to preserve your health. Run a lot more to _____ it.
- d. If a doctor advises a lean and lanky patient to reduce his weight further, be sure he is doing it to _____ his income.
- e. The world is too much with us; late and soon,
Getting and _____ we lay waste our powers.

Answer:

- a. You were required to keep all the doors open, not **shut**.
- b. 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.
- c. Run four kilometres a day to preserve your health. Run a lot more to **destroy** it.
- d. If a doctor advises a lean and lanky patient to reduce his weight further, be sure he is doing it to **increase** his income.
- e. 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

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

Answer:

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

Questions (Page No. 122) (Speaking and Writing)

Question 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.

- and eighteen fire tenders struggled/the fire began on Monday/to douse the blaze till morning

- b. in a major fire/over 25 shops/were gutted
- c. but property/was destroyed/worth several lakhs/no casualties were reported.

Answer:

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

Question 2. Read the following newspaper report given in the box below.

Fire Station Goes Up in Flames

A fire chief was embarrassed when a station without a smoke alarm went up in flames. The building and a fire engine were destroyed in the blaze. Nobody was injured in the fire that was tackled by 30 firefighters in six fire engines from neighboring towns.

Answer: Do it yourself.