



Unit 7 • Energy in Daily Life: energy, heat and temperature

Name _____ Class _____ Roll no. _____ Date _____ Marks _____ / 35

1 Key words

[4]

Fill in the blanks with words from the box. Two words in the box are not needed. Each blank carries 0.5 mark.

biofuel calorimeter energy energy crisis fossil fuels geothermal energy kelvin
renewable temperature thermometer

The capacity to do work is called _____. Sources that nature makes again in a short time after we use them, like sunlight and flowing water, are _____ sources of energy. Coal, petrol and natural gas, formed from the remains of living things buried millions of years ago, are called _____. A shortage of energy caused by using too much non-renewable energy is an _____. The heat energy that comes from inside the Earth is _____. The degree of hotness or coldness of an object is its _____, and it is measured with a _____. The SI unit of temperature is the _____.

2 Multiple choice

[5]

Choose the correct option for each of the following questions.

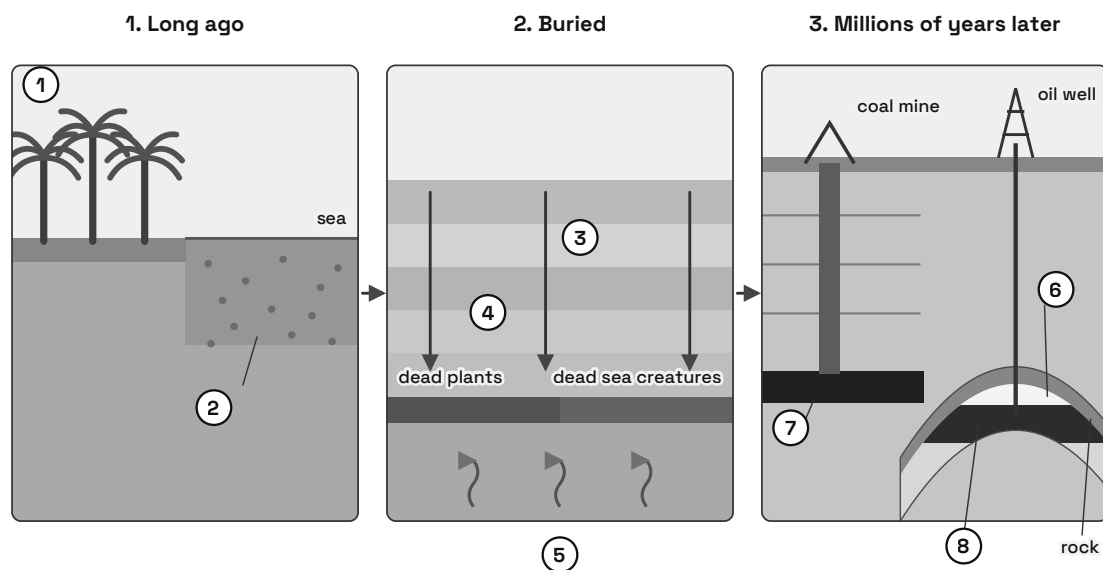
- i. Which of the following is an environment-friendly source of energy? [1]
 - a. diesel
 - b. petrol
 - c. hydroelectricity
 - d. coal
- ii. Which is the odd one out? [1]
 - a. firewood
 - b. coal
 - c. petrol
 - d. diesel
- iii. What is the range of temperature on a laboratory thermometer? [1]
 - a. 0 °C to 100 °C
 - b. 10 °C to 110 °C
 - c. -10 °C to 110 °C
 - d. 0 °C to 110 °C
- iv. Rita and Sarita measured their body temperatures and found 37 °C and 98.6 °F. Choose the best option. [1]
 - a. Sarita's body temperature is higher than Rita's.
 - b. Sarita has a fever.
 - c. Rita and Sarita have the same body temperature.
 - d. Both Rita and Sarita have a fever.



- v. What happens when two objects at different temperatures touch each other? [1]
- Temperature flows from the object with more heat to the object with less heat.
 - Heat flows from the object at the higher temperature to the object at the lower temperature.
 - Heat flows from the object at the lower temperature to the object at the higher temperature.
 - Temperature flows from the object at the higher temperature to the object at the lower temperature.

3 Label the diagram [4]

The diagram shows how fossil fuels form. Write the names of the parts numbered 1 to 8. Each carries 0.5 mark.



- | | |
|----------|----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |
| 5. _____ | 6. _____ |
| 7. _____ | 8. _____ |

4 Very short answers [4]

Write very short answers to the following questions.

- From which source does Nepal get almost all of its electricity? [1]

- What is the normal body temperature of a healthy person in degrees Fahrenheit? [1]

- What is the SI unit of heat? [1]



d. Why does a clinical thermometer have a kink just above its bulb? [1]

5 Short answers [8]

Write short answers to the following questions.

a. Write any two differences between biofuel and fossil fuel. [2]

b. Write one advantage and one disadvantage of fossil fuels. [2]

c. Write any two differences between heat and temperature. [2]

d. We feel cold when we touch well water or tap water in winter. Give a reason. [2]

6 Long answer [4]

Write a long answer to the following question.

What is an energy crisis? Explain any two efforts made in your surroundings to reduce the energy crisis.



[4]

Solve the following problems. Show your working.

[2]

Answer:

[2]

[illegible]

Answer:

[2]

Think, then answer.

A bucket of warm bathwater has more heat in it than a cup of boiling tea. If the tea is poured into the bucket, which way does the heat flow? Why?

(not marked)

Half fill one small glass with cold water and another with hot (not boiling) water. Measure each temperature, pour both into a bigger glass, stir and measure again.

Water	Temperature (°C)
cold water	
hot water	
mixture	

Why is the temperature of the mixture different from both?

