



ALADWANA

Gem



Science

الصف 4 الابتدائي

النماذج الاسترشادية لشهر مارس

العام الدراسي 2024 - 2025

Model (1)

15
Marks

1 Choose the correct answer:

- 1 From the factors that help in the formation of fossil fuels are
 - a) the decomposition of the dead living organisms
 - b) accumulation of sediments
 - c) pressure and heat
 - d) All the previous answers
- 2 Electricity is produced from
 - a) renewable resources only
 - b) non-renewable resources only
 - c) renewable and non-renewable resources
 - d) No correct answer
- 3 All the following conserve using of fossil fuels except
 - a) cycling
 - b) walking
 - c) using cars
 - d) using solar energy
- 4 The solar energy is converted into energy in greenhouses.
 - a) electrical
 - b) sound
 - c) thermal
 - d) kinetic

2 Complete the following sentences:

- 1 In electric power stations, ... operate the electric generator.
- 2 Carbon dioxide gas combines with water causes
- 3 The wind blows due to the difference in between the hot and cold air.
- 4 By decreasing the number of blades, the speed of rotation of turbines will

3 Answer the following questions:

- 1 Wind and water are considered renewable sources of energy. Give reason.
-
- 2 What happens when the potential energy of water increases in a dam containing water turbines?
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Model (2)

15
Marks

1 Choose the correct answer:

- 1 Generators convert kinetic energy into energy which is transmitted through wires.
a) potential b) electrical c) magnetic d) heat
- 2 In addition to long periods, all of the following are factors that help in the formation of fossil fuels except
a) extreme heat b) decomposition of the dead organisms
c) freshwater d) high pressure
- 3 Which of the following is a preferred natural resource for generating clean energy?
a) Ocean and river waters b) Dry trees and herbs
c) Water, coal, and oil d) Wind, oil, and natural gas
- 4 All the following are from the uses of electricity generated by solar panels except
a) operating irrigation equipment b) operating windmills
c) operating calculators d) lighting streets

2 Put (✓) or (X):

- 1 In an electric power station, thermal energy is used to heat water and form steam. ()
- 2 To conserve fuel, lit all lights even when you don't need them. ()
- 3 The kinetic energy generated by the wind rotates the blades of windmills to produce chemical energy. ()
- 4 The amount of solar energy that reaches the earth may vary from one region to another. ()

3 Answer the following questions

- 1 It is preferable to use the public transportation instead of private cars. Explain why.
-
- 2 The solar heater is placed at the top of buildings. (Give a reason.)
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Model (3)

15
Marks

1 Choose the correct answer:

- 1 is produced from burning the fossil fuels.
a) Carbon dioxide gas b) Oxygen gas c) Carbonic acid d) Water vapor
- 2 is one of the negative effects of fossil fuels burning that causes lung irritation and respiratory diseases.
a) Global warming b) Acid rain c) Deforestation d) Smog
- 3 The non-renewable resources of energy take to be formed.
a) a short period of time b) a very long period of time
c) few minutes d) few hours
- 4 Water turbines can generate more electricity by increasing energy of water that is stored in dams.
a) light b) sound c) thermal d) potential

2 Write the scientific term:

- 1 It is a phenomenon in which the Earth's temperature increases, when carbon dioxide gas increases in air.
(Global warming)
- 2 The device in the electric power station that turns kinetic energy into electrical energy.
(Generator)
- 3 A type of mirrors that is used to collect and focus sunlight onto metal pots to heat them and cook the food inside.
(Curved mirror)
- 4 The device in the electric power station that turns kinetic energy into electric energy.
(Electric generator)

3 Answer the following questions:

- 1 An increase in the burning of fossil fuels causes acid rain. (Give a reason).
-
- 2 Farmers use green houses to plant crops that grow in warm climates. (Give a reason).
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Model (4)

15
Marks

1 Choose the correct answer:

- 1 Water is similar to fuel as both
- a) are renewable sources of energy b) cause environmental pollution
- c) are sources of energy d) have the same chemical composition
- 2 Burning of fossil fuels causes
- a) acid rain b) environmental pollution
- c) global warming d) All the previous answers
- 3 Inside the electric power station, heating of produces steam.
- a) turbines b) generator c) water d) fuel
- 4 Using of water to generate electricity depends on places
- a) with strong winds b) with weak winds
- c) where dams are built on rivers d) where boats sail in rivers

2 Complete the following sentences:

- 1 From the disadvantages resulting from the use of fossil fuels is
- 2 Coal and can be used in electric power stations to generate electricity.
- 3 In water turbines, the energy of water movement is converted into a type of electrical energy which is called
- 4 Radiant energy is used to generate electricity directly by using, or indirectly as it causes blowing that is used to rotate windmills.

3 Answer the following questions:

- 1 We must turn off the light after leaving the room. Explain why.
-
- 2 What happens when the water supply that surrounds some modern watermills dries up?
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Model (5)

15
Marks

1 Choose the correct answer:

- 1 All of the following sentences represent the negative effects on the environment, except
- a) Burning fuel to obtain energy produces smog
 - b) Chemicals used in factories pollute the air
 - c) Pesticides used in farms
 - d) Using public transportation instead of private cars
- 2 Fossil fuels are classified as non-renewable because they
- a) require expensive equipment to extract
 - b) take millions of years to be replaced
 - c) can be found everywhere
 - d) provide all the energy we use
- 3 Remains of living organisms that were buried under the Earth's surface must be affected by to form fossil fuel.
- a) low pressure and high temperature
 - b) high pressure and high temperature
 - c) high pressure and low temperature
 - d) low pressure and low temperature
- 4 Solar panels use solar energy to generate energy which is used in lighting houses.
- a) electrical
 - b) sound
 - c) thermal
 - d) potential

2 Put (✓) or (X):

- 1 Smog is full of large particles that we breathe. ()
- 2 The potential energy operates the electric generator. ()
- 3 River water stores kinetic energy. ()
- 4 Wind is non-renewable energy resource. ()

3 Answer the following questions:

- 1 It is necessary to rationalize the consumption of water. What is the reason?
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- 2 What happens when the water of rivers falls from high slopes.
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