

الصف  
الرابع  
الابتدائي  
٢٠٢٤

بنك أسئلة

# التميز

أ/ محمود سعيد



ELMotamyez Questions Bank

# Science

February Revision

By

MRS. Amira Ahmed

 cartoon science

4  
الصف  
الرابع

نسخة  
مجانية

ملحق الإجابات  
بالداخل



El.Motamyez.School

يمكنكم الحصول على المذكرات والاختبارات من خلال مسح رمز ال QR Code  
أو من خلال صفحة "التميز - أ/ محمود سعيد".  
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February Questions Bank



Question 01

choose the corret answer

CONCEPT  
3.1

- 1 The energy source in a toy car is the .....  
 (a) engine      (b) tires      (c) battery      (d) fuel  
 (suez 2023)
- 2 The idea of design and work of the robot that explores the surface of Mars depends on the idea of transforming .....  
 (a) electric to kinetic      (b) potential to kinetic      (c) light to electric      (d) kinetic to electric  
 School book
- 3 In a battery of a toy car ..... energy changes into electrical energy  
 (a) chemical      (b) sound      (c) thermal      (d) kinetic  
 (Alex: montaza zone 2022)
- 4 Curiosity rover is designed to explore .....  
 (a) Mars planet      (b) the Moon      (c) the sun      (d) Earth planet  
 ( Alex.- Al Montaza zone(2)2023)
- 5 The ..... on the rover curiosity convert solar energy into ..... energy which is used to charge its batteries  
 (a) Solar panels electrical      (b) Batteries electrical      (c) Solar panels sound      (d) Batteries sound  
 (alex. 2023)
- 6 The output energy in the Mars exploration vehicle is ..... energy.  
 (a) electrical      (b) light      (c) kinetic      (d) solar  
 (Menoufia 2023)
- 7 By rubbing hands ..... energy is changed into thermal energy.  
 (a) chemical      (b) kinetic      (c) sound      (d) potential  
 (Cairo . Rod El Farag2023)
- 8 A plugged-in lamp can turn ..... energy to ..... energy.  
 (a) electrical, light      (b) kinetic, light      (c) chemical, light      (d) chemical, heat  
 (Ministry models 2022)





- 9 In the washing machine the ..... energy is converted into kinetic and sound energy.  
 (a) thermal (b) electrical (c) light (d) potential  
 (Giza: Dokki Zone2023)
- 10 When you use the hand bell, the .... energy changed into sound energy.  
 (a) Electrical (b) potential (c) thermal (d) kinetic  
 (Ministry models 2022)
- 11 Energy produced from the electric bulb is ..... energy.  
 (a) chemical (b) sound (c) light (d) kinetic  
 (El-Behira: Kafr El-Dawar 2023)
- 12 The output energy when playing drums is the ..... energy.  
 (a) chemical (b) light (c) sound (d) potential  
 (Minia: Bani Mazar 2023)
- 13 The input energy when using the lamp is the ..... energy.  
 (a) electrical (b) potential (c) kinetic (d) thermal  
 (Minia: Bani Mazar 2023)
- 14 Energy doesn't destroy, nor create from nothing, this indicates .....  
 (a) the draining of energy resources  
 (b) conservation and transformation of energy  
 (c) resources of energy are numerous  
 (d) destroying the energy resources  
 School book
- 15 During riding a bike, some kinetic energy is converted into ..... energy due to friction of bike's tire with the road.  
 (a) chemical (b) potential (c) thermal (d) electrical  
 (Ministry models 2022)
- 16 The produced energy from radio that reflects its main function is ..... energy  
 (a) electric (b) sound (c) light (d) chemical  
 (Cairo: Heliopolis2023)
- 17 Input energy when using the hair dryer is ..... energy.  
 (a) electrical (b) potential (c) light (d) kinetic  
 (Cairo: El Waily Zone2023)
- 18 The output energy when using the hair dryers is the ..... energy.  
 (a) electrical (b) potential (c) light (d) thermal



- 19 The output energy that is not from the job of hair dryer is .....  
 (a) chemical (b) sound (c) kinetic (d) light  
 (Ismailia: Inspectorate2023)
- 20 The unusable energy that produced from the electric lamp ..... energy  
 (a) potential (b) chemical (c) thermal (d) light  
 (Cairo: El Nozha2023)
- 21 The wasted energy in most devices in the form of ..... energy.  
 (a) electric (b) thermal (c) sound (d) kinetic  
 (Menoufia 2023)
- 22 Both hair dryer and electric water kettle produce ..... energy.  
 (a) thermal (b) light (c) electric (d) potential  
 (Alex: montaza zone 2022)
- 23 The stored energy inside the battery of a mobile phone is..... energy  
 (a) electrical (b) light (c) chemical (d) sound  
 (Alex: montaza zone 2023)

Question 02

put ( true ) or ( false )

- 1 Mars is located a few meters away from Earth. ( )  
 (Alex: montaza zone 2022)
- 2 Mars Curiosity can be operated from a distance ( )  
 (Ministry models 2022)
- 3 A toy car can continue moving even after its battery runs out. ( )  
 (Giza: Dokki Zone2023)
- 4 Rover Curiosity is used to explore the Jupiter. ( )  
 (Alex. Al Montaza zone 1)
- 5 Chemical energy is the energy that stored in food and battery. ( )  
 (Cairo . Rod El Farag2023)
- 6 Energy may be destroyed inside different devices. ( )  
 (Cairo: El Waily Zone2023)
- 7 Most of energy chains start with the moon ( )  
 ( Giza: Agoza Zone2023)
- 8 There is a stored chemical energy inside the food we eat. ( )  
 ( Giza: Agoza Zone2023)





- 9 Energy cannot be transformed from one form to another ( )  
(Alex: montaza zone 2022)
- 10 Both electric bulb and electric heater produce thermal energy. ( )  
(Alex: East zone 2022)
- 11 The energy chain of a burning candle is chemical energy converted into thermal energy & light energy ( )  
(Giza 2022)
- 12 When pedalling a bike, the chemical energy in your body change to kinetic energy ( )  
(Minia: Bani Mazar 2022)
- 13 Plants need sunlight to grow ( )  
(Ministry models 2022)
- 14 The produced sound energy helps the hair dryer to do its function. ( )  
(Ministry models 2022)

Question 03

Correct the underline words

- 1 Curiosity is a robotic vehicle that is designed to explore the surface of the moon. ( )  
( Giza: Agoza Zone2023)
- 2 Thermal energy used to play a drum ( )  
(Ministry models 2022)
- 3 To operate an electric mixer, we use sound energy ( )  
(Ministry models 2022)
- 4 Light energy is stored inside the battery of mobile phone. ( )  
(Qena: Science Inspectorate2023)

Question 04

Complete the following sentences

- 1 On Mars planet, Curiosity robot can be operated for a long period of time by using .....\_energy from sunlight that is converted into .....\_energy used to recharge its batteries  
(Cairo - Zeitoun Zone 2023)
- 2 Solar panels are used to generate .....\_energy  
(Ismailia: Inspectorate2023)



- 3 Most of the energy we use is produces inside the .....  
(Ismailia: Inspectorate2022)
- 4 The energy that is produced from the battery and used to operate a toy car is .....\_energy.  
(Alex: East zone 2022)
- 5 Light energy is converted into .....\_energy which is stored in the form of sugar inside the trees.  
(Dakahlia: 2023)
- 6 .....\_is the main source of energy on the Earth's surface.  
(Dakahlia: 2023)
- 7 Energy can neither be .....\_nor ..... , but only .....\_from one form to another  
(Cairo 2023)
- 8 To operate an electric mixer, we use .....\_energy.  
(Alex: East zone 2022)
- 9 The electric lamp converts .....\_energy into light and heat energy.  
(Alex: East zone 2022)
- 10 The energy can be .....\_from one form to another  
(Cairo: El Waily Zone2023)
- 11 In hand bell, kinetic energy is converted into .....\_energy.  
(Alexandria: Middle Zone2023)
- 12 In the washing machine electrical energy converted into .....\_energy.  
(Suez: South Zone2023)
- 13 When you ride a bicycle, the .....\_energy stored in your body is converted into .....\_energy which causes the bicycle to move  
(Behaira 2022)
- 14 Energy produced from the radio which helps the device do its main function is .....\_energy  
(El-Behira: Kafr El-Dawar 2023)
- 15 The mobile phone converts chemical energy stored in its batteries into .....\_energy and .....\_energy.  
(Qalyubiyya 2023)

Question 05

Write the scientific term

- 1 A robot vehicle that can be controlled from a distance and is used to explore the surface of mars ( )  
(Ismailia: Inspectorate2023)





- 2 The form of energy that is stored in battery of a remote-control toy cars. ( )  
(Ministry models 2022)
- 3 The energy produced from playing guitar. ( )  
(Giza 2023)
- 4 Energy is neither created nor destroyed, but it changes from one form to another. ( )  
(Dakahlia: 2023)
- 5 The energy used to play a drum. ( )  
(Minia: Bani Mazar 2023)
- 6 A kind of energy that is produced from the electrical heater and burning coal . ( )  
(Alex: montaza zone 2022)
- 7 A device used to convert electrical energy into light energy ( )  
(Alex: East zone 2022)
- 8 The energy produced when the wood of trees is burned. ( )  
(Alex: East zone 2022)
- 9 Energy that always produced due to friction. ( )  
(Ministry models 2022)
- 10 The wasted energy of a computer . ( )  
(Ministry models 2022)
- 11 The energy that is produced from the blender and helps it in doing its job. ( )  
(Al-Azhar Al-Sharif 2023)

**Question 06 Give reason for each of the following**

- 1 Mars rover curiosity operates for long period of time on Mars without any need to be charged

.....

**Question 07 What happens if**

- 1 On shaking a hand bell. (according to the change of energy)

.....  
(Cairo . Rod El Farag2023)





2 On turning an electric lamp. (according to changing in energy)

.....  
(Cairo: El Waily Zone2023)

3 The change of energy when you turn on the television

.....  
(Cairo: El Nozha2023)

4 You put your hands near a lighted lamp.

.....  
(Minia: Bani Mazar 2023)

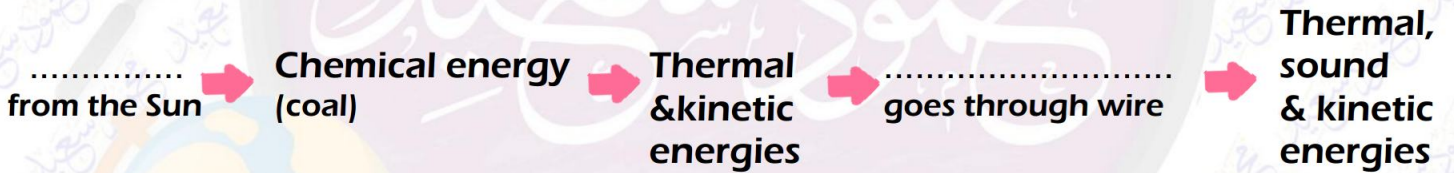
5 Rubbing your hand together (According to the change of energy)

..... (Menoufia, 2022)

**Question 08 Answer the following questions**

1 Complete the following energy chain in the hair dryer.

(Cairo: El Nozha2023)



2 Complete the following table:

(Dakahlia: 2023)

Device	Input energy	Output energy
1. Electric heater:	.....	.....
2. Hand bell:	.....	.....

3 Mention energy changing in the following table:

(El-Behira: Kafr El-Dawar 2023)

Device	Consumed (input) energy	Produced (output) energy
Fan:	.....	.....

4 Complete the following figure: (Menoufia 2023)



5 Mention the input and output energies of the opposite device. (Minia: Bani Mazar 2023)

Input energy is .....

Output energy is .....



6 Mention a device that convert electric energy into kinetic and sound energy

(Qena 2023)

Question 01

choose the corret answer

CONCEPT  
3.2

- 1 Among forms of fuel that present in car fuel stations are .....
  - a gasoline and wood
  - b natural gas and coal
  - c wood and coal
  - d natural gas and gasoline
- 2 All of the following are forms of fuel, except .....
  - a natural gas
  - b gasoline
  - c coal
  - d glass
- 3 ..... is considered as the main resource of energy on the Eath's surface
  - a Gasoline
  - b the sun
  - c natural gas
  - d the moon
- 4 Wood is considered as .....
  - a bio fuel
  - b fossil fuel
  - c liquid fuel
  - d gaseous fuel
- 5 ..... is a type of biofuel which is made of wood.
  - a Coal
  - b Oil
  - c Charcoal
  - d Natural gas
- 6 All the following are forms of fossil fuel, except .....
  - a water
  - b coal
  - c natural gas
  - d oil
- 7 Extreme heat and pressure under the earth's surface has an important role in forming .....
  - a wood
  - b wind
  - c fossil fuel
  - d biofuel
- 8 Fossil fuel is extracted from .....
  - a the Earth's surface
  - b the underground
  - c the food
  - d the water
- 9 Fossil fuels need ..... to be formed under the Earth's surface.
  - a five years
  - b ten years
  - c hundreds of years
  - d millions of years



Question 02

put ( true ) or ( false )

- 1 Both coal and wood produce thermal energy when they are burned. ( )
- 2 You need gasoline to move a bicycle ( )
- 3 When fuel is burned, it produces thermal energy. ( )
- 4 Green plants are one of the nonrenewable resources of energy. ( )
- 5 Water and gasoline are two renewable resource of energy ( )
- 6 We have to conserve all forms of fuel. ( )
- 7 Coal was formed from the sea animals remains. ( )
- 8 Charcoal is formed from decomposition of remains of ancient plants ( )
- 9 Biofuels are from nonrenewable resources of energy. ( )
- 10 The Sun is the main source of forming both biofuel and fossil fuel ( )
- 11 Oil and coal are considered as nonrenewable resources. ( )
- 12 Biofuel is one of non-renewable resources of energy. ( )
- 13 We can make liquid fuel from wood chips and grass ( )
- 14 Some types of plants can be used to make a liquid fuel. ( )

Question 04

Complete the following sentences

- 1 When fossil fuel is burned, it produces..... energy.
- 2 Some forms of fuel can be used in cooking food such as wood and .....
- 3 Fuel is used as a source of ..... energy.
- 4 ..... is used as source of thermal energy in homes and cars.
- 5 We need ..... energy for cooking food and warming houses.
- 6 Wood and ..... are examples of biofuel, while ..... and ..... are examples of fossil fuel.
- 7 ..... is a renewable source of energy.
- 8 Coal and oil are considered as ..... resources of energy.
- 9 Corn and wood are ..... fuel.
- 10 Fossil fuel is considered as ..... resources of energy





**Question 04**

**write scientific term for each of the following**

- 1 Any substance that produces thermal energy when it is burned. ( )
- 2 The energy produced when the wood is burned ( )
- 3 It is the main source of most forms of energy on the Earth's surface ( )
- 4 They are fuels made from living organisms that can be planted ( )
- 5 It is a form of fossil fuel that was formed from dead marine animals ( )
- 6 It is a form of fossil fuel that was formed from dead plants under the effect of extreme heat and pressure ( )

**Question 05**

**Give Reason for each of the following**

- 1 Using wood of trees as a fuel has negative effects on the environment  
.....
- 2 Wood is considered as a fuel.  
.....
- 3 We must conserve the fossil fuels  
.....

**Question 06**

**What happens if ?**

- 1 The car movement if fuel runs out in a car.  
.....
- 2 The remains of marine were buried under the Erath's surface over millions of years  
.....



## Question 07

cross the odd word

1 Wood - Coal - Oil - Natural gas.

## Question 08

Answer the following questions

**B) Give an example:**

1. Renewable energy resource

2. Fossil fuel.

انتهت الأسئلة مع أطيّب الامنيات بالنجاح والتوفيق



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أ/ محمود سعيد



Model Answers

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February Questions Bank



Question 01

choose the corret answer

CONCEPT  
3.1

- 1 The energy source in a toy car is the .....  
 (a) engine (b) tires (c) battery (d) fuel  
 (suez 2023)
- 2 The idea of design and work of the robot that explores the surface of Mars depends on the idea of transforming .....  
 (a) electric to kinetic (b) potential to kinetic (c) light to electric (d) kinetic to electric  
 School book
- 3 In a battery of a toy car ..... energy changes into electrical energy  
 (a) chemical (b) sound (c) thermal (d) kinetic  
 (Alex: montaza zone 2022)
- 4 Curiosity rover is designed to explore .....  
 (a) Mars planet (b) the Moon (c) the sun (d) Earth planet  
 ( Alex.- Al Montaza zone(2)2023)
- 5 The ..... on the rover curiosity convert solar energy into ..... energy which is used to charge its batteries  
 (a) Solar panels electrical (b) Batteries electrical (c) Solar panels sound (d) Batteries sound  
 (alex. 2023)
- 6 The output energy in the Mars exploration vehicle is ..... energy.  
 (a) electrical (b) light (c) kinetic (d) solar  
 (Menoufia 2023)
- 7 By rubbing hands ..... energy is changed into thermal energy.  
 (a) chemical (b) kinetic (c) sound (d) potential  
 (Cairo . Rod El Farag2023)
- 8 A plugged-in lamp can turn ..... energy to ..... energy.  
 (a) electrical, light (b) kinetic, light (c) chemical, light (d) chemical, heat  
 (Ministry models 2022)





- 9 In the washing machine the ..... energy is converted into kinetic and sound energy.  
 (a) thermal (b) electrical (c) light (d) potential  
 (Giza: Dokki Zone2023)
- 10 When you use the hand bell, the .... energy changed into sound energy.  
 (a) Electrical (b) potential (c) thermal (d) kinetic  
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- 11 Energy produced from the electric bulb is ..... energy.  
 (a) chemical (b) sound (c) light (d) kinetic  
 (El-Behira: Kafr El-Dawar 2023)
- 12 The output energy when playing drums is the ..... energy.  
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- 13 The input energy when using the lamp is the ..... energy.  
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 (b) conservation and transformation of energy  
 (c) resources of energy are numerous  
 (d) destroying the energy resources  
 School book
- 15 During riding a bike, some kinetic energy is converted into ..... energy due to friction of bike's tire with the road.  
 (a) chemical (b) potential (c) thermal (d) electrical  
 (Ministry models 2022)
- 16 The produced energy from radio that reflects its main function is ..... energy  
 (a) electric (b) sound (c) light (d) chemical  
 (Cairo: Heliopolis2023)
- 17 Input energy when using the hair dryer is ..... energy.  
 (a) electrical (b) potential (c) light (d) kinetic  
 (Cairo: El Waily Zone2023)
- 18 The output energy when using the hair dryers is the ..... energy.  
 (a) electrical (b) potential (c) light (d) thermal



- 19 The output energy that is not from the job of hair dryer is .....  
 (a) chemical (b) sound (c) kinetic (d) light  
 (Ismailia: Inspectorate2023)
- 20 The unusable energy that produced from the electric lamp ..... energy  
 (a) potential (b) chemical (c) thermal (d) light  
 (Cairo: El Nozha2023)
- 21 The wasted energy in most devices in the form of ..... energy.  
 (a) electric (b) thermal (c) sound (d) kinetic  
 (Menoufia 2023)
- 22 Both hair dryer and electric water kettle produce ..... energy.  
 (a) thermal (b) light (c) electric (d) potential  
 (Alex: montaza zone 2022)
- 23 The stored energy inside the battery of a mobile phone is..... energy  
 (a) electrical (b) light (c) chemical (d) sound  
 (Alex: montaza zone 2023)

Question 02

put ( true ) or ( false )

- 1 Mars is located a few meters away from Earth.    
 (Alex: montaza zone 2022)
- 2 Mars Curiosity can be operated from a distance    
 (Ministry models 2022)
- 3 A toy car can continue moving even after its battery runs out.    
 (Giza: Dokki Zone2023)
- 4 Rover Curiosity is used to explore the Jupiter.    
 (Alex. Al Montaza zone 1)
- 5 Chemical energy is the energy that stored in food and battery.    
 (Cairo . Rod El Farag2023)
- 6 Energy may be destroyed inside different devices.    
 (Cairo: El Waily Zone2023)
- 7 Most of energy chains start with the moon    
 ( Giza: Agoza Zone2023)
- 8 There is a stored chemical energy inside the food we eat.    
 ( Giza: Agoza Zone2023)





- 9 Energy cannot be transformed from one form to another ✗  
(Alex: montaza zone 2022)
- 10 Both electric bulb and electric heater produce thermal energy. ✓  
(Alex: East zone 2022)
- 11 The energy chain of a burning candle is chemical energy converted into thermal energy & light energy ✓  
(Giza 2022)
- 12 When pedalling a bike, the chemical energy in your body change to kinetic energy ✓  
(Minia: Bani Mazar 2022)
- 13 Plants need sunlight to grow ✓  
(Ministry models 2022)
- 14 The produced sound energy helps the hair dryer to do its function. ✗  
(Ministry models 2022)

## Question 03

### Correct the underline words

- 1 Curiosity is a robotic vehicle that is designed to explore the surface of the moon. Mars  
( Giza: Agoza Zone2023)
- 2 Thermal energy used to play a drum The sun  
(Ministry models 2022)
- 3 To operate an electric mixer, we use sound energy kinetic  
(Ministry models 2022)
- 4 Light energy is stored inside the battery of mobile phone. electric  
(Qena: Science Inspectorate2023)

## Question 04

### Complete the following sentences

- 1 On Mars planet, Curiosity robot can be operated for a long period of time by using solar energy from sunlight that is converted into electrical energy used to recharge its batteries (Cairo - Zeitoun Zone 2023)
- 2 Solar panels are used to generate electrical energy (Ismailia: Inspectorate2023)



- 3 Most of the energy we use is produced inside the **sun**  
(Ismailia: Inspectorate2022)
- 4 The energy that is produced from the battery and used to operate a toy car is **electrical** energy.  
(Alex: East zone 2022)
- 5 Light energy is converted into **chemical** energy which is stored in the form of sugar inside the trees.  
(Dakahlia: 2023)
- 6 **The sun** is the main source of energy on the Earth's surface.  
(Dakahlia: 2023)
- 7 Energy can neither be **created** nor **destroyed**, but only **changed** from one form to another  
(Cairo 2023)
- 8 To operate an electric mixer, we use **electrical** energy.  
(Alex: East zone 2022)
- 9 The electric lamp converts **electrical** energy into light and heat energy.  
(Alex: East zone 2022)
- 10 The energy can be **changed** from one form to another  
(Cairo: El Waily Zone2023)
- 11 In hand bell, kinetic energy is converted into **sound** energy.  
(Alexandria: Middle Zone2023)
- 12 In the washing machine electrical energy converted into **kinetic** energy.  
(Suez: South Zone2023)
- 13 When you ride a bicycle, the **chemical** energy stored in your body is converted into **kinetic** energy which causes the bicycle to move  
(Behaira 2022)
- 14 Energy produced from the radio which helps the device do its main function is **sound** energy  
(El-Behira: Kafr El-Dawar 2023)
- 15 The mobile phone converts chemical energy stored in its batteries into **light** energy and **sound** energy.  
(Qalyubiyya 2023)

## Question 05 Write the scientific term

- 1 A robot vehicle that can be controlled from a distance and is used to explore the surface of mars  
**mars rover curiosity robot**  
(Ismailia: Inspectorate2023)





- 2 The form of energy that is stored in battery of a remote-control toy cars.
- 3 The energy produced from playing guitar.
- 4 Energy is neither created nor destroyed, but it changes from one form to another.
- 5 The energy used to play a drum.
- 6 A kind of energy that is produced from the electrical heater and burning coal .
- 7 A device used to convert electrical energy into light energy
- 8 The energy produced when the wood of trees is burned.
- 9 Energy that always produced due to friction.
- 10 The wasted energy of a computer .
- 11 The energy that is produced from the blender and helps it in doing its job.

**Chemical energy**  
(Ministry models 2022)

**Sound energy**  
(Giza 2023)

**Law of conservation of energy**  
(Dakahlia: 2023)

**Kinetic energy**  
(Minia: Bani Mazar 2023)

**Thermal energy**  
(Alex: montaza zone 2022)

**Electric lamp**  
(Alex: East zone 2022)

**Thermal energy**  
(Alex: East zone 2022)

**thermal energy**  
(Ministry models 2022)

**Thermal energy**  
(Ministry models 2022)

**kinetic energy**  
(Al-Azhar Al-Sharif 2023)

## Question 06 Give reason for each of the following

- 1 Mars rover curiosity operates for long period of time on Mars without any need to be charged

**Because of solar panels that use sunlight to recharge its batteries**

## Question 07 What happens if

- 1 On shaking a hand bell. (according to the change of energy)  
**Kinetic energy changes into sound energy**

(Cairo . Rod El Farag2023)

On turning an electric lamp. (according to changing in energy)

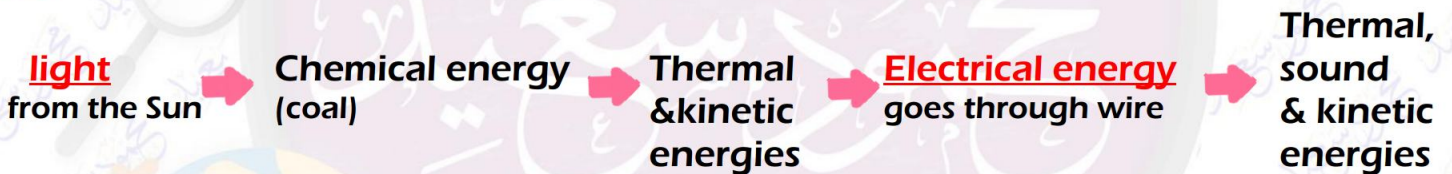




- 2 The electrical energy changes into light and thermal energies  
(Cairo: El Waily Zone2023)
- 3 The change of energy when you turn on the television  
Electrical energy changes into sound, light and thermal energies  
(Cairo: El Nozha2023)
- 4 You put your hands near a lighted lamp.  
You feel warm, because some electrical energy is converted into thermal energy  
(Minia: Bani Mazar 2023)
- 5 Rubbing your hand together (According to the change of energy)  
Kinetic energy changes into thermal energy  
(Menoufia, 2022)

**Question 08 Answer the following questions**

1 Complete the following energy chain in the hair dryer. (Cairo: El Nozha2023)



2 Complete the following table: (Dakahlia: 2023)

Device	Input energy	Output energy
1. Electric heater:	<u>Electrical energy</u>	<u>Thermal energy</u>
2. Hand bell:	<u>Kinetic energy</u>	<u>Sound energy</u>

3 Mention energy changing in the following table: (El-Behira: Kafr El-Dawar 2023)

Device	Consumed (input) energy	Produced (output) energy
Fan:	<u>Electrical energy</u>	<u>Kinetic energy</u>

4 Complete the following figure: (Menoufia 2023)



**Mention the input and output energies of the opposite device.** (Minia: Bani Mazar 2023)

Input energy is electrical energy

Output energy is thermal energy



**6** **Mention a device that convert electric energy into kinetic and sound energy**

Washing machine – blender

(Qena 2023)

Question 01

choose the corret answer

CONCEPT  
3.2

- 1 Among forms of fuel that present in car fuel stations are .....
  - a gasoline and wood
  - b natural gas and coal
  - c wood and coal
  - d natural gas and gasoline
- 2 All of the following are forms of fuel, except .....
  - a natural gas
  - b gasoline
  - c coal
  - d glass
- 3 ..... is considered as the main resource of energy on the Eath's surface
  - a Gasoline
  - b the sun
  - c natural gas
  - d the moon
- 4 Wood is considered as .....
  - a bio fuel
  - b fossil fuel
  - c liquid fuel
  - d gaseous fuel
- 5 ..... is a type of biofuel which is made of wood.
  - a Coal
  - b Oil
  - c Charcoal
  - d Natural gas
- 6 All the following are forms of fossil fuel, except .....
  - a water
  - b coal
  - c natural gas
  - d oil
- 7 Extreme heat and pressure under the earth's surface has an important role in forming .....
  - a wood
  - b wind
  - c fossil fuel
  - d biofuel
- 8 Fossil fuel is extracted from .....
  - a the Earth's surface
  - b the underground
  - c the food
  - d the water
- 9 Fossil fuels need ..... to be formed under the Earth's surface.
  - a five years
  - b ten years
  - c hundreds of years
  - d millions of years



Question 02

put ( true ) or ( false )

- 1 Both coal and wood produce thermal energy when they are burned.
- 2 You need gasoline to move a bicycle
- 3 When fuel is burned, it produces thermal energy.
- 4 Green plants are one of the nonrenewable resources of energy.
- 5 Water and gasoline are two renewable resource of energy
- 6 We have to conserve all forms of fuel.
- 7 Coal was formed from the sea animals remains.
- 8 Charcoal is formed from decomposition of remains of ancient plants
- 9 Biofuels are from nonrenewable resources of energy.
- 10 The Sun is the main source of forming both biofuel and fossil fuel
- 11 Oil and coal are considered as nonrenewable resources.
- 12 Biofuel is one of non-renewable resources of energy.
- 13 We can make liquid fuel from wood chips and grass
- 14 Some types of plants can be used to make a liquid fuel.



Question 04

Complete the following sentences

- 1 When fossil fuel is burned, it produces **thermal** energy.
- 2 Some forms of fuel can be used in cooking food such as wood and **coal**
- 3 Fuel is used as a source of **thermal** energy.
- 4 **natural gas** is used as source of thermal energy in homes and cars.
- 5 We need **thermal** energy for cooking food and warming houses.
- 6 Wood and **charcoal** are examples of biofuel, while **oil** and **coal** are examples of fossil fuel.
- 7 **water** is a renewable source of energy.
- 8 Coal and oil are considered as **nonrenewable** resources of energy.
- 9 Corn and wood are **bio** fuel.
- 10 Fossil fuel is considered as **nonrenewable** resources of energy



Question 04

write scientific term for each of the following

- |   |  |                |
|---|--|----------------|
| 1 | Any substance that produces thermal energy when it is burned.  | Fuel           |
| 2 | The energy produced when the wood is burned  | Thermal energy |
| 3 | It is the main source of most forms of energy on the Earth's surface                                       | sun            |
| 4 | They are fuels made from living organisms that can be planted  | Biofuel        |
| 5 | It is a form of fossil fuel that was formed from dead marine animals                                       | Oil            |
| 6 | It is a form of fossil fuel that was formed from dead plants under the effect of extreme heat and pressure | Coal           |

Question 05

Give Reason for each of the following

- Using wood of trees as a fuel has negative effects on the environment  
**Because continuity of cutting down trees leads to deforestation**
- Wood is considered as a fuel.  
**Because wood produces thermal energy when it is burned**
- We must conserve the fossil fuels  
**Because fossil fuels are formed over millions of years, so they cannot be replaced as we use them**

Question 06

What happens if ?

- The car movement if fuel runs out in a car.  
**The car movement decreases until it stops**
- The remains of marine were buried under the Erath's surface over millions of years  
**Formation of oil**



## Question 07

## cross the odd word

1 Wood - Coal - Oil - Natural gas.

Wood (biofuel)

## Question 08

## Answer the following questions

**B) Give an example:**

1. Renewable energy resource water

2. Fossil fuel. gasoline

انتهت الأسئلة مع أطيب الامنيات بالنجاح والتوفيق

