

E Model Exam



Model Exam 1

1 Choose the correct answer:

- 1 Ecologists study the flow of Energy in difficult Ecosystems such as
 - a. north pole
 - b. bottom of oceans
 - c. forests
 - d. a & b
- 2 is (are) example (s) of biofuel.
 - a. Petroleum
 - b. Coal
 - c. Corn
 - d. Natural gas
- 3 Curiosity is the most famous on mars.
 - a. Application
 - b. Spacecraft
 - c. Robot
 - d. Rocket
- 4 Car seat-belt used to keep the body of driver from moving
 - a. upward
 - b. downward
 - c. backward
 - d. forward

2 Write the scientific term:

- 1 It is a gas region at the edge of the sun that emits light and heat. (.....)
- 2 The input energy in calculator. (.....)
- 3 Energy is neither created nor destroyed but it can be changed. (.....)
- 4 A heavy steel ball swinging on a cable. (.....)

3 Complete the following:

- 1 Spacecraft needs more than months to reach mars.
- 2 Electric iron changes energy to energy.
- 3 Solar cars are in weight.



4 Batteries store energy and used to capture

4 Correct the underline words:

- 1 Charcoal is made up of grass, corn or wood chips. (.....)
- 2 Electric vehicles cause climate changes. (.....)
- 3 Any energy chain ends with the sun. (.....)
- 4 The input energy in the solar cell is electric energy. (.....)

5 Mention the input and output energies of the following



6 What meant by:

- Renewable source of energy

.....

7 Give reason for:

- People use machines.

.....

8 What is the importance of:

- Green house:

.....



Model Exam 2

1 Choose the correct answer:

- 1 The amount of is limited on the earth.
 - a. biofuel
 - b. fossil fuel
 - c. a & b
 - d. no correct answers
- 2 Modern wind mill is than old wind mill.
 - a. taller
 - b. shorter
 - c. heavier
 - d. no correct answer
- 3 Sound energy is produced from all the following devices except
 - a. Cellular phone
 - b. TV
 - c. Radio
 - d. electric iron
- 4 The correct arrangement for generating electricity by the wind energy is
 - a. Sun – wind – electric lines – wind mills - houses
 - b. Sun – wind – wind mills – electric lines - houses
 - c. Sun – wind mills – electric lines – wind - houses
 - d. Sun – wind mills – wind – electric lines - houses

2 Write the scientific term:

- 1 A heavy steel ball swinging on a cable. (.....)
- 2 A device used to light houses. (.....)
- 3 The input energy in hand bell. (.....)
- 4 It burns inside car engine to make the car moves. (.....)



3 Complete the following:

- ① Truck causes damage than the car.
- ② Hair dryer changes energy to and energies.
- ③ Solar cars don't cause
- ④ and are non-renewable sources of energy.

4 Correct the underline words:

- ① Solar vehicles need gas stations. (.....)
- ② Coal is used to operate the gas oven. (.....)
- ③ Any energy chain ends with the sun. (.....)
- ④ Kinetic energy is lost during collision. (.....)

5 The following figure represents a solar heater:

- ① The input energy is
- ② The output energy is
- ③ It is placed on the



6 What's happen when:

- You look directly to the sun for a long time.

.....

7 What is the importance of:

① Seatbelt

.....

② Dams

.....



Model Exam 3

1 Choose the correct answer:

1 The most effective turbine in generating electricity is



2 All the following are renewable sources of energy except

a. corn

b. wood

c. petroleum

d. grass

3 Heat energy is in solar heater.

a. consumed

b. produced

c. lost

d. destroyed

4 When a hits a person, he may be injured only and survive.

a. train

b. truck

c. car

d. bike

2 Write the scientific term:

1 To get it, it requires removal of forest and cutting tree.

(.....)

2 Very tiny organisms, smaller than the head of a pin.

(.....)



- 3 Device used to transfer images and sounds.
- 4 The input energy of the calculator.

3 Complete the following:

- 1 Air bag is made of thin _____ material folded into the steering wheel.
- 2 _____ and _____ are examples of fossil fuel.
- 3 When a player hits the ball with a bat, the speed of the ball _____ in the _____ direction.
- 4 Batteries store _____ energy and used to operate _____.

4 Correct the underline words:

- 1 The surface of the sun is solid. (_____)
- 2 When fuel burns inside a car, the car stops. (_____)
- 3 Solar vehicle needs to be charged. (_____)
- 4 Electricity transfer to cities through thin wires. (_____)

5 Complete the following table:

Device	Input Energy	Output energy
Motor	_____	_____
Dynamo	_____	_____



6 What meant by:

- Photosphere

.....
.....

7 Give reason for:

- Petroleum is a non-renewable source of energy.

.....
.....

8 What is the importance of:

- 1** Air bag:

.....
.....

- 2** Fossil fuel:

.....
.....



Model Exam 4

1 Choose the correct answer:

- 1 The surface of the sun is called
 - a. sun sphere
 - b. gaseous sphere
 - c. photosphere
 - d. ionosphere
- 2 _____ contains chemical energy.
 - a. Solar heater
 - b. Batteries
 - c. Radio
 - d. TV
- 3 Ethanol is produced from _____.
 - a. grass
 - b. corn
 - c. coal
 - d. a & b
- 4 Heat and light energies transfer from space to us in a form of _____.
 - a. curved lines
 - b. waves
 - c. zigzag lines
 - d. circles

2 Write the scientific term:

- 1 It consists of large number of small solar cells. (_____)
- 2 The input energy of the calculator. (_____)
- 3 A heavy steel ball swinging on a cable. (_____)
- 4 It is the energy produced from burning fossil fuel. (_____)

3 Complete the following:

- 1 Sun consists of different gases such as _____ an
_____.
- 2 _____ produced from the decomposition of algae.
- 3 Solar vehicles don't need _____ or _____.
- 4 Solar energy causes air _____ and wind _____.



4 Correct the underlined words:

- 1 All devices depend on renewable sources of energy. (.....)
- 2 The chemical structure of water and petroleum is the same. (.....)
- 3 Charcoal is produced from the decomposition of tree remains. (.....)
- 4 After collision, the air bag inflates fast. (.....)

5 Which figure represents more severe damage and why?



Figure (1)



Figure (2)

6 What will happen when:

- When the ball of newton cradle is raised up

.....

.....

7 What is the importance of:

1 Curved mirrors in solar oven.

.....

.....

2 T.V

.....

.....



Model Exam 5

1 Choose the correct answer:

- 1 Coal is the source of energy in
 - a. gas oven
 - b. fire place
 - c. petroleum oven
 - d. solar heater
- 2 Water of rivers stores great at the top of slopes.
 - a. Kinetic energy
 - b. Potential energy
 - c. Electric energy
 - d. Light energy
- 3 Slow objects cause
 - a. great damage that can't be repaired
 - b. great damage that can be repaired
 - c. small damage that can be repaired
 - d. small damage that can't be repaired
- 4 The distance between earth and mars is Million kilometers.
 - a. 54
 - b. 55
 - c. 44
 - d. 45

2 Write the scientific term:

- 1 It is the moment of crashing of two objects together. (.....)
- 2 It is the energy that will not run out faster than consuming it. (.....)
- 3 Energy neither created nor destroyed. (.....)
- 4 It is made up of grass, corn or wood chips. (.....)





3 Complete the following:

- 1 Cars stop, when the fuel
- 2, and are examples of biofuel.
- 3 During collision, The air bag
- 4 The input energy in running is energy

4 Correct the underline words:

- 1 heavy objects always cause damage less than light objects. (.....)
- 2 Burning of biofuel cause air pollution & global warming. (.....)
- 3 Increasing the number of blades is better. (.....)
- 4 dynamo changes electric energy into kinetic energy. (.....)

5 Choose from the below figures the most effective turbine & the reason:

Figure (1)	Figure (2)	Reason
		<p>.....</p>



6 What meant by:

- Law of conservation of energy

7 What will happen when:

- The sun disappears suddenly

8 Give reason for:

- Any energy chain starts with the sun.
-
-



3 cars are light in weight.

4 and are examples of fossil fuel.

4 Correct the underlined words:

1 Electric vehicles cause climate change. ()

2 The outcoming energy of battery is chemical energy. ()

3 Fossil fuels are extracted from mountains. ()

4 Petroleum is an example for biofuel. ()

5 Study the following figure then complete the following:

1 The boy uses a to hit the ball.

2 The energy transfer from the to the

3 The speed of the ball in in directions.



6 Give reason for:

- We feel warmth of the sun at night.

.....

7 What is the importance of:

1 Motor

.....

2 Solar energy

.....



- 3 Solar cars are In weight.
- 4 Fast rubber ball makes sound when it hit by racket than slower ball.

4 Correct the underlined words:

- 1 The wind rotates the blades of watermills. (.....)
- 2 Coal is the oldest fuel that used all over the world. (.....)
- 3 A crash investigator sees a car crash as a joke. (.....)
- 4 When fuel runs out, the car moves. (.....)

5 What is the type of fuel:



Figure (1)



Figure (2)



Figure (2)

6 What meant by:

- Renewable source of energy

.....

.....

7 How to reduce burning fossil fuel:

- 1
- 2
- 3

Model Exam 8

1 Choose the correct answer:

- 1 depends on renewable source of energy.
 - a. Petroleum oven
 - b. Gas oven
 - c. Solar cell
 - d. Flash light
- 2 From the disadvantages of over use of fossil fuel Is (are)
 - a. cutting trees
 - b. removal of forests
 - c. air pollution
 - d. a & b
- 3 used to move things.
 - a. Dynamo
 - b. Motor
 - c. Hair dryer
 - d. electric heater
- 4 The car with speed has the highest kinetic energy
 - a. 100 km/h
 - b. 80 km/h
 - c. 60 km/h
 - d. 40 km/h

2 Write the scientific term:

- 1 The vehicle that doesn't need any fuel or electricity. (.....)
- 2 It is the energy produced from burning fossil fuel. (.....)
- 3 The amount of it on the earth is limited. (.....)
- 4 The incoming energy in electric heater. (.....)

3 Complete the following:

- 1 When two cars collide in the direction, the damage will be less severe.
- 2 is the energy stored in food.



- 3 Coal is used in to produce electricity.
- 4 Heavy objects have energy.

4 Correct the underline words:

- 1 The output energy in a calculator is the solar energy. (.....)
- 2 When a car hits a boy, he will survive. (.....)
- 3 wood is a a non-renewable source of energy. (.....)
- 4 Burning fuel produces light energy. (.....)

5 Arrange the following energy chains from start to end:

- During running:



Chemical energy



Kinetic energy



Solar energy

6 What meant by:

- Solar panels

.....
.....

7 Give reason for:

- When you touch an electric lamp, you feel hot.

.....
.....

- 2 A spacecraft needs more than Month to reach mars.
- 3 You feel when you approach your hand to the electric lamp.
- 4 The rate of formation of petroleum is than the rate of its consumption.

4 Correct the underline words:

- 1 Motor changes kinetic energy into electric energy. (.....)
- 2 Any energy chain ends with the sun. (.....)
- 3 To get fossil fuel, it requires cutting trees & removal of forests. (.....)
- 4 We must light up electric bulb and electric devices if we don't need it. (.....)

5 Mention the advantages and disadvantages of solar vehicles:

Advantages

.....

.....

.....

.....

Disadvantages

.....

.....

.....

.....

6 What is the importance of:

- Wrecking ball

.....

.....

Model Exam 10**1 Choose the correct answer:**

- 1 Fast objects cause
- great damage that can be repaired
 - great damage that can't be repaired
 - small damage that can be repaired
 - small damage that can't be repaired
- 2 The surface of the sun
- is solid such as moon
 - is gas such as moon
 - isn't solid such as moon
 - isn't gas such as moon
- 3 Which of the following statements is correct?
- Energy can't be changed from one form to another.
 - Energy can be changed from one form to another.
 - Energy may be lost or destroyed.
 - Energy can be created.
- 4 is the oldest fuel used all over the world.
- Coal
 - Wood
 - Petroleum
 - Natural gas



2 Write the scientific term:

- ① It is the energy that will not run out faster than consuming it. (.....)
- ② The energy produced due to friction. (.....)
- ③ It is used in cars to keep the driver's body from moving forward during collision. (.....)
- ④ Energy that consumed from hand bell. (.....)

3 Complete the following:

- ① is used to knock down parts of a building.
- ② Electricity transfers to cities through
- ③ The wheels of the car when fuel burns inside car engine.
- ④, and are examples of fossil fuel.

4 Correct the underline words:

- ① Fuel powered-cars need to be charged. (.....)
- ② Life continues on the earth in the absence of the sun. (.....)
- ③ Charcoal is made up of grass, corn or wood chips. (.....)
- ④ Burning of biofuel cause air pollution & global warming. (.....)



5 Complete the following table:

Device	Source of Energy	Kind
Flashlight
Solar heater
Fire place

6 Compare between:

Device	Biofuel	Fossil fuel
Type
Importance
Disadvantages
Examples



Model Exams

Model Exam 1

1 Choose the correct answer:

- 1 d 2 c 3 c
4 d

2 Write the scientific term:

- 1 Photosphere
2 Solar Energy
3 Law of Conservation of Energy
4 Wrecking Ball

3 Complete the following:

- 1 6
2 electric – heat 3 light
4 chemical – devices (toy cars)

4 Correct the underlined words:

- 1 Ethanol
2 Fuel-powered
3 starts 4 output

5 Mention the input and output energies of the following:

Figure	Input Energy	Output Energy
Hair dryer	Electric	Heat – Sound – kinetic
Electric lamp	Electric	Light – Heat
Playing football	Chemical	kinetic

6 What is meant by:

– Renewable Source of Energy:
It is the energy that will not run out faster than us consuming it.

7 Give reason for:

– To make their life easier and get tasks done faster.

8 What is the importance of:

– It helps farmers grow plants that need warm weather in winter.

Model Exam 2

1 Choose the correct answer:

- 1 b 2 a 3 d
4 b

2 Write the scientific term:

- 1 Wrecking Ball
2 Electric Bulb
3 Kinetic Energy
4 Fuel

3 Complete the following:

- 1 more
2 electric – sound – heat – kinetic
3 climate changes
4 Petroleum – Natural gas

4 Correct the underlined words:

- 1 Fuel-powered
2 fireplace

3 starts
4 transferred
5 The following figure shows a solar heater:

- 1 solar energy
2 heat energy
3 top of the building

6 What will happen:

– Your eyes will be damaged.

7 What is the importance of:

- 1 It is used to keep the building from moving and collision.
2 They can generate electricity.

Model Exam 3

1 Choose the correct answer:

- 1 c 2 c
4 d

2 Write the scientific term:

- 1 Biofuel
2 Diatom Algae
3 TV
4 Solar Energy

3 Complete the following:

- 1 nylon
2 Petroleum
3 increases
4 chemical energy

4 Correct the underlined words:

- 1 Moon

3 starts
4 transferred
5 The following figure represents a solar heater:

- 1 solar energy
- 2 heat energy
- 3 top of the building

6 What will happen when

- Your eyes will be damaged.

7 What is the importance of:

- 1 It is used to keep the driver's body from moving forward during collision.
- 2 They can generate clean energy.

Model Exam 3

1 Choose the correct answer:

- 1 c
- 2 c
- 3 b
- 4 d

2 Write the scientific term:

- 1 Biofuel
- 2 Diatom Algae
- 3 TV
- 4 Solar Energy

3 Complete the following:

- 1 nylon
- 2 Petroleum - benzene - coal
- 3 increases - opposite
- 4 chemical energy

4 Correct the underlined words:

- 1 Moon

- 2 runs out
- 3 Electric
- 4 huge

5 Complete the following table:

Device	Input Energy	Output Energy
Motor	Electric	Kinetic
Dynamo	Kinetic	Electric

6 What is meant by:

- It is a gas region at the edge of the Sun that emits light and heat.

7 Give reason for:

- Because it starts to run out as soon as we use it. Also, the rate of our consumption exceeds the rate of its formation.

8 What is the importance of:

- 1 Airbag:
 - a. It slows the speed of the driver when his body moves forward.
 - b. It absorbs the energy of the car during collision.
- 2 Fossil fuel:
 - a. Lighting houses, warming clothes, cooking and operating cars.

Model Exam 4

1 Choose the correct answer:

- 1 c 2 b 3 d
4 b

2 Write the scientific term:

- 1 Solar Panels
2 Solar Energy
3 Wrecking Ball
4 Heat Energy

3 Complete the following:

- 1 hydrogen - helium
2 petroleum
3 electricity - fuel
4 movement - blowing

4 Correct the underlined words:

- 1 Some
2 different
3 Coal
4 deflates

5 Which figure represents more severe damage and why?

- Figure (2)
Because the two cars collide in opposite directions.

6 What will happen when:

- The ball stores potential energy and it doesn't have any kinetic energy.

7 What is the importance of:

- 1 To direct the sunrays towards the cooking pans.
2 To transfer light and sound.

Model Exam 5

1 Choose the correct answer:

- 1 b 2 b 3 c
4 a

2 Write the scientific term:

- 1 Collision
2 Renewable Source of Energy
3 Law of Conservation of Energy
4 Ethanol

3 Complete the following:

- 1 runs out
2 Corn - grass - wood
3 inflates
4 chemical

4 Correct the underlined words:

- 1 more
2 fossil fuel
3 Decreasing
4 Motor

5 Choose from the figures the most effective turbine & clarify the reason:

- Figure (2), because it is taller than figure (1) & it has 3 blades only.

6 What is meant by:

- Energy is neither created nor destroyed but it is changed from one form to another.

7 What will happen when:

- 1 Plants will wither and die.
2 Animals that feed on plants will die.
3 Life disappears on the earth.

8 Give reason for:

- Because the Sun is the main source of energy.

Model Exam 6

Choose the correct answer:

- 1 c 2 b 3 c

Write the scientific term:

- 1 Greenhouse
2 Ecologists
3 Fuel
4 Dynamo

Complete the following:

- 1 changes to kinetic energy
2 solar - electric
3 Solar
4 Petroleum - natural gas - coal

Correct the underlined words:

- 1 Fuel-powered
2 incoming
3 underground
4 fossil fuel

Study the following figure, then

complete the following:

- 1 bat
2 bat - ball
3 increases - different.

Give reason for:

- Because the atmosphere envelope, water and soil absorb heat energy from the sun.

What is the importance of:

- 1 It is used to move objects.
2 a. Planting inside greenhouses
b. Operating irrigation machines
c. Warming houses d. Cooking
e. Heating water

Model Exam 7

1 Choose the correct answer:

- 1 c 2 a 3 d
4 d

2 Write the scientific term:

- 1 Photosphere
2 The Sun 3 Airbag
4 Solar Energy

3 Complete the following:

- 1 Coal
2 Heat energy 3 light
4 louder

4 Correct the underlined words:

- 1 windmills 2 Wood
3 puzzle 4 stops

5 What is the type of the fuel:

- Figure (1): Renewable source of energy.
- Figure (2): Non-renewable source of energy.
- Figure (3): Non-renewable source of energy.

6 What is meant by:

- Renewable Source of Energy:
It is the energy that will not run out faster than us consuming it.

7 How to reduce burning fossil fuel:

- 1 Walking or driving a bike instead of driving cars.
2 Using public transportations.
3 Turning off electric bulbs and electric devices if we don't need them.



Model Answers



Model Exam 8

1 Choose the correct answer:

- 1 c 2 c 3 b
- 4 a

2 Write the scientific term:

- 1 Solar Vehicle
- 2 Heat Energy
- 3 Fossil Fuel
- 4 Electric Energy

3 Complete the following:

- 1 same
- 2 Chemical energy
- 3 electric power stations
- 4 high

4 Correct the underlined words:

- 1 input 2 bike
- 3 Coal 4 heat

5 Arrange the following energy chains from the start to the end:



6 What is meant by:

- Solar panels

They consist of a large number of small solar cells. They change solar energy into electric or heat energies.

7 Give reason for:

- A part of the electric energy changes to heat energy. So you feel hot when you approach your hand to it.

Model Exam 9

1 Choose the correct answer:

- 1 a 2 b 3 b
- 4 c

2 Write the scientific term:

- 1 Electric Vehicle
- 2 Cricket Game
- 3 Fossil Fuel
- 4 Greenhouse

3 Complete the following:

- 1 decrease 2 6
- 3 hot 4 less

4 Correct the underlined words:

- 1 dynamo 2 starts
- 3 biofuel 4 turn off

5 Mention the advantages and disadvantages of solar vehicles:

Advantages

- 1 They don't need fuel.
- 2 They don't need electricity.
- 3 They don't cause climate changes.
- 4 They are light in weight.

Disadvantage

The amount of energy it gets from the sun is smaller than what it gets from gasoline or electricity.

6 What is the importance of:

- It is used by construction workers to knock down parts of buildings.

Model Exam 10

1 Choose the correct answer:

- 1 b
- 4 b

2 c

3 b

2 Write the scientific term:

- 1 Renewable Source of Energy
- 2 Heat Energy
- 3 Seatbelt
- 4 Kinetic Energy

3 Complete the following:

- 1 Wrecking ball
- 2 huge wires
- 3 rotates
- 4 Petroleum - natural gas - coal

4 Correct the underlined words:

- 1 Electric cars
- 2 disappears
- 3 Ethanol
- 4 fossil fuel

5 Complete the following table:

Device	Source of energy	Source of Energy Kind
Flashlight	Chemical energy	Non-renewable
Solar heater	Solar energy	Renewable
Fireplace	Coal	Non-renewable

6 Compare between:

P.O.C.	Biofuel	Fossil Fuel
Its type	Renewable	Non-renewable
Importance	<ol style="list-style-type: none"> 1. Lighting houses 2. Warming houses 3. Cooking 4. Operating cars 	It is a renewable source of energy.
Disadvantages	It causes: <ol style="list-style-type: none"> 1. Air pollution. 2. Global warming. 	To get it, it requires: <ol style="list-style-type: none"> 1. Cutting trees 2. Removal of forests.
Examples	<ol style="list-style-type: none"> 1. Petroleum 2. Natural gas 3. Benzene 4. Coal 	<ol style="list-style-type: none"> 1. Wood 2. Grass 3. Corn 4. Wood chips

