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Energy – How Things Work

Section A – Fill in the Blanks.

- _____ is the common fuel used in most vehicles.
- _____ is the ancient Indian system that helps design buildings in harmony with nature.
- Burning too much wood or coal creates smoke and _____.
- _____ bulbs are energy-efficient and use less electricity.
- _____ rotate with the wind and help to produce electricity.
- Electricity has made our daily lives more _____.
- A rubber band in a guitar produces _____ energy when it vibrates.
- Most of the electricity we use comes from burning fuels like _____.
- The energy stored in petrol and diesel is known as _____ energy.
- Energy makes our world _____ and _____.

Section B – Multiple Choice Questions.

- Which of the following is a source of clean energy?

- | | | | |
|-----------|--------------------------|-----------|--------------------------|
| a) Coal | ☐ | b) Sun | ☐ |
| c) Petrol | ☐ | d) Diesel | ☐ |

- What happens when you place a wet cloth in the Sun?

- | | | | |
|---------------|--------------------------|--------------------|--------------------------|
| a) It freezes | ☐ | b) It gets damaged | ☐ |
| c) It dries | ☐ | d) It melts | ☐ |

- In which regions do people keep their cattle on the ground floor to stay warm in winter?

- | | | | |
|----------------|--------------------------|---------------------|--------------------------|
| a) Uttarakhand | ☐ | b) Himachal Pradesh | ☐ |
| c) Ladakh | ☐ | d) All of these | ☐ |

- What kind of energy did ancient ships use to travel across the seas?

- | | | | |
|-----------------|--------------------------|-----------------|--------------------------|
| a) Solar energy | ☐ | b) Water energy | ☐ |
| c) Wind energy | ☐ | d) Fuel energy | ☐ |

- What do windmills help to generate?

- | | | | |
|----------------|--------------------------|----------|--------------------------|
| a) Electricity | ☐ | b) Light | ☐ |
| c) Heat | ☐ | d) Sound | ☐ |

- Which energy source makes the water wheel rotate?

- | | | | |
|----------|--------------------------|----------|--------------------------|
| a) Light | ☐ | b) Heat | ☐ |
| c) Wind | ☐ | d) Water | ☐ |

- Vaastu Shastra helps plan buildings in harmony with —

- | | | | |
|--------------|--------------------------|-------------|--------------------------|
| a) Colour | ☐ | b) Nature | ☐ |
| c) Furniture | ☐ | d) Vehicles | ☐ |

Electricity can be produced from fast-moving —

a) People ☐

b) Cars ☐

c) Rivers ☐

d) Animals ☐

Which fuel causes more pollution when used?

a) LPG ☐

b) Wood or coal ☐

c) Solar energy ☐

d) Petrol ☐

Machines in industries mainly run on —

a) Solar energy ☐

b) Electricity ☐

c) Wind energy ☐

d) Fuel from vehicles ☐

Section C – True or False.

1. Animals do not need energy to move. ☐
2. Solar power is a clean source of energy. ☐
3. All electricity is produced from renewable sources. ☐
4. Batteries store energy for later use. ☐
5. Energy is needed only when we play. ☐
6. Wind energy can be used to produce electricity. ☐
7. Electricity can be dangerous if not used properly. ☐
8. Oil is the only fuel used in our daily lives. ☐
9. Machines in industries help make things like clothes and toys. ☐
10. Windmills spin with the wind to produce water. ☐

Section D – Match the Following.

Column A	Column B	Ans
1. Solar Panels	i. Used for cooking food	1. ____
2. Windmills	ii. Derived from flowing water	2. ____
3. Cooking Gas	iii. Produce electricity from sunlight	3. ____
4. Coal	iv. Non-renewable energy source	4. ____
5. Hydro Power	v. Generate electricity using wind	5. ____

Section E – Short Answer Questions (2–3 sentences).

1. What is energy?

Ans. _____

2. How do we get energy from food?

Ans. _____

3. What are some sources of energy?

Ans. _____

4. Why do people keep their cattle on the ground floor of their houses?

Ans. _____

5. Why is electricity important?

Ans. _____

6. What is clean energy?

Ans. _____

7. How did traders from Gujarat and Tamil Nadu travel to other countries long ago?

Ans. _____

8. How does Vaastu Shastra help in saving energy?

Ans. _____

9. Why should we use fuel carefully?

Ans. _____

10. Why should we use less wood and coal?

Ans. _____

Section F – Long Answer Questions (4–6 sentences).

1. Describe different sources of energy and their importance.

Ans. _____

2. Explain the benefits of clean energy sources like solar and wind.

Ans. _____

3. Discuss safety rules for using electricity.

Ans. _____

4. How does energy from nature work in daily life, with examples?

Ans. _____

5. What is the role of stored energy, and how can we save it?

Ans. _____

Section G – Give two example each one.

- | | | | |
|----------------------|---|-------|-------|
| 1. Energy from food | – | _____ | _____ |
| 2. Energy from fuel | – | _____ | _____ |
| 3. Energy from wind | – | _____ | _____ |
| 4. Energy from water | – | _____ | _____ |

Section H – One Word Answers.

- | | | |
|--|---|-------|
| 1. Name the world's first airport to run entirely on solar energy | – | _____ |
| 2. Name a device that changes sunlight into electricity | – | _____ |
| 3. Name one source of energy that does not cause pollution | – | _____ |
| 4. The source of energy for living beings | – | _____ |
| 5. The type of energy that comes from movement | – | _____ |
| 6. A machine that uses wind to produce electricity | – | _____ |
| 7. Substances like petrol, diesel, coal or wood that produce energy when burnt | – | _____ |
| 8. Energy stored in torches and toys | – | _____ |
| 9. The animal that helps to keep houses warm in Ladakh | – | _____ |
| 10. Mills that use water to grind grains | – | _____ |

Section I – Unscramble the Words.

- | | | | | | |
|----------------|---|-------|------------|---|-------|
| 1. R E N E G Y | – | _____ | 2. N U S | – | _____ |
| 3. D I N W | – | _____ | 3. T H A E | – | _____ |
| 5. L I G H T | – | _____ | 6. A O L C | – | _____ |

Answer**Section A – Fill in the Blanks**

- | | | | |
|--------------|----------------------|--------------|---------|
| 1. Petrol | 2. Vaastu Shastra | 3. pollution | 4. LED |
| 5. Windmills | 6. comfortable | 7. sound | 8. coal |
| 9. chemical | 10. active and alive | | |

Section B – Multiple Choice Questions

- | | | | |
|--------------------|--------------------|--------------------|-------------------|
| 1. b) Sun | 2. c) It dries | 3. d) All of these | 4. c) Wind energy |
| 5. a) Electricity | 6. d) Water | 7. b) Nature | 8. c) Rivers |
| 9. b) Wood or coal | 10. b) Electricity | | |

Section C – True or False

- | | | | | |
|----------|---------|----------|---------|-----------|
| 1. False | 2. True | 3. False | 4. True | 5. False |
| 6. True | 7. True | 8. False | 9. True | 10. False |

Section D – Match the Following

- | | | | | |
|----------|--------|--------|---------|---------|
| 1. - iii | 2. - v | 3. - i | 4. - ii | 5. - iv |
|----------|--------|--------|---------|---------|

Section E – Short Answer Questions

- Energy is the ability to do work. It helps things move, make light, sound, and heat.
- The food we eat is broken down in our body to give us energy to work, play, and grow.
- The main sources of energy are the Sun, wind, water, food, fuel, and electricity.
- In cold regions, people keep cattle on the ground floor because the heat from the animals keeps the house warm.
- Electricity helps us run machines, lights, fans, and many household appliances.
- Clean energy comes from natural sources like the Sun and wind and does not cause pollution.
- They used ships with large sails that moved with the help of wind energy.
- Vaastu Shastra guides the design of houses to make the best use of sunlight, wind, and natural heat.
- Fuels are limited and cause pollution, so we should use them wisely.
- Burning wood and coal causes smoke and pollution and harms the environment.

Section F – Long Answer Questions

- The Sun, wind, water, food, and fuels are main sources of energy.
The Sun gives us heat and light.
Wind and water help produce electricity.
Fuels like petrol and diesel run vehicles.
All these energy sources are important for our daily activities.
- Clean energy sources like solar and wind do not cause pollution.
They are renewable and available in nature.
Solar panels use sunlight to make electricity, and windmills use wind power.
These sources help save fuel and protect the environment.
- We should never touch electrical switches or wires with wet hands.
Do not play near plugs or sockets.

Always switch off appliances when not in use.

These safety rules help prevent shocks and accidents.

4. The Sun helps to dry clothes and warm water.

Wind turns windmills to make electricity.

Flowing water moves water wheels and turbines.

These natural forms of energy make our lives easier and safer.

5. Stored energy in fuels and batteries helps us run machines, toys, and vehicles.

We can save energy by switching off lights and fans when not needed.

Using solar and wind energy also helps reduce fuel use.

Saving energy protects natural resources for the future.

Section G – Give Two Examples Each

1. Running, playing

2. Driving cars, cooking

3. Turning windmills, sailing boats

4. Water wheels, hydropower plants

Section H – One Word Answers

1. Cochin International Airport

2. Solar panel

3. Wind energy

4. Food

5. Kinetic energy

6. Windmill

7. Fuels

8. Batteries

9. Cattle

10. Watermills

Section I – Unscramble the Words

1. ENERGY

2. SUN

3. WIND

4. HEAT

5. LIGHT

6. COAL

One Point Learning