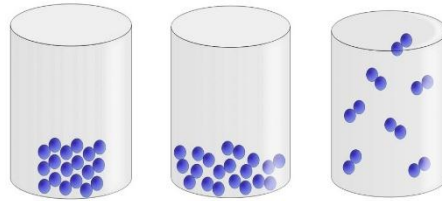


Unit 4: Matter and its characteristics

Use these words to fill in the blanks. Some words will be used more than once.

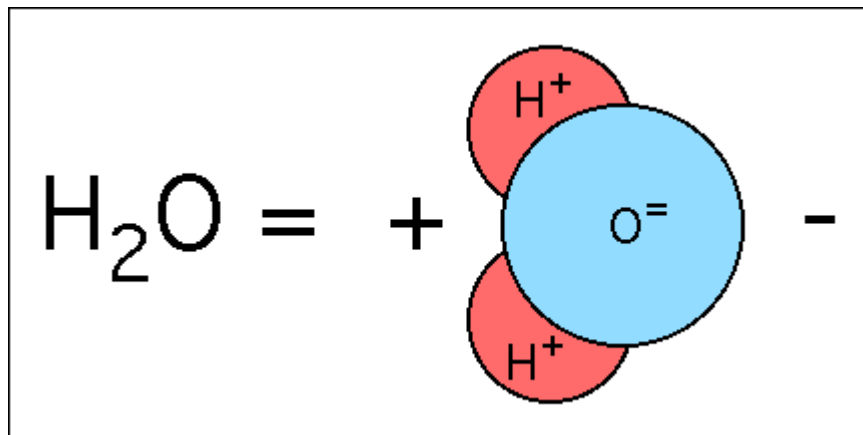
Particles	Matter	Mass	Space
-----------	--------	------	-------

### States of Matter



- Everything in this world that has mass and occupies space is matter.
- Particles are always moving about.
- Matter is found in three states or forms.

Now complete these three sentences using the same pair of words each time.



- Ice is made up of hydrogen, oxygen
- Water is made up of hydrogen, oxygen
- Water vapour is made up of hydrogen, oxygen

## Concept check:

<u>Object</u>	<u>Mass</u>	<u>Volume</u>	<u>State of matter</u>	<u>Conducts heat</u>	<u>Conducts electricity</u>	<u>Floats on water</u>	<u>Sinks in water</u>
<u>Air</u>	Definite	Indefinite	Gas	Yes	No	No	Yes
<u>Water</u>	Definite	Definite	Liquid	Yes	Yes	No	No
<u>Plastic bag</u>	Definite	Definite	Solid	No	No	Yes	No

## Exercise

### Choose the correct Answer.

1. Which of the following metals is also needed in our diet?

- a) gold      b) silver      **c) iron**      d) copper

2. Everything on earth is made up of tiny

- a) Particles**      b) Parts      c) Space      d) Solids

3. Ice , water and water vapour are made of

- a) Water particles**      b) Solids      c) Gas      d) Particle

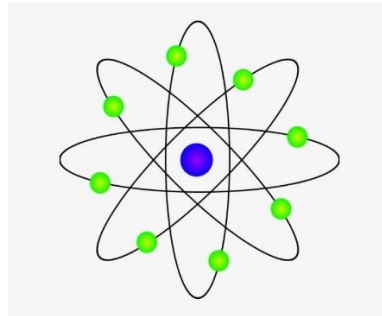
4. Which type of matter has a fixed shape and a fix volume?

- a) Solid**      b) Gas      c) Liquid      d) Particle

5. When iron reacts with air and water , the substance formed on its surface is called

- a) Nickel      b) Steel      **c) Rust**      d) Dust

**Fill in the blanks:**



- a) Matter is made up of atoms.
- b) The particles in a solid are packed very closely together.
- c) The particles in a liquid are packed loosely together .They can flow.
- d) In a gas the spaces between particles are bigger.
- e) Mass is the amount of matter in an object.

**Match the definition in Column A with the correct term in Column**

**B.**

Column A		Column B
Not easy to bend	●	Transparent
See- through	●	Waterproof
Does not absorb water	●	Magnetic
Attracts iron	●	Rigid

**Mark these sentences with true and false:**

- i. Particles move.
- ii. Particles in a gas are packed tightly together.
- iii. A liter of water is more when it is in a 5 liter container.
- iv. Particles in orange juice are packed less closely than those in orange ice lolly.
- v. Ice melts into a gas.

T
F
F
T
F

**Rearrange the jumbled words:**









Jumbled words	Arranged words
Cusloleme	<b>Molecules</b>
Orsonctud	<b>Conductors</b>
Uidiql	<b>Liquid</b>
Orstalsuin	<b>Insulators</b>
Llicatem	<b>Metallic</b>

**Word search:**

SILVER	VINEGAR	MOLECULES	COPPER	MATTER
--------	---------	-----------	--------	--------

M	A	T	T	E	R	T	B	M	V
F	G	J	C	S	H	S	G	X	I
C	O	P	P	E	R	D	U	K	N
W	Q	U	P	B	M	K	L	F	E
S	I	L	V	E	R	L	W	Y	G
J	L	K	W	M	Q	P	G	X	A
K	L	F	O	P	E	W	X	O	R
M	O	L	E	C	U	L	E	S	Y

**Drag and drop:**

<b>Towel</b>	<b>Tyre</b>	<b>Scissors</b>	<b>Glass</b>
			
<b>Ball</b>	<b>Copper wire</b>	<b>Balloon</b>	<b>Steel chain</b>
			

**Conductor**

Scissors

---

Copper wire

---

Steel chain

---

**Insulator**

Towel

---

Tyre

---

Glass

---

Ball

---

Balloon

---

## Comprehension:

Answer the following questions after reading the paragraph.

Matter is anything that has mass and takes up space. Matter can be described in terms of physical properties and chemical properties. Physical properties and chemical properties of matter can change. Matter is composed of elements and compounds.

In matter, the particles attract each other via intermolecular forces of attraction. The particles are continuously moving. The particles of matter have spaces between them. The matter is categorized into three categories: Solid, Liquid and Gas.

**i. What is the composition of matter?**

Matter is composed of elements and compounds.

**ii. Write the three categories of matter.**

Solid, Liquid and Gas.

**iii. Give two characteristics of matter.**

The particles are continuously moving.

The particles of matter have spaces between them.

## Answer the following questions:

**1. What is matter?**

Everything in the world that has some mass and occupies space is called matter.

**2. What is difference between a solid and a liquid?**

Solid	Liquid
Solids have definite shape, mass and volume. For example, a brick , iron rod etc.	Liquids have definite mass and volume but they do not have a fixed shape. For example, water, milk oil etc.

### 3. Why it is not very good idea to use aerosol sprays?

These contain chemicals that could harm the environment when released into the atmosphere.

### 4. What are some of the properties of aluminium?

Aluminium is a silvery-white, soft, non-magnetic and easily shaped metal.

### 5. Do liquids have a fixed shape? Explain your answer.

Liquids have a definite mass and a definite volume but they do not have a fixed shape. They take the shape of container in which they are present.

### 6. Do the particles in a liquid stay in one place?

No, the particles in a liquid are not packed together so closely. The force of attraction between the particles is not so strong. The particles move about more freely.

### 7. Why is it not very good idea to dispose of oil down drains or into lakes and rivers?

Oils do not dissolve in water. They can block drains. They form a film on water and can harm wildlife and plants. Never pour oil down a drain.

### Long question:

#### 1. Differentiate between conductors and insulators?

Conductors	Insulators
The materials through which electricity and heat can flow are called conductors. Examples: Silver, copper, aluminium, mercury, steel, iron etc.	The materials through which electricity and heat cannot flow are called insulators. Examples: Plastic, rubber, wood, air, glass, paper, fabric etc.

Unit 5: forms of energy and energy transfer.

Concept check:

Fill in the blanks with suitable words.

- **Temperature** is the measure of the average energy of particles in a substance.
- **Heat** is the total amount of thermal energy of particles in a substance.

Exercise

Choose the correct answer.

1. Energy is needed to:

- a. Move things.
- b. Pull things
- c. Perform work.
- d. **Do all the above.**

2. To conserve resources we should

- a. **Turn off light when not in use.**
- b. Avoid using energy savers.
- c. Use air conditioners all the time
- d. Waste water.

3. The flow of thermal energy from a warmer object to a cooler object is

- a. **Heat.**
- b. Temperature.
- c. Potential energy.
- d. Energy.

4. Which of the following is a natural source of energy?

- a. Bulb
- b. Battery
- c. Heater
- d. **Natural gas**

5. The normal human body temperature on the Celsius scale is

- a. **37°**
- b. 40°
- c. 98.6°
- d. 0°



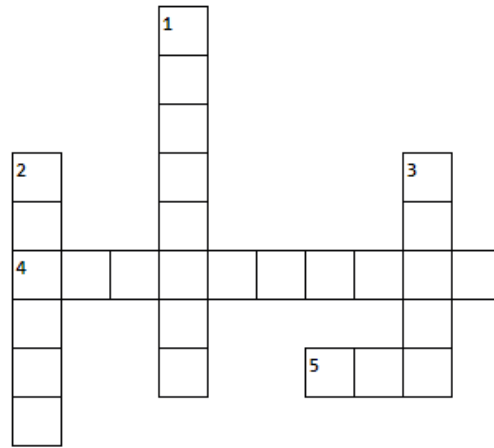
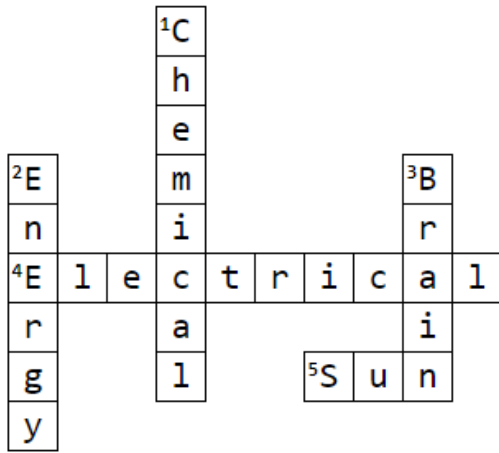
Fill in the blanks with suitable words.

- i. The average energy of particles in a substance is called **temperature**.
- ii. The total energy of particles in a substance is called **heat**.
- iii. The flow of thermal energy from a warmer object to a cooler object is known as **heat**.
- iv. The instrument which is used to measure temperature is called a **thermometer**.
- v. The normal human body temperature on the Celsius scale is **37°**.
- vi. The melting the melting point of ice is **32°** Fahrenheit and **0°** Celsius.
- vii. The temperature at which pure water boils is **212°** Fahrenheit and **100°** Celsius.
- viii. A temperature that is lower than 0°C is written with a **negative** sign.

Answer the following questions:

- i. **Define heat.**  
The total energy of particles in a substance is called heat.
- ii. **Define temperature.**  
The average energy of particles in a substance is called temperature.
- iii. **Which two scales are commonly used to measure temperature?**  
The two scales to measure temperature are following:
  - Celsius scale.
  - Fahrenheit scale.
- iv. **Which instrument is used to measure temperature?**  
Thermometer is used to measure temperature.
- v. **What happens to the liquid in a thermometer when the air around it gets?**
  - a. **Warmer:** When the air around thermometer gets hot, the liquid inside the thermometer begins to expand. It moves upwards inside the tube.
  - b. **Colder:** When air is cold, liquid contracts and move downwards.

**Crosswords**



**Across**

- 4. Bulb uses energy
- 5. First source of energy

**Down**

- 1. Energy in Food
- 2. Ability to do work
- 3. Most energy demanding organ

**Words Search**

Find the following word in the words search.

Light	Sun	Energy	Electrical	Coal
-------	-----	--------	------------	------

S	F	A	T	S	E	F	F	O	A
P	M	W	S	U	N	C	Q	X	Z
I	L	O	A	W	E	S	F	P	I
E	L	E	C	T	R	I	C	A	L
S	O	U	O	D	G	I	S	Q	H
O	M	I	A	T	Y	O	A	Z	T
G	V	O	L	I	G	H	T	N	U
E	G	S	L	T	Y	A	W	D	S

**Jumbled Words**

i. RENAEBLEW

RENEWABLE

ii. WIDN

WIND

iii. FOSLIS

FOSSIL

iv. WAERT

WATER

v. ENEGYR

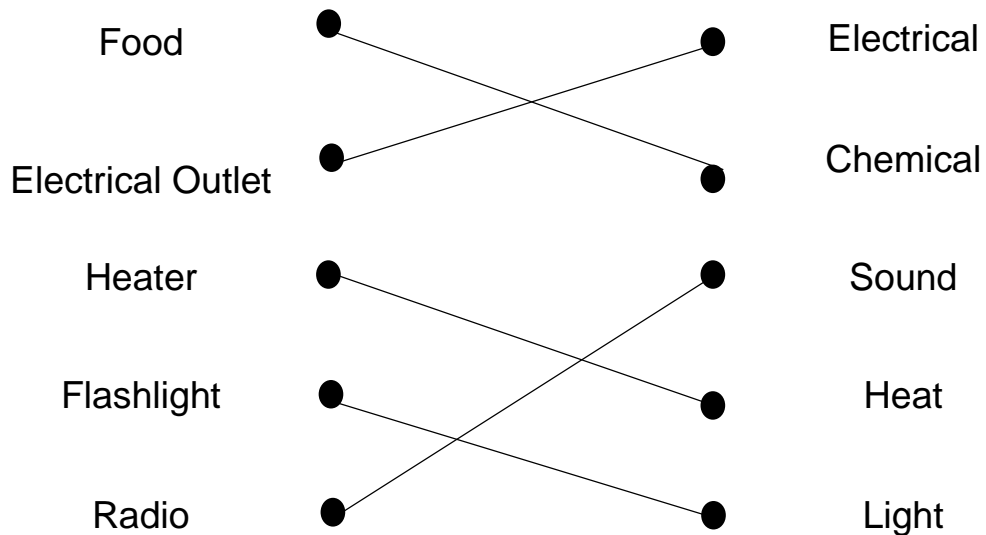
ENERGY

**1. Columns**

**Match Column A with Column B.**

**Column A  
(Appliances)**

**Column B  
(Energy)**



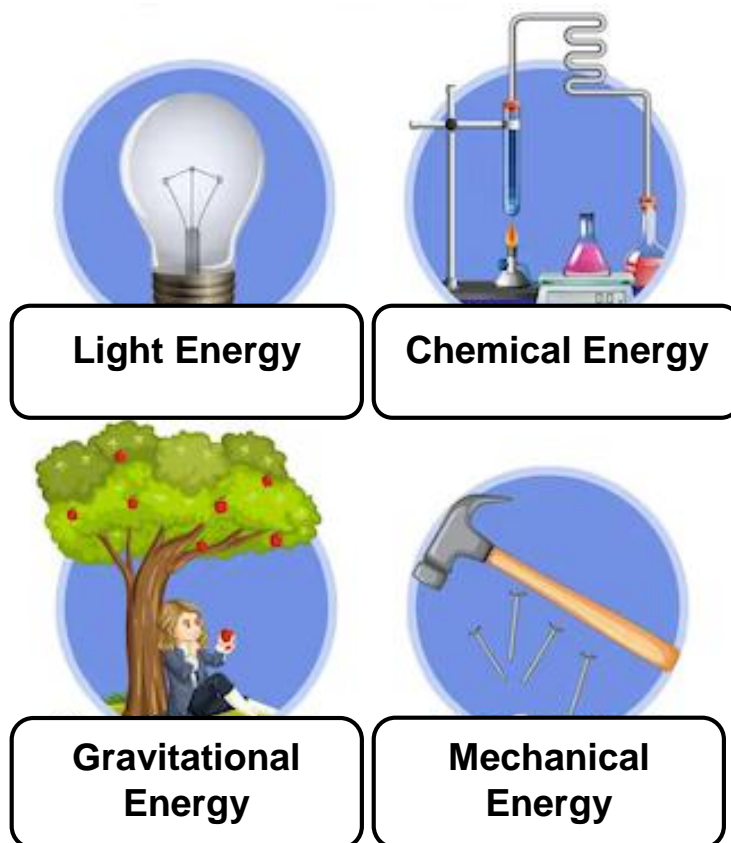
**Write “T” for the true and “F” for the false statement.**

- i. Fossil fuels are renewable energy resources.
- ii. Sun gives electrical energy.
- iii. We need energy to do work.
- iv. Wind power is a dirty source of energy.
- v. Energy can neither be created nor be destroyed.

F
F
T
F
T






**Label the diagram.**

Types of energy



### Drag and Drop

Look at the pictures and write their names in the relevant column.

				
Wind Energy	Water Energy	Heat Energy	Solar Energy	Light Energy

### Comprehension

Answer the following questions after reading the paragraph.

The ability for doing work is known as Energy. Energy is a universal term, which we use a lot in our daily life. There are so many energy sources. Mainly, the energy is created from the natural sources including sun, wind, water, coal, oil and gas. Coal, oil and gas are known as Fossil Fuels. Fossil fuels formed in the geological past from the remains of living organisms. It takes millions of years to form.

i. **What are fossil fuels?**

Ans: Coal, oil and gas are known as fossil fuels.

ii. **Write down the natural sources of energy.**

Ans: Natural sources of energy are Sun, wind, water, coal, oil and gas.

Sound + Light

Concept check:

Sound travels in a medium. Sound can travel through solids liquids and gases. Sound cannot travel through outer space because it is a vacuum.

Choose the correct answer.

1. More vibrations per second

a. Noise.

c. Silence.

b. High sounds.

d. Low sounds.

2. Which of the following frequencies cannot be heard by the human ear?

a. 5 Hz

c. 500 Hz

b. 10,000 Hz

d. 100 Hz

3. The frequency of a sound wave is the

a. Number of vibrations per seconds.

c. Number of vibrations per hour.

b. Number of vibrations per minute.

d. None of the above.

4. An echo is produced when

a. There are many people in a room.

c. There are many soft objects in a room.

b. Sound waves bounce off a surface.

d. Sound waves are absorbed by a surface.

5. If an object vibrates 500 times in a second, its frequency will be

a. 50 Hz

c. 5000 Hz

b. 500 Hz

d. 5 Hz

Match the definition in the column A with the correct term in column B.

Column A	Column B
Repeated motion of an object.	Echo
The unit of measuring frequency.	Sound wave
The bouncing of a sound wave from one surface to another.	Vibration
Vibration passing from particle to particle.	Hertz

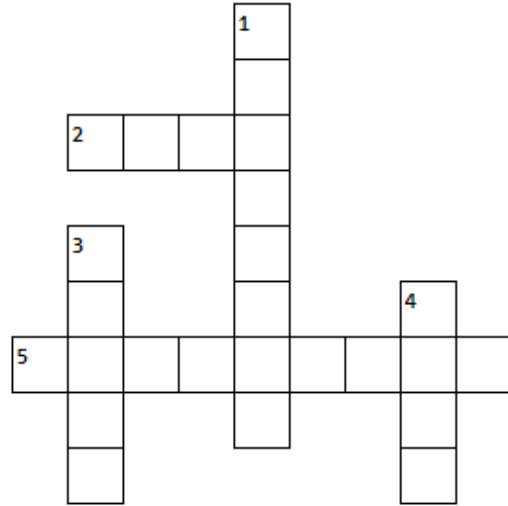
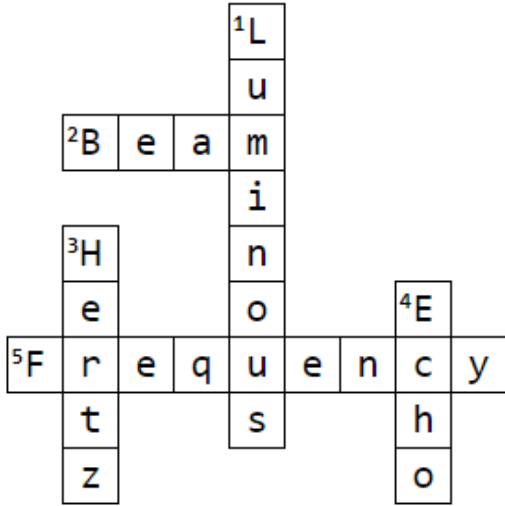
**Match the definition in the column A with the correct term in column B.**

Column A	Column B
An object that produces its own light.	Opaque
An object that allows all of the light to pass through it.	Translucent
An object that blocks the light.	Transparent
An object that allows some of the light to pass through it.	Luminous

**Fill in the blanks.**

- i. Sound waves cannot travel in a vacuum.
- ii. The number of vibrations are measured in units called hertz.
- iii. A recurring disturbance or movement that transfers energy through matter is called a sound.
- iv. Sound travels fastest through a solid medium.
- v. Bats use a property of sound called echolocation to tell where they are going.
- vi. A straight line of light coming from a light source is called a beam.
- vii. An object that gives off its own light is luminous.
- viii. An object that allows all of the light to pass through it is transparent.
- ix. An object that allows all partial light to pass through it is translucent.
- x. An object that allows all no light to pass through it is opaque.
- xi. The word solar means the Sun.  
The moon shines only because it reflects the light of the Sun.

**Crosswords**



Across

Down

- 2. Collection of rays
- 5. Vibrations per second

- 1. Object gives light
- 3. Hz
- 4. Reflection of sound

**Words Search**

Find the following word in the words search.

Opaque	Reflect	Hertz	Echo	Light
--------	---------	-------	------	-------

S	F	A	T	L	I	G	H	T	A
P	M	W	S	U	N	C	E	X	Z
I	L	O	A	W	E	S	R	P	I
E	R	E	F	L	E	C	T	A	L
S	O	C	O	D	G	I	Z	Q	H
O	M	H	A	T	Y	O	A	Z	T
G	V	O	P	A	Q	U	E	N	U
E	G	S	L	T	Y	A	W	D	S



**Jumbled Words**

i. AVIBTIRON

VIBRATION

ii. UOSND

SOUND

iii. WVEA

WAVE

iv. TGHIL

LIGHT

v. NLOUMIUS

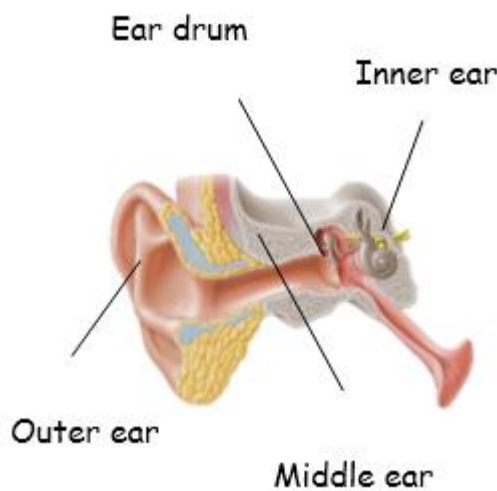
LUMINOUS

**Write “T” for the true and “F” for the false statement.**

- vi. Light cannot travel through vacuum.
- vii. Transparent objects do not allow light to pass.
- viii. Fireflies are luminous.
- ix. Polished metals reflect light well.
- x. Light and sound are forms of energy.






F
F
T
T
T

**Label the diagram.**



**Drag and Drop**

Look at the pictures and write their names in the relevant column.

				
<b>Sun</b>	<b>Book</b>	<b>Firefly</b>	<b>Moon</b>	<b>Light Bulb</b>

<b>Luminous</b>	<b>Non-Luminous</b>
Sun	Book
Firefly	Moon
Light bulb	

**Classify the given objects:**

<b>Objects</b>	<b>Transparent</b>	<b>Translucent</b>	<b>Opaque</b>
Cloud		✓	
Aluminium foil			✓
Brick			✓
Sunglasses		✓	
Butter paper		✓	
Eyelids			✓
Clean air	✓		

## Comprehension

Answer the following questions after reading the paragraph.

Sound is a form of energy. It is produced by vibrations and it travels in waves. The air through which sound travels is called a medium. A medium can be anything – liquid, solid or gas. Sound travels fastest in solids than in liquids and most slowly in gases.

**i. How is sound produced?**

Ans: Sound is produced by vibrations.

**ii. What is medium?**

Ans: The air through which sound travels is called a medium.

### Short questions:

**1. Define luminous object and give one example.**

If an object can give off its own light, it is called luminous object.

Examples: the Sun, fire etc.

**2. Define non-luminous object and give one example.**

If an object cannot give off its own light, it is called luminous object.

Examples: moon, book etc.

**3. Define sound?**

Sound is a form of energy. It is produced by vibrations and travels in waves.

**4. Define frequency.**

The number of vibrations per second is called frequency. Its unit is called hertz (Hz).

**5. Can sound travel in a vacuum?**

Sound waves need a medium to travel through. But there is no medium in vacuum. That's why sound cannot travel in vacuum.

### **Long question:**

#### **Transparent objects:**

Objects which allow all the light to pass through them are called transparent objects.

**Examples:** Glass window, plastic wrap, clear glass etc.

#### **Translucent objects:**

Objects which allow some light to pass through them are called translucent objects.

**Examples:** tissue paper, butter paper etc.

#### **Opaque objects:**

Objects which do not allow any light to pass through them are called opaque objects.

**Examples:** book, wall etc.

## Unit 5c electricity and simple circuits

**Choose the correct answer.**

- i. The materials which allow electricity to pass through them are called
- a. Insulators **b. Conductors**  
 c. Plastic d. Wood
- ii. The materials which do not allow electricity to pass through them are called
- a. Insulators** b. Conductors  
 c. Copper d. Iron
- iii. Which of the following is an example of an insulator?
- a. Rubber** b. Copper  
 c. Silver d. Iron
- iv. Which of the following is an example of a conductor?
- a. Rubber **b. Copper**  
 c. Wood d. Plastic
- v. Which kind of circuit has two or more paths for the current to flow along?
- a. Series circuit **b. Parallel circuit**  
 c. Simple circuit d. Incomplete circuit
- vi. Which of the following describes the flow of current in a series circuit?
- a. The current flows along two or more paths.  
 b. The current does not flow  
**c. The current only has one path to flow along.**  
 d. The current is controlled by a switch.

**Fill in the blanks:**

- i. Electricity which flows through a material is called **current**.
- ii. A complete path for electricity to flow along is called a **circuit**.
- iii. If there is no gap or break in the circuit it is called an **incomplete circuit**.
- iv. If there is gap or break in the circuit it is called a **complete circuit**.
- v. The device which is used to turn on electrical appliance on or off is called a **switch**.
- vi. In a **series** circuit, the appliances are connected in a line, one after other.
- vii. In a **parallel** circuit, the current flows through different branches or paths.
- viii. A substance which allows electricity to pass through is called a **conductor**.
- ix. A substance which does not allow electricity to pass through is called an **insulator**.

**Make a list of electrical appliances in your home. Classify them into mains-powered and battery powered.**

Appliance at home	Mains-powered	Battery powered
Mobile phone		✓
TV	✓	
Torch light		✓
Iron	✓	
Toy car		✓

**Short questions:**

**1. What is a switch used for?**

A switch is device that is used to turn an electrical appliance on or off.

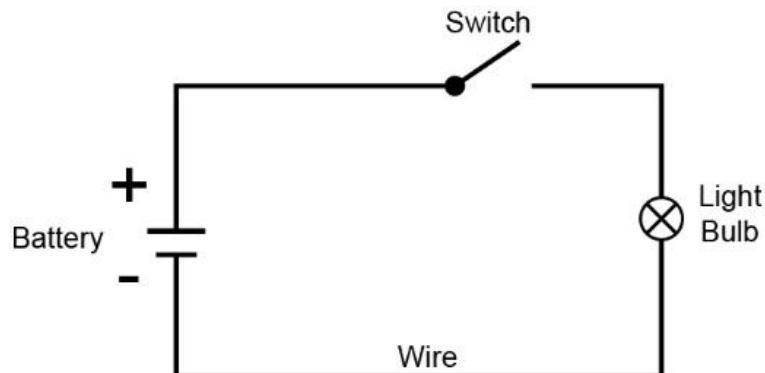
**2. Define a circuit?**

The path along which electricity flows is called a circuit.

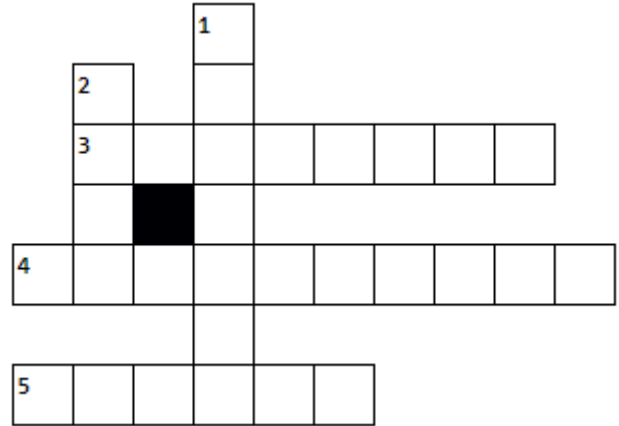
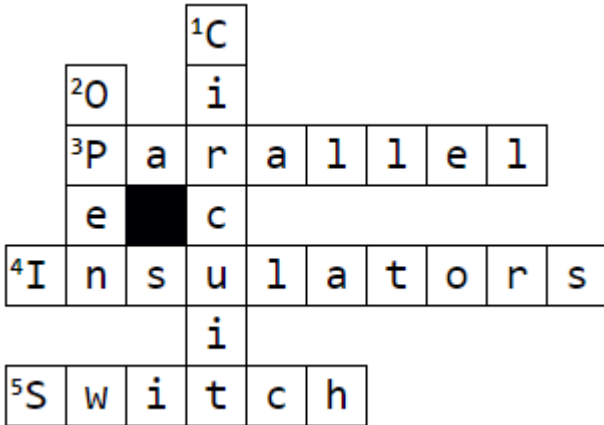
**3. Compare a series and parallel circuit?**

Series circuit	Parallel circuit
In a series circuit, the appliances are connected in a line one after the other.	In a parallel circuit, the current flows through different branches or paths.

**4. Draw a complete circuit.**



**Crosswords**



**Across**

- 3. Circuit with more paths
- 4. Materials for safety
- 5. Control flow of current

**Down**

- 1. Path for electricity
- 2. Gap in circuit

**Words Search**

Find the following word in the words search.

Series	Wire	Circuit	Mains	Flow
--------	------	---------	-------	------

S	F	L	O	W	E	F	F	O	A
P	M	W	S	U	N	C	C	X	Z
I	L	O	A	W	E	S	I	P	I
E	S	E	R	I	E	S	R	A	L
S	O	U	O	R	G	I	C	Q	H
O	M	I	A	E	Y	O	U	Z	T
G	V	O	L	I	M	A	I	N	S
E	G	S	L	T	Y	A	T	D	S

**Jumbled Words**

i. COMLETEP

COMPLETE

ii. BLUB

BULB

iii. GHTLI

LIGHT

iv. ELTRICITYEC

ELECTRICITY

v. PTHA

PATH

**2. Columns**

Match Column A with Column B.

**Column A**

**Column B**

Plastic

Output

Bulb

Insulator

Copper

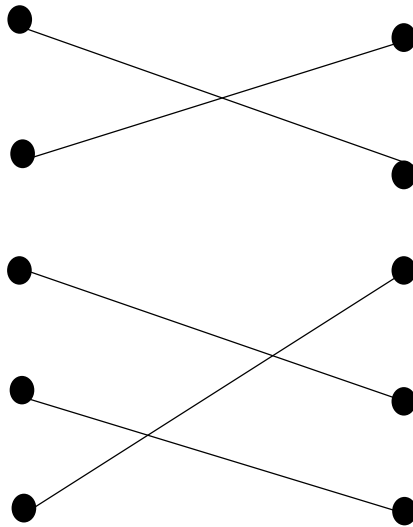
Input

Closed circuit

Conductor

Battery

Complete



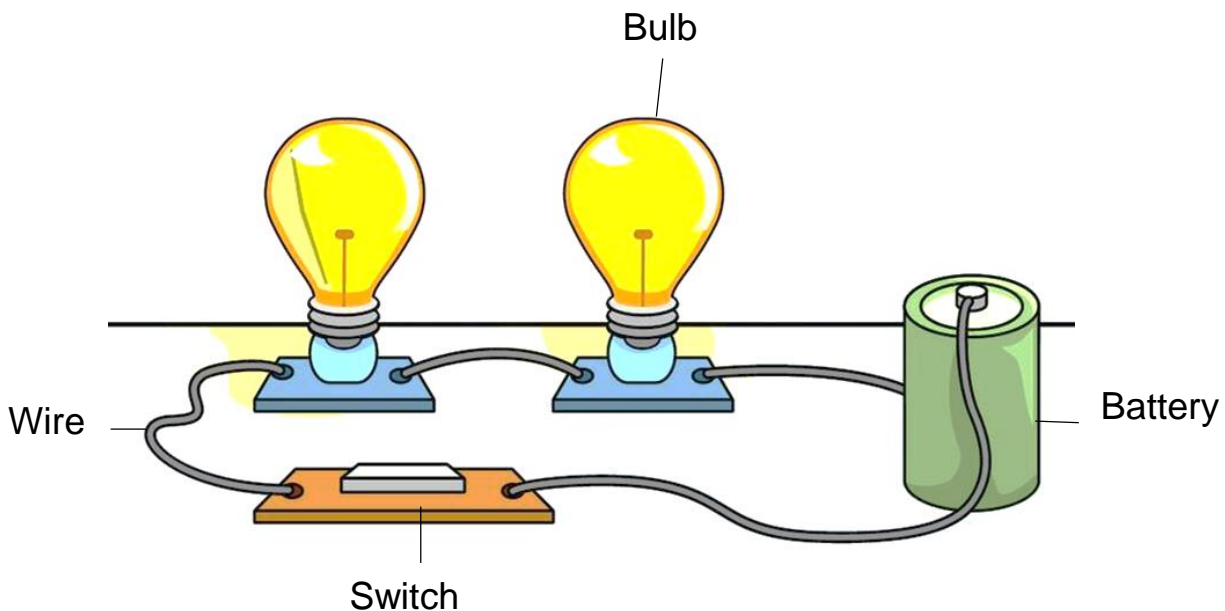


**Write “T” for the true and “F” for the false statement.**

- i. Electricity will not flow in a closed circuit.
- ii. Switch is a device used as ON and OFF button.
- iii. In series circuit, bulb glows more brightly.
- iv. Electricity is a form of energy.
- v. Appliances connected with each other in series circuit.





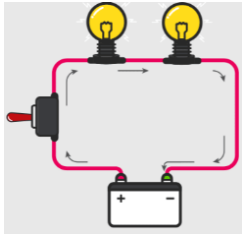
F
T
F
T
T

**Label the diagram.**



### Drag and Drop

Look at the pictures and write their names in the relevant column.

				
<b>Battery</b>	<b>Switch</b>	<b>Transformer</b>	<b>Electricity</b>	<b>Series circuit</b>

### Comprehension

Answer the following questions after reading the paragraph.

Electricity is the flow of electrical power or charge. Electricity is both a basic part of nature and one of the most widely used forms of energy. The path along which electricity flows is called a circuit. There are two types of circuit, closed circuit and open circuit.

iii. **What is electricity?**

Ans: Electricity is the flow of electrical power or charge.

iv. **How many types of circuit. Name them.**

Ans: There are two types of circuit.

- Closed circuit
- Open circuit

Unit 6: Forces and motion

**Choose the correct option**

1. which of the following is the example of the simple machine:

- a) juicer      b) staler      c) nail clipper      d) scissors

2. a light bulb is an example of a:

- a) lever      b) screw      c) wedge      d) wheel and axle

3. gears moving in a circular motion are a type of:

- a) lever      b) screw      c) wedge      d) wheel and axle

4. toilet paper on a roller is an example of a:

- a) pulley      b) wheel and axle      c) inclined plane      d) lever

5. The metal cap of a bottle can be opened by using a bottle opener. In this case the bottle opener works as a:

- a) screw      b) wedge      c) lever      d) pulley

6. a flagpole is an example of a:

- a) lever      b) pulley      c) wheel and axle      d) all of them

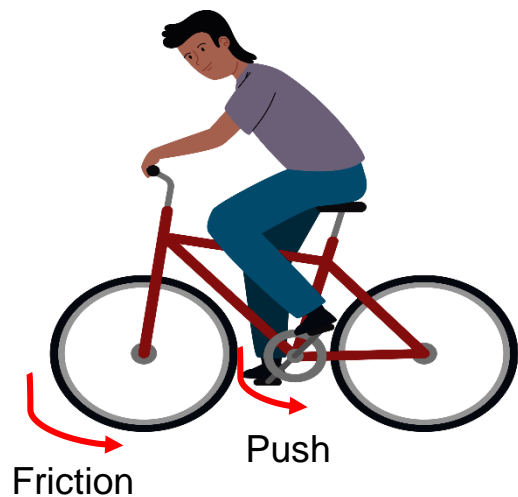
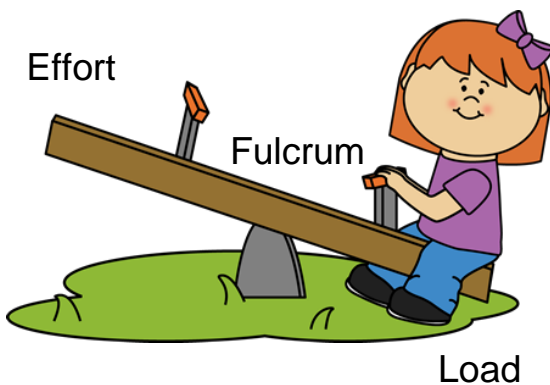
### Fill in the blanks

- i. A device or tool used to make the work easier and faster is called **machine**.
- ii. A **simple** machine has few or no moving parts.
- iii. A **compound** machine is made up of two or more simple machines combined together.
- iv. A simple machine is made up of a bar or rod, which rests and turns on a fixed point is called a **lever**.
- v. A simple machine is used to cut or split things apart is called a **wedge**.
- vi. A simple machine that is used to fasten or hold materials together is called a **screw**.
- vii. A simple machine with a slanting surface used to move heavy loads up or down is called an **inclined plane**.
- viii. A simple machine consisting of a rope or string, wound around a grooved wheel is called a **pulley**.
- ix. The rod that goes through the wheel and helps the wheel to move is called an **axle**.

Match the column A with column B:

Column A	Column B
Two inclined plane joined back to back, used to cut or split things apart	Inclined plane
A rigid bar or rod that rests and moves on a support and is used to move a heavy load easily	pulley
a rope or string wound around a grooved wheel, used to move objects up, down, or across	screw
a slanting surface used for moving objects from lower to higher or higher to lower surfaces easily	wedge
an inclined plane wrapped around a cylindrical pole that is used to fasten, or hold things together	lever

Label the diagram.

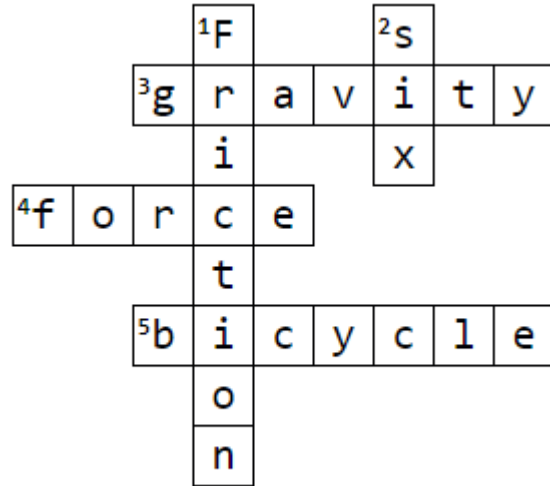
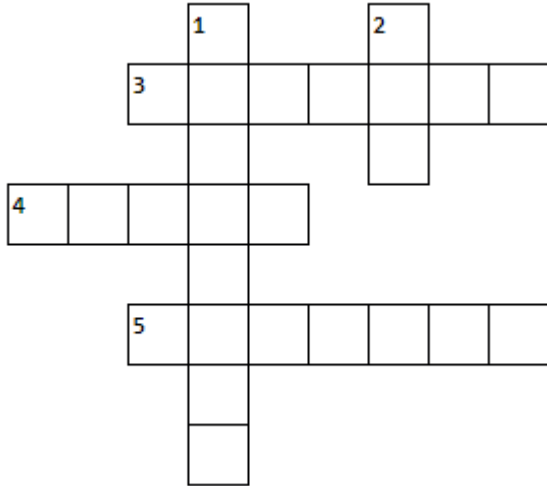


**Find and circle the names of the following words in the square below.**

Distance	Drill	Flagpole	Force	Fork	Friction
Gravity	Inclined plane	Lever	Pull	Pulley	Push
Ramp	Screw	See-saw	Speed	Wedge	Windmill
Wheel and axle					

K	I	G	W	H	E	E	L	A	N	D	A	X	L	E
Q	P	R	Q	L	Y	I	F	L	A	G	P	O	L	E
V	F	P	U	S	H	B	I	P	H	B	W	Y	Q	P
T	B	Z	T	P	F	C	N	J	F	R	C	U	J	U
P	S	E	U	F	O	R	C	E	R	R	B	R	G	L
W	G	H	H	B	R	G	L	Z	I	P	I	D	R	L
I	Z	F	C	W	K	S	I	P	C	E	X	D	A	E
N	Y	M	A	G	H	M	N	G	T	W	P	R	V	Y
D	I	S	T	A	N	C	E	J	I	N	U	I	I	F
M	I	B	V	V	W	G	D	S	O	L	L	L	T	B
I	+	J	J	R	A	M	P	C	N	E	L	L	Y	Z
L	P	L	C	Y	D	W	L	R	T	V	U	W	L	O
L	E	P	H	P	S	S	A	E	W	E	D	G	E	P
V	E	N	Z	J	T	K	N	W	P	R	N	I	Y	K
B	D	N	S	J	H	S	E	E	S	A	W	X	Q	S

**Crosswords**



**Across**

- 3. natural force.
- 4. push or pull.
- 5. a compound machine.

**Down**

- 1. slows down things.
- 2. number of simple machines

**Jumbled Words**

- |       |          |                 |       |        |               |
|-------|----------|-----------------|-------|--------|---------------|
| vi.   | Focre    | <u>Force</u>    | vii.  | Reelv  | <u>Lever</u>  |
| viii. | Notiom   | <u>Motion</u>   | ix.   | Cewrs  | <u>Screw</u>  |
| x.    | Vitgray  | <u>Gravity</u>  | xi.   | Earsg  | <u>Gears</u>  |
| xii.  | Ricftion | <u>Friction</u> | xiii. | Gewed  | <u>Wedge</u>  |
| xiv.  | Chiname  | <u>Machine</u>  | xv.   | Yellup | <u>Pulley</u> |



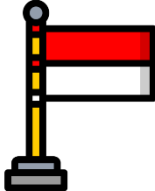






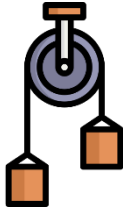
Write “T” for the true and “F” for the false statement.

- i. Gears are a type of lever.
- ii. A pulley is a compound machine.
- iii. Lever help to raise or lower a heavy load.
- iv. Rubbing hands is an example of lever
- v. Gravity pulls everything towards the center of the earth.

T
F
T
F
T

### Drag and Drop

Look at the pictures and write their names in the relevant column.

				
Drill	Wheel and axle	Flagpole	Inclined plane	Spade
				
Screw	Bicycle	Lever	Playground slide	Pulley

#### Gadget

Drill

Bicycle

Playground slide

Spade

Flagpole

#### Machines

Screw

Wheel and axle

Inclined plane

Lever

Pulley



**Short Question Answers.**

1. If an object is acting as a lever, what is the force applied to the object called?

The force applied to the object is called effort.

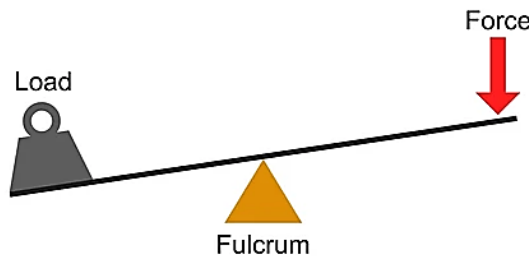
2. What is the point where a lever moves called?

This point is called fulcrum.

3. How is a simple machine different from a compound machine?

Simple Machine	Compound Machine
A simple machine has few or no moving parts. Example: Lever etc.	When two or more simple machines are put together, they make a compound machine. Example: Wheel barrow etc.

4. Draw a lever and label all three parts of it.



5. Where do you see the use of pulleys? Give at least three examples from your daily life.

Pulleys are used in:

- Flagpoles
- Window blinds
- Clothing line

6. How can you say that inclined planes are machines? Give at least three examples from your daily life to support your answer.

An inclined plane has a sloping surface that reduces the force needed to raise a load and make our work easier.

Examples in our daily life:

Slides, rooftops, stairs and ramps.

## Fun page

Find 13 words from unit heat in the grid below.

Here are the first letters of the words you are looking for:

B, C, D, E, F, F, H, L, M, P, T, T, T

M	I	G	U	S	T	A	D	E	S	T	U	D
F	A	H	R	E	N	H	E	I	T	I	O	E
S	P	E	A	N	O	L	G	P	E	R	O	N
O	H	A	B	L	P	A	R	T	I	C	L	E
M	U	T	C	H	O	X	E	Z	T	F	U	V
T	H	E	R	M	O	M	E	T	E	R	N	A
E	M	E	M	A	N	E	Q	H	U	E	E	P
S	P	G	A	S	D	L	Y	E	I	E	P	O
L	A	B	O	R	A	T	O	R	Y	Z	E	R
K	A	O	Y	A	Y	R	P	M	T	I	V	A
W	B	I	X	D	K	P	S	A	O	N	I	T
C	E	L	C	I	U	S	N	L	O	G	J	E
F	J	I	Q	O	T	R	A	N	S	F	E	R
K	I	N	E	T	I	C	H	B	G	N	L	C
R	S	G	U	L	C	L	O	N	I	C	A	L