



# **MIDDLE PRIMARY**

## **Advance Science**

### **E-Booklet**

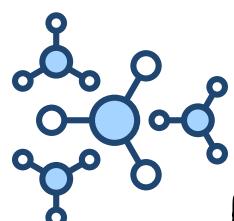
### **Part 1**



# State of Matter

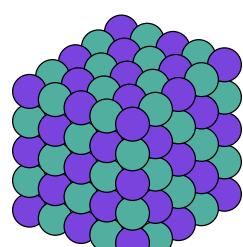
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Match the keyword to the definition by adding numbers.



1  
Particle

Matter with a defined shape and volume. The particles are very close together and arranged in an organized fashion.



2  
Solid

A tiny piece of matter. They can be atoms, molecules or ions.

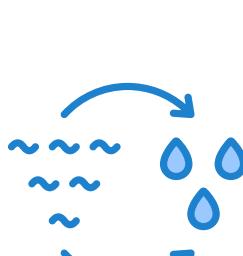


3  
Liquid

Matter that has no fixed volume or shape. The particles are spaced far apart and can move in any direction.



4  
Gas



5  
Condensation

The state change which occurs when the surface of a liquid warms up and turns into a gas.



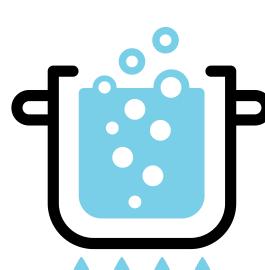
6  
Evaporation

The state change which occurs when a liquid is cooled down and turns into a solid.



7  
Freezing

The state change which occurs when gas is cooled down and forms a liquid.



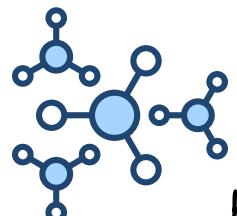
8  
Boiling

The state change (which occurs in water at  $100^{\circ}\text{C}$ ) when a liquid turns into a gas.

## State of Matter - Solutions

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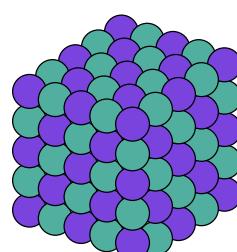
Match the keyword to the definition by adding numbers.



1  
Particle

2

Matter with a defined shape and volume. The particles are very close together and arranged in an organized fashion.



2  
Solid

1

A tiny piece of matter. They can be atoms, molecules or ions.



3  
Liquid

4

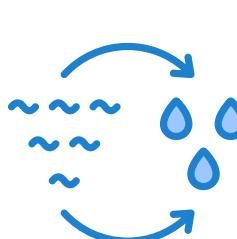
Matter that has no fixed volume or shape. The particles are spaced far apart and can move in any direction.



4  
Gas

3

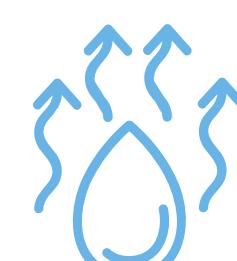
Matter which has a defined volume but no fixed shape. The particles are close together but arranged randomly.



5  
Condensation

6

The state change which occurs when the surface of a liquid warms up and turns into a gas.



6  
Evaporation

7

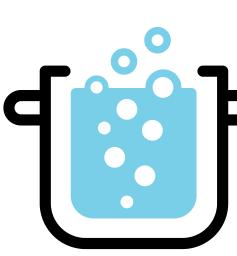
The state change which occurs when a liquid is cooled down and turns into a solid.



7  
Freezing

5

The state change which occurs when gas is cooled down and forms a liquid.



8  
Boiling

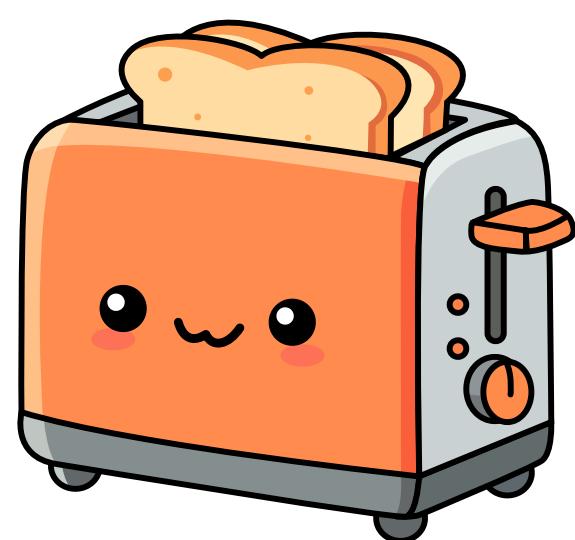
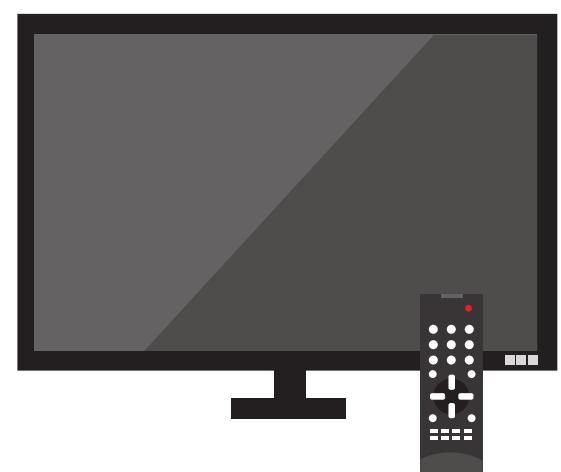
8

The state change (which occurs in water at  $100^{\circ}\text{C}$ ) when a liquid turns into a gas.

## What Needs Electricity?

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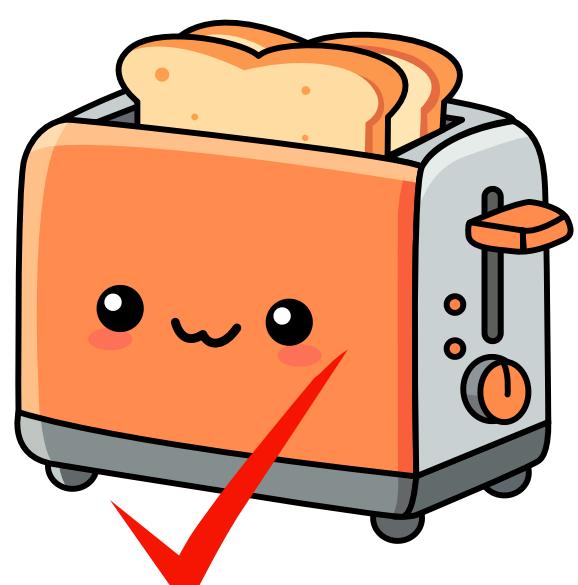
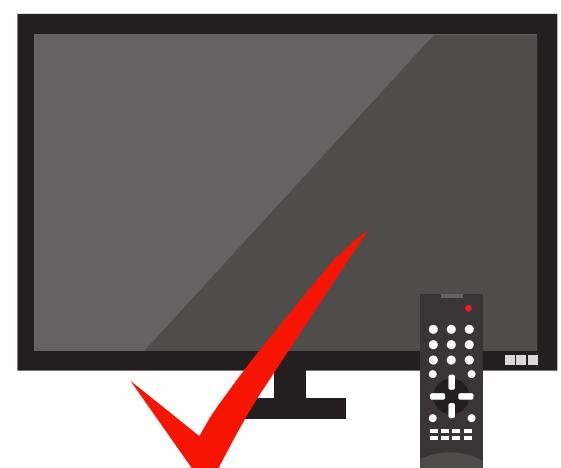
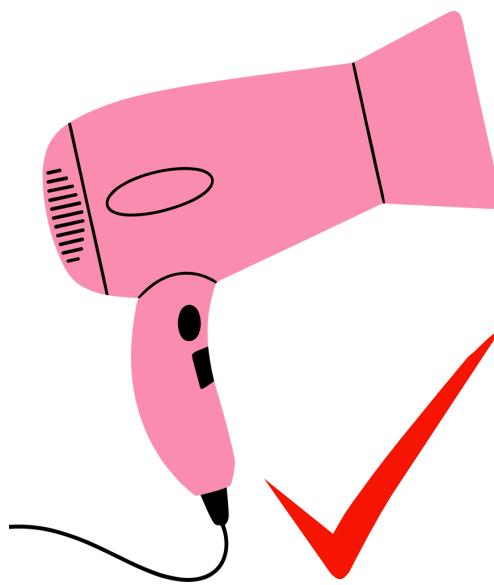
Circle the objects that need electricity.



## What Needs Electricity? - Solutions

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Circle the objects that need electricity.



## Label the Electrical Circuit

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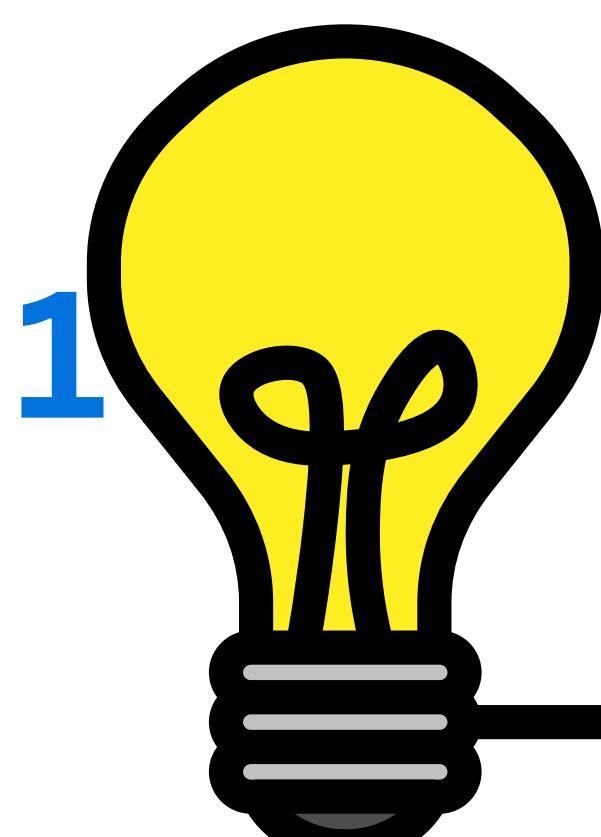
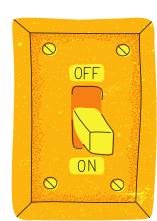
Label the parts of the electrical circuit.

switch

battery

wire

bulb



1

2

3

4

## Label the Electrical Circuit - Solutions

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Label the parts of the electrical circuit.

switch

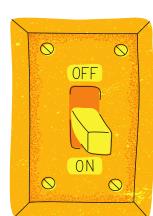
battery

wire

bulb



bulb



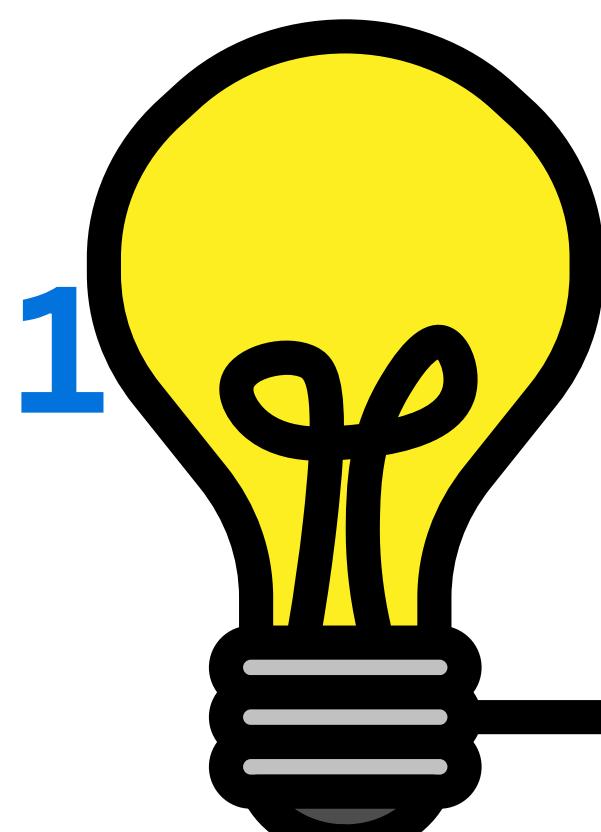
switch



battery



wire



3

4

1

bulb

2

switch

3

wire

4

battery

## Electrical Conductors or Insulators

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Write conductor or insulator in the lines provided for the materials in the pictures

- **A conductor is a material that allows electricity to pass through it.**
- **An insulator is a material that doesn't allows electricity to pass through it**



Rubber Gloves



Nails



Wooden Plank



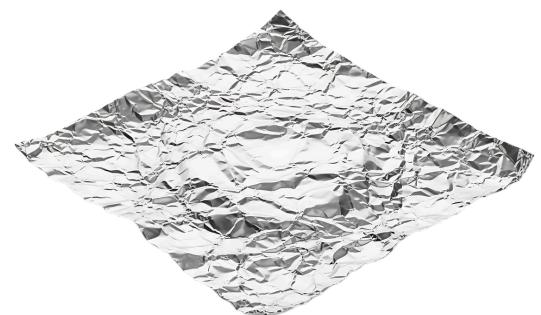
Rubber Tyre



Coin



Glass Cup



Aluminium Foil



Metal Spoon



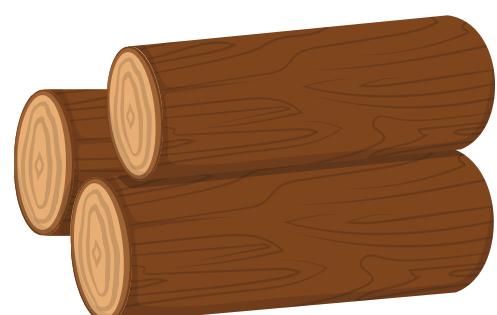
Wooden Ladle



Plastic Cup



Metal Scissors



Wood Logs

## Electrical Conductors or Insulators - Solutions

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Write conductor or insulator in the lines provided for the materials in the pictures

- A conductor is a material that allows electricity to pass through it.
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Rubber Gloves

insulator



Nails

conductor



Wooden Plank

insulator



Rubber Tyre

insulator



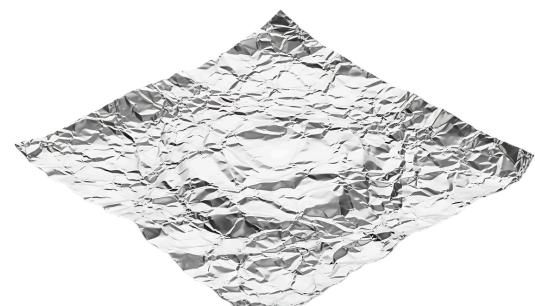
Coin

conductor



Glass Cup

insulator



Aluminium Foil

conductor



Metal Spoon

conductor



Wooden Ladle

insulator



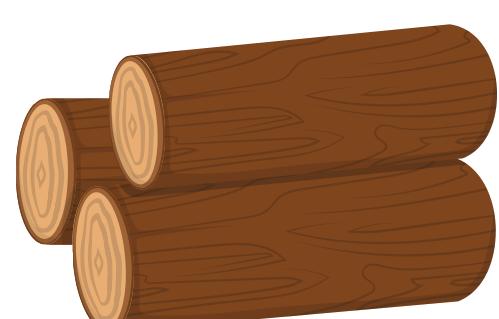
Plastic Cup

insulator



Metal Scissors

conductor



Wood Logs

insulator