

Chapter 2

States of Matter

I. Indicate whether the following statements are true or False:

Question 1.

Solids have a definite volume.

Answer:

True

Question 2.

Liquids can not flow.

Answer:

False

Question 3.

We can melt any substance by cooling it.

Answer:

False

Question 4.

Liquids can take the shape of a container.

Answer:

True

Question 5.

Gases have a definite shape or volume.

Answer:

False

Question 6.

Matter changes its state when heat is added or removed.

Answer:

True

Question 7.

A fuel is a substance which gives heat energy on burning.

Answer:

True

II. Fill in the blanks:

(Evaporation, Mass, Water, Solid, Stone, Freezing)

Question 1.

The measure of matter in an object is _____.

Answer:

Mass

Question 2.

Change of liquid into vapour on heating is called _____.

Answer:

Evaporation

Question 3.

An example for liquid is _____.

Answer:

Water

Question 4.

The change of liquid into solid on cooling is known as _____.

Answer:

Freezing

Question 5.

An example for solid is _____.

Answer:

Stone

III. Draw a line to match the objects and their state of matter:



Solid



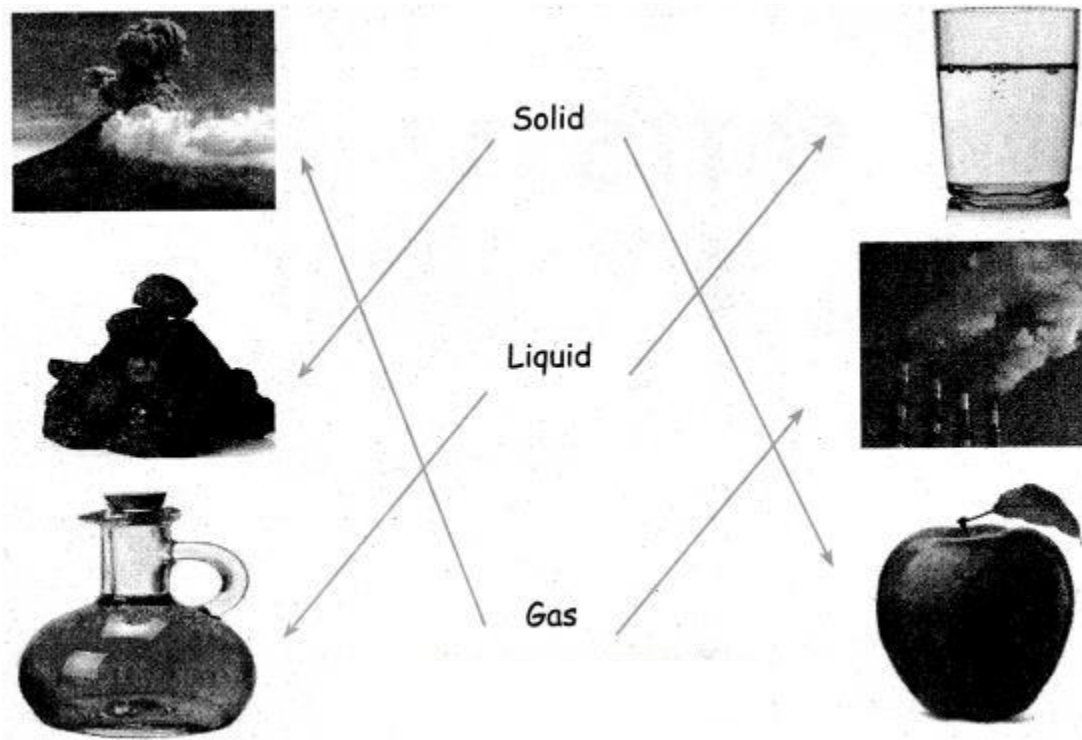
Liquid



Gas



Answer:



IV. Answer in a word or two:

Question 1.

Which of these is a solid: wood or juice? _____

Answer:

Wood.

Question 2.

Which of these is hard : a sponge or a glass or a cloth? _____

Answer:

a glass.

Question 3.

What are three states of matter? _____

Answer:

Solid, Liquid, Gas.

Question 4.

Name three substances which can change to liquid when they are heated?

Answer:

Ice, Cheese, Jaggery.

Question 5.

In which state of matter the particles are very close to each other?

Answer:

Solid State.

Question 6.

What state of matter is rain?

Answer:

Liquid State.

Question 7.

Which among the state of matter has definite size but no definite shape?

Answer:

Liquid State.

Question 8.

What would cause a liquid to turn into a solid?

- a) Pouring it into a container
- b) Heating it until it boils
- c) Cooling it until it freezes
- d) Keeping its temperature the same

Answer:

- c) Cooling it until it freezes

Question 9.

What are some properties of pencil?

Answer:

- Pencil is rigid.
- It has definite shape and volume.
- It occupies a fixed space.
- They cannot move freely.

V. Find me: (Liquid, Water, Wood)

Question 1.

I am a five letter word. I am an essential need for your life. I remain in all the three states of matter. Who am I

Answer:

I am water.

Question 2.

I am a solid. I am obtained from the trees. I am useful for heating. Who am I?

Answer:

I am wood.

Question 3.

I am one among the three states. I have loosely arranged particles. I become vapour on heating. Who am I?

Answer:

I am liquid.

VI. Describe the word in one sentence:

Question 1.

Solid :

Answer:

Solids are things that have a definite shape and volume.

Question 2.

Liquid:

Answer:

Liquids are things that do not have a definite shape but occupies space.

Question 3.

Melting:

Answer:

Change of solid into liquid on heating is called melting.

Question 4.

Evaporation:

Answer:

Change of liquid into vapour on heating is called evaporation.

Question 5.

Freezing:

Answer:

Change of liquid into solid on cooling is known as freezing.

VII. Which change of state is taking place in each description below?

Freezing

Evaporation

Condensation

Melting

a. An ice cube turning to water _____

Answer:

Melting

b. Water turning to ice in a freezer _____

Answer:

Freezing

c. Change of liquid into vapour on heating _____

Answer:

Evaporation


d. A bathroom mirror misting up _____

Answer:

Condensation

Intext Activity:

Let us Do (Text Book Page No. 103):

<p>List out the some of the matter around you.</p> <p>1. _____ 2. _____ 3. _____ 4. _____</p>	
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Answer:

1. House
2. Chair
3. Board
4. Car

Let us Do (Text Book Page No. 105):

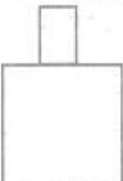
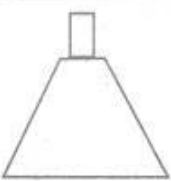
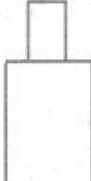
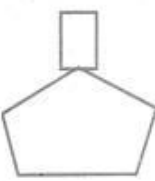
1. Place four 1L bottles of different shapes on the table.
2. Take a bucket with water.
3. Call one child to hold the empty bottles and the other to fill water into them using a paper cup.
4. Ask the other children to fill the table as given below.

	Bottle 1	Bottle 2	Bottle 3	Bottle 4
Number of cups used				
Shape of bottle (Draw)				

Did each bottle need the same number of cups to get filled?

We can see that water takes up the same space in each bottle and the shape of the water is same as the shape of the bottle.

Answer:

	Bottle 1	Bottle 2	Bottle 3	Bottle 4
Number of cups used	6	6	6	6
Shape of bottle (Draw)				

Think Zone (Text Book Page No. 105):

Question 1.

What is the shape of water in your bottle?

Answer:

The water takes up the shape of my bottle.

Question 2.

What happens if you pour water on the floor or table?

Answer:

Spread from one place to another place.

Think Zone (Text Book Page No. 106):

Question 1.

Cooking gas in gas cylinder has a smell. Why?

Answer:

Because Ethyl mercaptan is added with LP& to find the leakage.

Let us Do (Text Book Page No. 107):

Say whether it is Solid or Liquid or Gas (Put 'S' for Solid, 'L' for Liquid and 'G' for Gas).

Falls



Chair



Air filled balloon



Cake



Juice



Jar with pebbles



Ice cube



Steam from soup in bowl



Pencil



Chocolates



Bucket filled with water



Water in a glass



Milk



Bricks



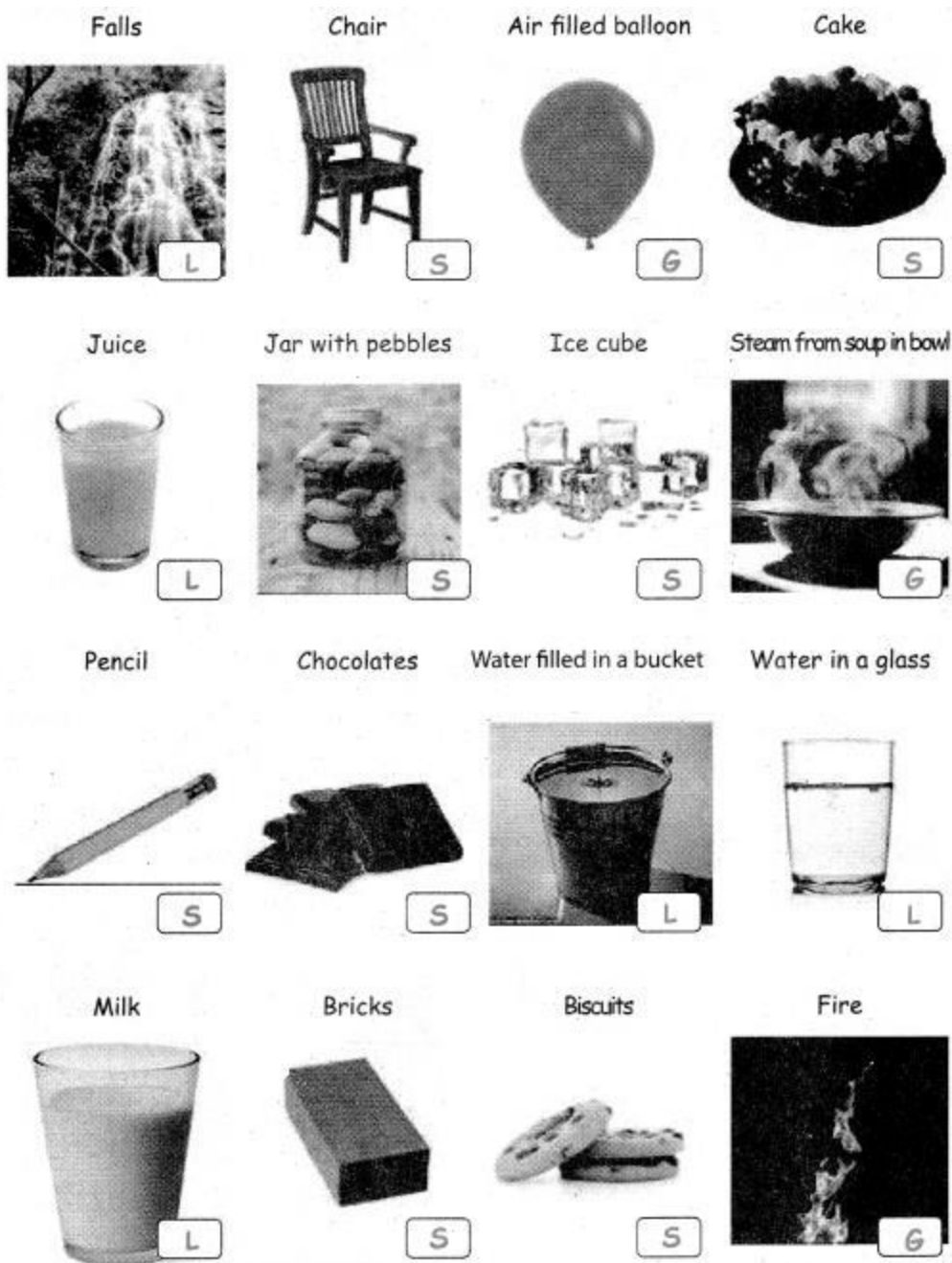
Biscuits



Fire



Answer:



Let us Read and Complete the table (Text Book Page No. 108):

Here are some properties of matter:

Fixed shape

No fixed shape

Fixed volume

No fixed volume

Flow all sides

Rigid

Copy the following table. Write each property in the correct column of the table. Some properties may belong to more than one column.

Properties of solids	Properties of liquids	Properties of gases

Answer:

Properties of solids	Properties of liquids	Properties of gases
Fixed Shape	No fixed shape	No fixed shape
Rigid	Flow all sides	Flow all sides
Fixed volume	Fixed volume	No fixed volume

Let us Do (Text Book Page No. 108):

Question 1.

Take some ice cubes in a container. Heat the container and observe the changes.

Answer:

Ice cubes melt.

Question 2.

Take some cheese in a container.. Heat the container and observe the changes.

Answer:

Cheese melts.

Question 3.

Take some jaggery in a pan. Heat the pan and observe the changes.

Answer:

Jaggery melts.

Let us think (Text Book Page No. 109):

Question 1.

What makes the coconut oil freeze in winter season?



Answer:

In winter season room temperature will drop down almost below 20°C which is less than the freezing point of coconut oil. So it freeze in winter season.

Complete the table (Text Book Page No. 109):

State of matter	Add	New state	Process
ice	+ heat		melting
water	+ heat	steam	
clouds	+ cool	liquid	
	+ cool		freezing

Answer:

State of matter	Add	New State	Process
ice	+ heat	Liquid	melting
water	+ heat	steam	Evaporation
clouds	+ cool	liquid	Condensation
water	+ cool	Solid	freezing

Think and answer (Text Book Page No. 109):



a. Which can was taken from the fridge?

Answer:

Can A.

b. How do you know?

Answer:

Water droplets appear on the can A.

c. How did water droplets appear on the can A?

Answer:

Because of condensation.

d. Why are there no water droplets on can B?

Answer:

Can B is not kept in the fridge.

Let us Understand (Text Book Page No. 109):

Question 1.

Keep a stone on the floor. Does it move by itself?

Answer:

No.

Question 2.

Pour a mug of water on the floor. Does the water flow? Does it flow in one direction?

Answer:

Yes, the water flows in all direction.

Question 3.

Take an air filled balloon. Prick it with a needle. Does the air rush out?

Answer:

Yes.

Question 4.

Fill an open vessel with water. Press the surface of the water with your hands. How do you

feel?

Answer:

Water overflows.

Look at the pictures. Write down what you see. (Text Book Page No. 110):

(Wood, Leaves, Paper)

Question 1.



_____ burns

Answer:

Paper burns

Question 2.



_____ burns

Answer:

Wood burns

Question 3.



_____ burns

Answer:

Leaves burns\

Match the following:

Liquid Fuel

Gas Fuel

Solid Fuel



Answer:

