

# What's the **Matter**?



Name:

Grade:

Name \_\_\_\_\_

Date \_\_\_\_\_

## What's the **Matter**?

God created everything on earth. He created everything with something called **matter**.

Learning about **matter** helps us appreciate, value and understand everything that God created.

**Matter** is the building blocks of everything we see.

Stuff God created **matters**. Everything we see and touch is all made with **matter**. **Matter** has mass and takes up space by having volume. Yup, that means you are **matter**!

You **matter** to God. You are valuable to Jesus. He died to save you. He conquered death and is alive. Jesus loves you so much that he offers you eternal life, so you do not have to die either. You can live forever with a Father who loves you more than **anyone** could ever love you. All you have to do is **believe** that Jesus is the Only Son of God. The Bible promises that if you really believe in Jesus, you are saved. Enjoy your life with Jesus, who created all that **matters**! yay!



Name \_\_\_\_\_

Date \_\_\_\_\_

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He created everything with something  
called **matter**. Learning about **matter**  
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understand everything that \_\_\_\_\_  
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Enjoy your life with Jesus, who created all  
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Name \_\_\_\_\_

Date \_\_\_\_\_

## Matter changes. God does not

### The Bible tells me so...

#### **Hebrews 13:8**

Jesus Christ is the same yesterday and today and forever.

#### **Romans 12: 2**

Do not be conformed to this world, but be transformed by the renewal of your mind, that by testing you may discern what is the will of God, what is good and acceptable and perfect.

#### **Philippians 4:6-7**

Do not be anxious about anything, but in everything by prayer and supplication with thanksgiving let your requests be made known to God. And the peace of God, which surpasses all understanding, will guard your hearts and your minds in Christ Jesus.

#### **2 Corinthians 4:16-18**

Therefore we do not lose heart. Though outwardly we are wasting away, yet inwardly we are being renewed day by day. For our light and momentary troubles are achieving for us an eternal glory that far outweighs them all. So we fix our eyes not on what is seen, but on what is unseen, since what is seen is temporary, but what is unseen is eternal.

#### **James 1:17**

Every good gift and every perfect gift is from above, coming down from the Father of lights, with whom there is no variation or shadow due to change.



Name \_\_\_\_\_

Date \_\_\_\_\_

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James 1:17

Every \_\_\_\_\_ gift and every perfect gift is from above, coming down from the Father of \_\_\_\_\_, with whom there is \_\_\_\_\_ variation or shadow due to \_\_\_\_\_.

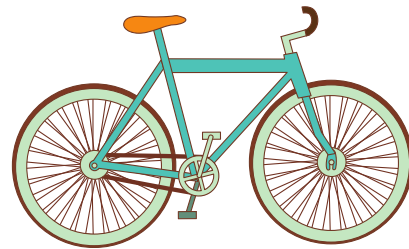
Name \_\_\_\_\_

Date \_\_\_\_\_

# MASS

Circle the object that weighs more than the other.

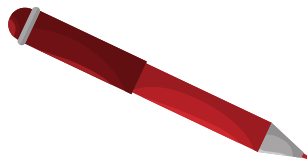
a.



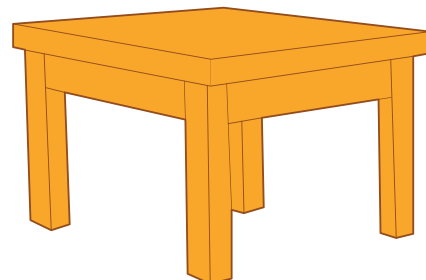
b.



c.



d.



Name \_\_\_\_\_

Date \_\_\_\_\_

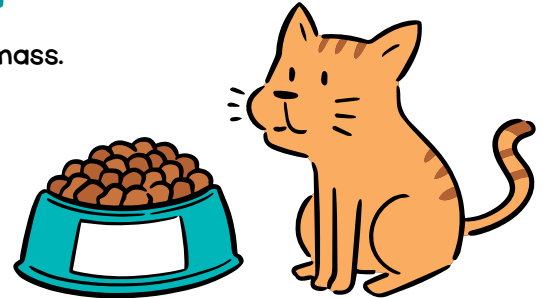
# MASS ESTIMATION

The gram (g) and the kilogram (kg) are metric units of mass.

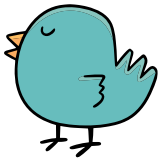
A piece of dry cat food is about one gram.

A kitten is about one kilogram.

1 kg = 1000 g



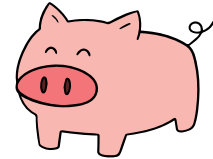
Circle the more sensible measure.



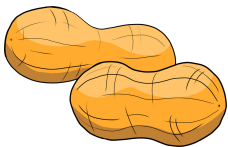
3 g    3 kg



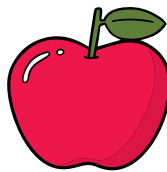
700 g    700 kg



300 g    300 kg



4 g    4 kg



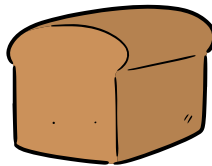
90 g    90 kg



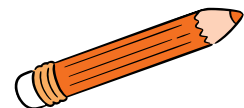
2 g    2 kg



30 g    30 kg



750 g    750 kg



7 g    7 kg

Name \_\_\_\_\_

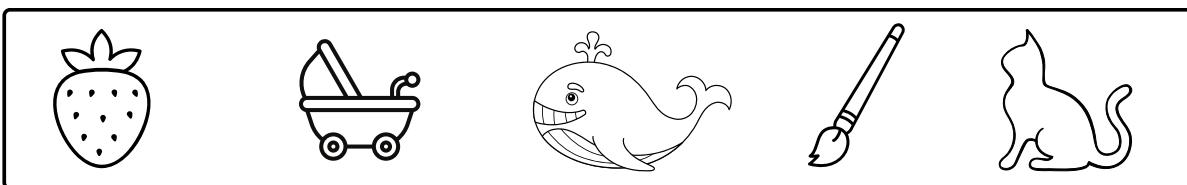
Date \_\_\_\_\_

# MASS

1

Color the two *lightest* items in each set:

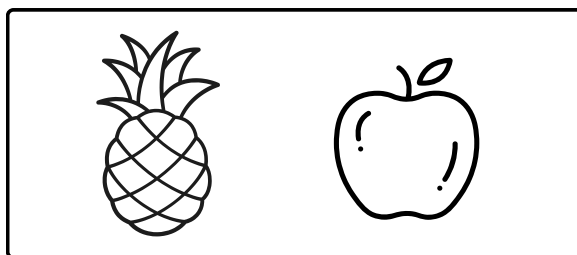
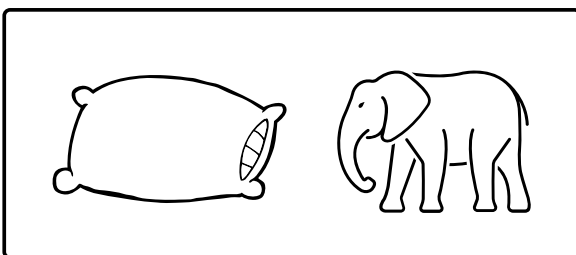
/4



2

Color the *heavier* item in each pair:

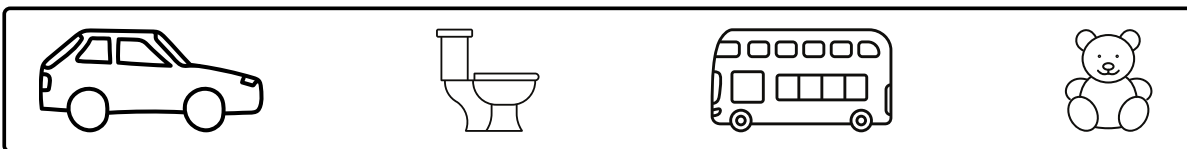
/2



3

Color the *heaviest* item in each set:

/2



Name \_\_\_\_\_

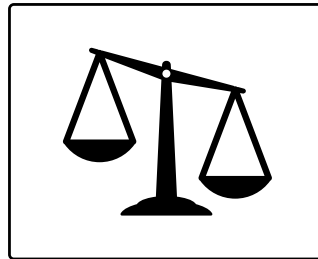
Date \_\_\_\_\_

# MASS

4

Circle the heavier sides of each pan balance:

/2



5

Circle the scales where the items being measured are the same mass:

/1



6

A flower and a cat were placed on separate sides of a pan balance. Draw a picture below to represent the mass difference.

/3

Name \_\_\_\_\_

Date \_\_\_\_\_

# MASS

7

Draw two items with similar masses in each set:

/2

--	--

--	--

8

Draw two items that are light in mass:

/2

--

--

9

Draw two items that are heavy in mass:

/2

--

--

Name \_\_\_\_\_

Date \_\_\_\_\_

# MASS

10

Describe what would happen to a pan scale if you put a brick in one pan and a paperclip in the other.

/6

- Explain your reasoning using words
- Draw your prediction

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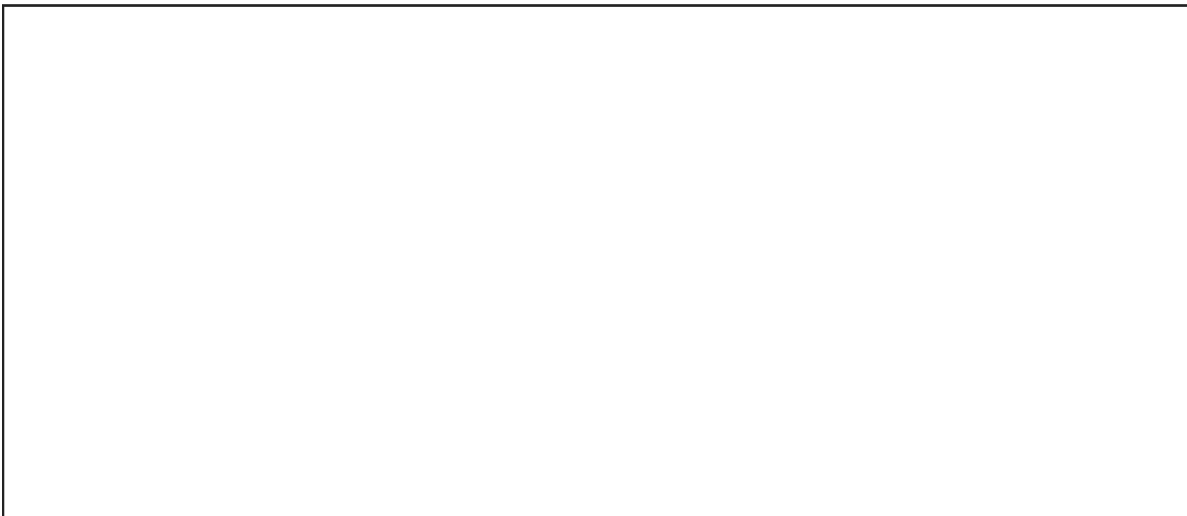
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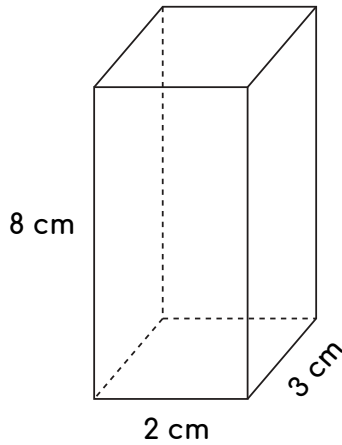


Name \_\_\_\_\_

Date \_\_\_\_\_

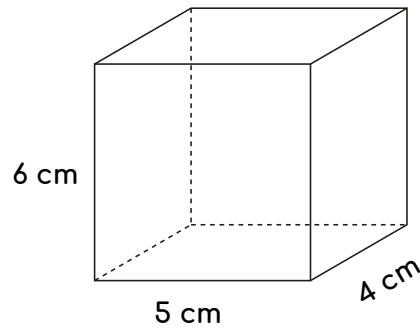
## Find the Volume

Find the volume of the following prisms.



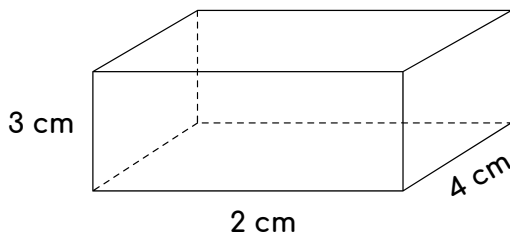
$$\begin{matrix} l & & w & & h \\ \bigcirc & \times & \bigcirc & \times & \bigcirc \end{matrix}$$

Volume \_\_\_\_\_



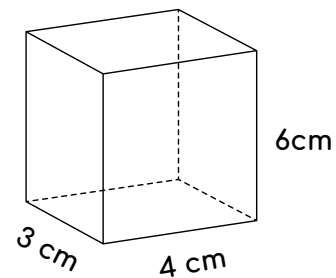
$$\begin{matrix} l & & w & & h \\ \bigcirc & \times & \bigcirc & \times & \bigcirc \end{matrix}$$

Volume \_\_\_\_\_



$$\begin{matrix} l & & w & & h \\ \bigcirc & \times & \bigcirc & \times & \bigcirc \end{matrix}$$

Volume \_\_\_\_\_



$$\begin{matrix} l & & w & & h \\ \bigcirc & \times & \bigcirc & \times & \bigcirc \end{matrix}$$

Volume \_\_\_\_\_

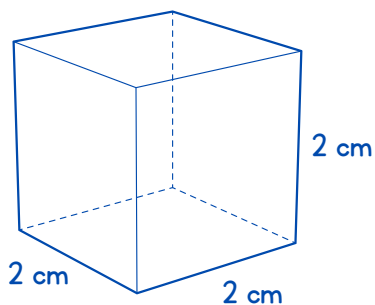


Name \_\_\_\_\_

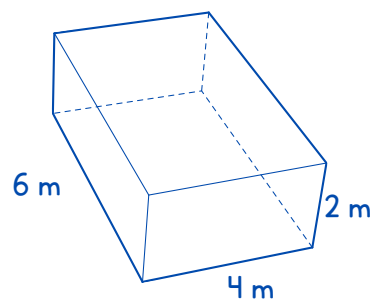
Date \_\_\_\_\_

## Finding Volume

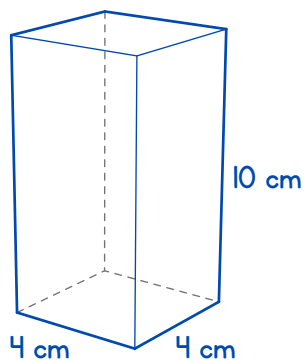
To find the volume of a rectangular prism, you multiply the length  $\times$  width  $\times$  height.  
Find the volume of the following rectangular prisms.



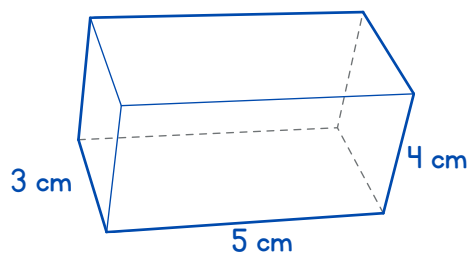
Volume \_\_\_\_\_



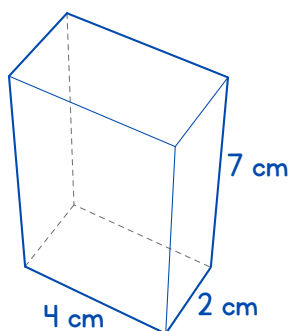
Volume \_\_\_\_\_



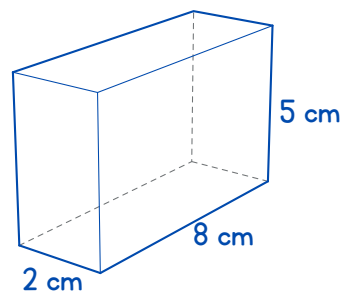
Volume \_\_\_\_\_



Volume \_\_\_\_\_



Volume \_\_\_\_\_



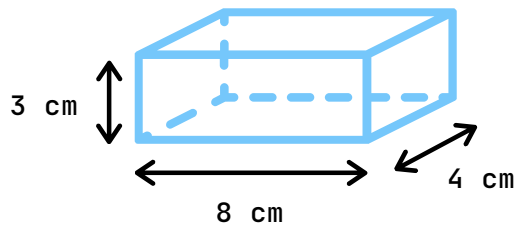
Volume \_\_\_\_\_

Name \_\_\_\_\_

Date \_\_\_\_\_

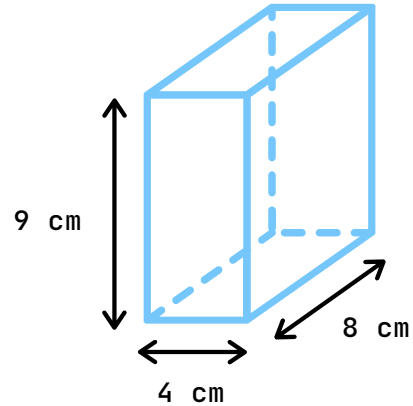
## COMPUTING FOR VOLUME

The formula for getting the volume of a rectangular prism is  $L \times H \times W$ .  
Let's practice computing for volume with the following problems:



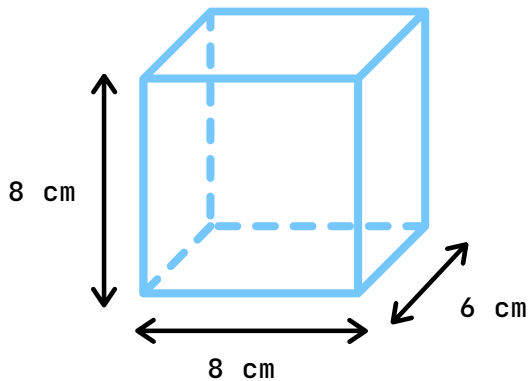
$$\begin{array}{ccc} L & H & W \\ \boxed{\phantom{00}} & \times \boxed{\phantom{00}} & \times \boxed{\phantom{00}} \end{array}$$

Volume:



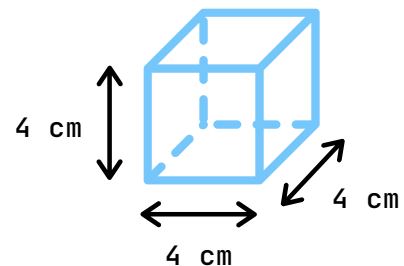
$$\begin{array}{ccc} L & H & W \\ \boxed{\phantom{00}} & \times \boxed{\phantom{00}} & \times \boxed{\phantom{00}} \end{array}$$

Volume:



$$\begin{array}{ccc} L & H & W \\ \boxed{\phantom{00}} & \times \boxed{\phantom{00}} & \times \boxed{\phantom{00}} \end{array}$$

Volume:



$$\begin{array}{ccc} L & H & W \\ \boxed{\phantom{00}} & \times \boxed{\phantom{00}} & \times \boxed{\phantom{00}} \end{array}$$

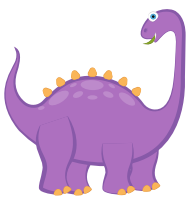

Volume:

Name \_\_\_\_\_


Date \_\_\_\_\_

# HEAVIER or lighter

Cut and paste the words heavier or lighter to make each sentence true.

A  is  than a  bird.  
dinosaur

A  is  than a  computer.  
book

A  is  than a  tree.  
leaf

A  is  than a  toy car.  
car



lighter

**heavier**

lighter

**heavier**

Name \_\_\_\_\_

Date \_\_\_\_\_

## WHAT IS A SOLID?

- a solid is mostly stiff or rigid, and it has a certain shape. A solid is contained of atoms and molecules that are connected to one another which supports it's solid shape

## WHAT IS A LIQUID?

- a liquid moves and flows and has volume. A liquid's atoms and molecules are loosely connected or bonded to each other

## WHAT IS A GAS?



a gas has no shape and no volume



Name \_\_\_\_\_

Date \_\_\_\_\_

# CHANGES IN STATES OF MATTER

Part I: Draw a line to match the change in state with its description.

melting ●

● gas to liquid

freezing ●

● liquid to gas

evaporation ●

● liquid to solid

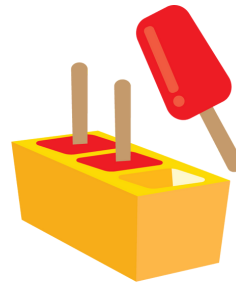
condensation ●

● solid to liquid

Part II: Label the following changes in state.



ice cube left out



juice placed in a freezer



drying laundry



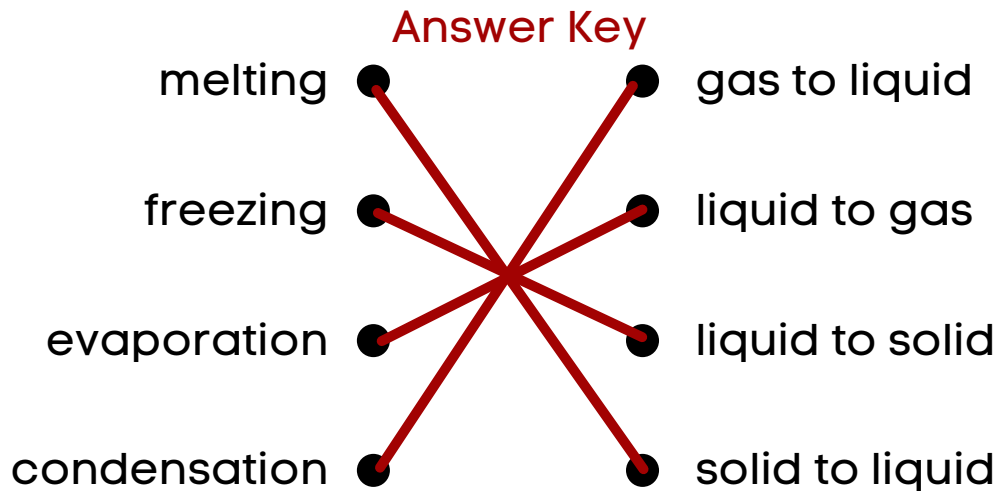
formation of dew drops

Name \_\_\_\_\_

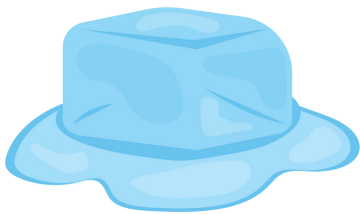
Date \_\_\_\_\_

# CHANGES IN STATES OF MATTER

Part I: Draw a line to match the change in state with its description.

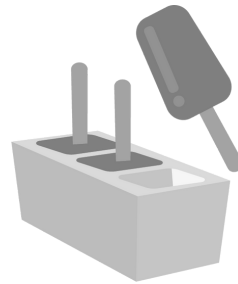


Part II: Label the following changes in state.



ice cube left out

melting



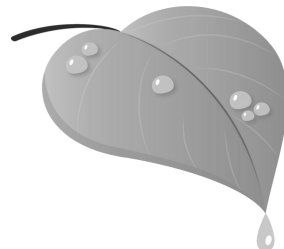
juice placed in a freezer

freezing



drying laundry

evaporation



formation of dew drops

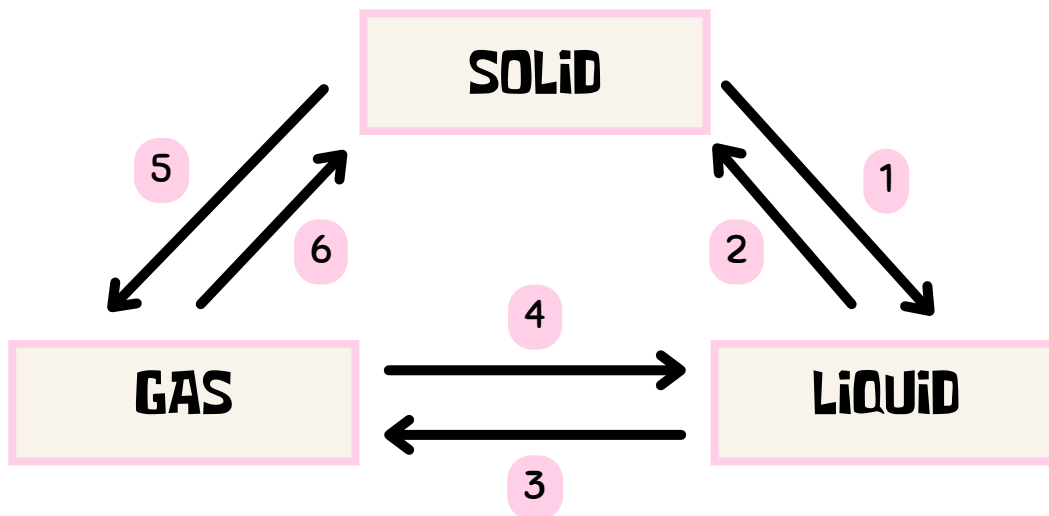
condensation

Name \_\_\_\_\_

Date \_\_\_\_\_

# CHANGE OF STATE

Use the diagram below to answer the following question about change of state!



Name the change of state of matter from:

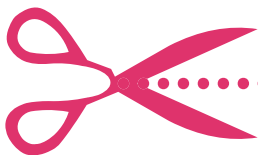
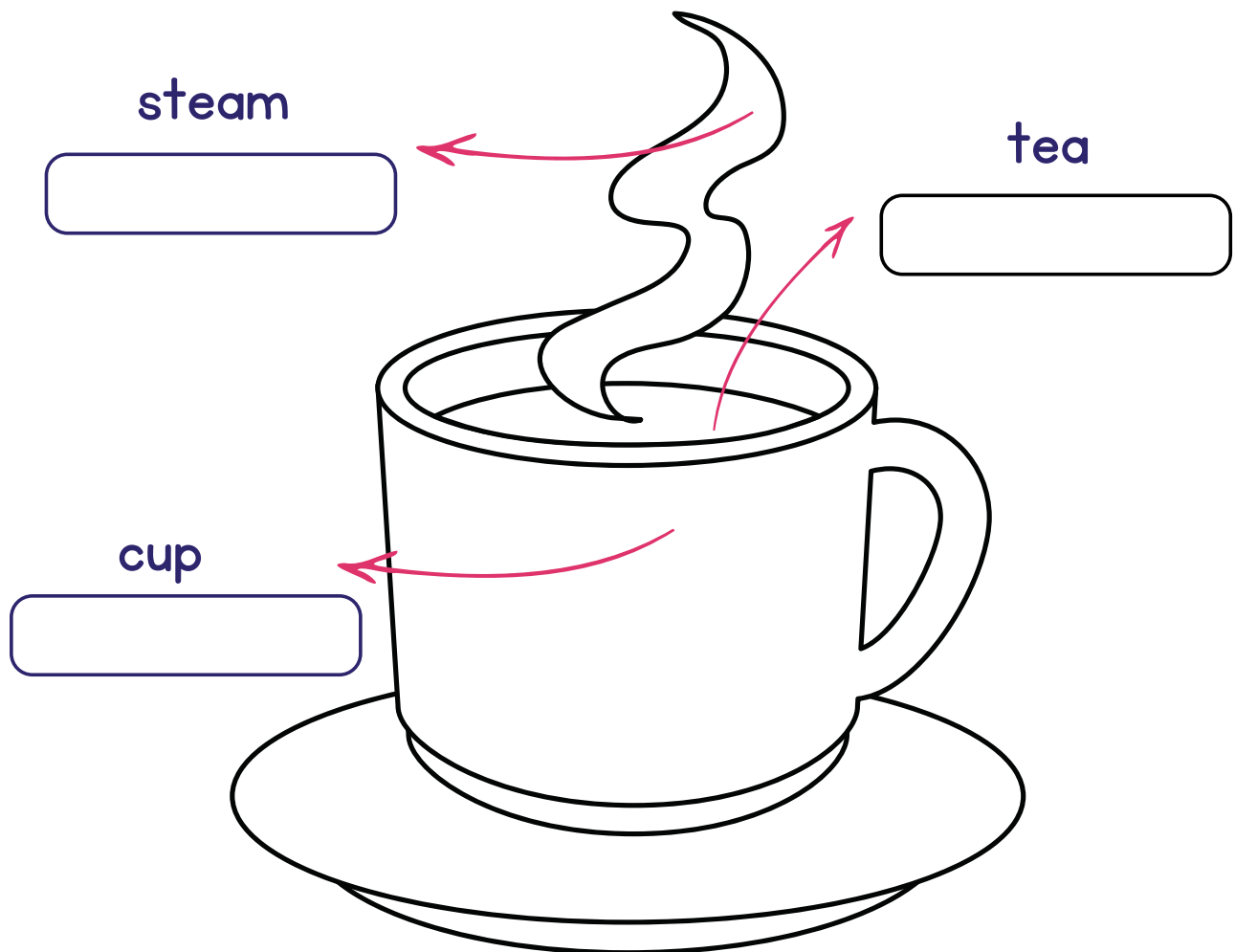
- |                    |   |
|--------------------|---|
| 1. Solid to liquid | 1 |
| 2. Liquid to solid | 2 |
| 3. Liquid to Gas   | 3 |
| 4. Gas to liquid   | 4 |
| 5. Solid to gas    | 5 |
| 6. Gas to solid    | 6 |

Name \_\_\_\_\_

Date \_\_\_\_\_

# States of Matter

Color the picture. Cut out each state of matter below the page and paste them in their right boxes.



liquid

solid

gas

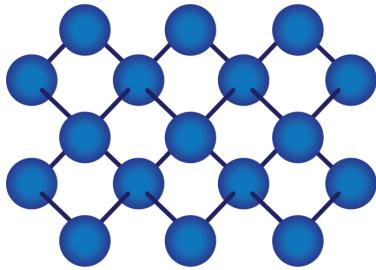


Name \_\_\_\_\_

Date \_\_\_\_\_

# STATES OF MATTER

Describe the arrangement of atoms in each of the following state.



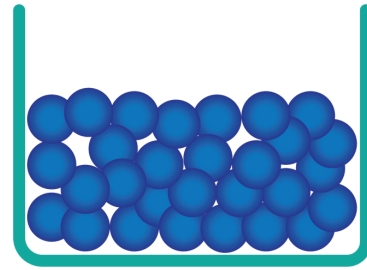
solid

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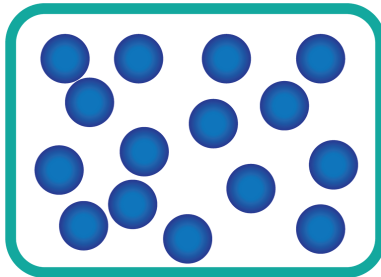
liquid

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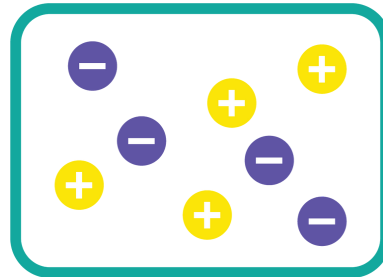
gas

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plasma

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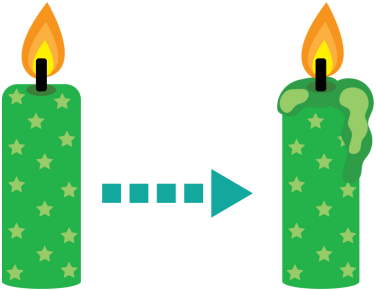
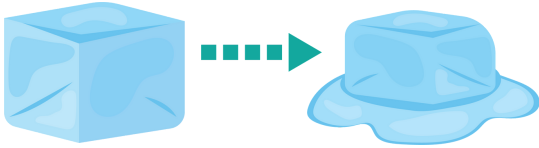
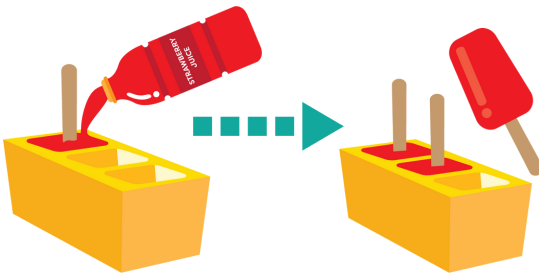
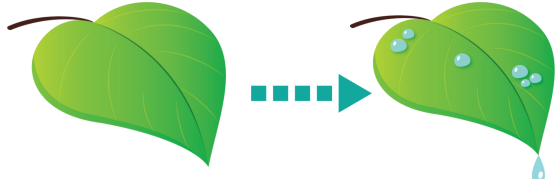
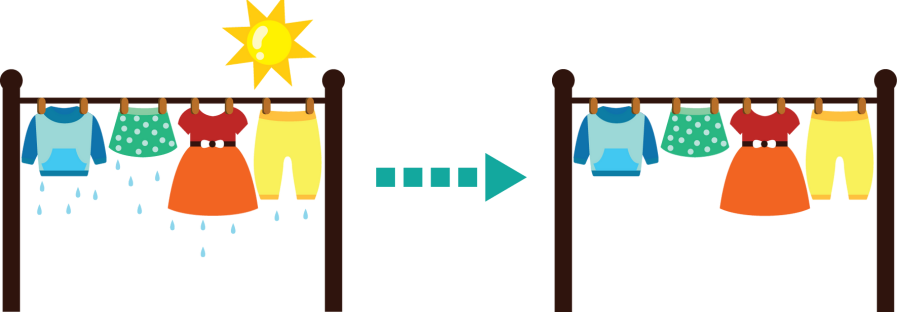
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Name \_\_\_\_\_

Date \_\_\_\_\_

# CHANGES IN STATES OF MATTER

Identify and label the following changes in states of matter.

 <p>_____</p>	 <p>_____</p>
 <p>_____</p>	 <p>_____</p>
 <p>_____</p>	

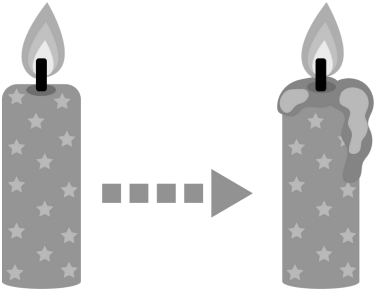
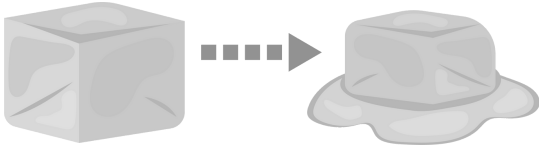
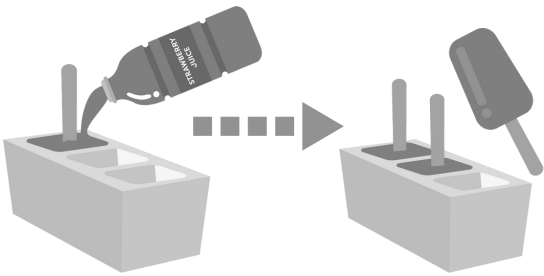
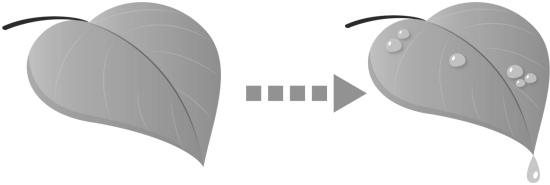
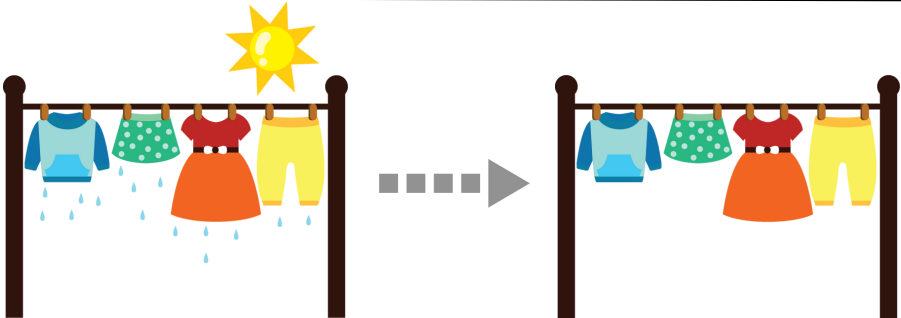
Name \_\_\_\_\_

Date \_\_\_\_\_

# CHANGES IN STATES OF MATTER

## Answer Key

Complete the diagram below by labelling the changes in state.

 <p><u>Melting</u></p>	 <p><u>Melting</u></p>
 <p><u>Freezing</u></p>	 <p><u>Condensation</u></p>
 <p><u>Evaporation</u></p>	

Name \_\_\_\_\_

Date \_\_\_\_\_

# STATES OF MATTER

Complete the following sentences using the correct state of matter:

**Solid**

**Liquid**

**Gas**



The balloons are filled with \_\_\_\_\_



Rain is a \_\_\_\_\_



Smoke is a \_\_\_\_\_



The books are a \_\_\_\_\_



The steam is a \_\_\_\_\_



The tea is a \_\_\_\_\_

The mug is a \_\_\_\_\_

Name \_\_\_\_\_

Date \_\_\_\_\_

# SOLIDS AND LIQUIDS

## changing states

I can identify conditions in which the states of liquids and solids change.

Solids and liquids can change from one form to the other. Let's use water as our example. Water as a solid is called ice. When you put an ice cube in boiling water, the ice begins to melt back to its liquid state and also evaporates and turns into a gas which is called steam. Water is a great way of explaining all states of matter: liquid, solid and gas.



solid



heat



liquid & gas

Draw other examples of solids that you can think of that change into liquids when heated?

Name \_\_\_\_\_

Date \_\_\_\_\_

# States of Matter

Cut and paste the word into the correct column.

solid	liquid	gas



wind



shoe



smoke



juice



soda



wood



book



apple



river



rain



soap



air

Name \_\_\_\_\_

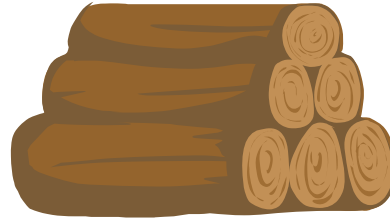
Date \_\_\_\_\_

# State of Matter

Write solid, liquid, or gas.



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

Name \_\_\_\_\_

Date \_\_\_\_\_

# STATES OF MATTER

Look at the pictures and mark the materials with **S** (solid), **L** (liquid), and **G** (gas).



hot air balloon



wood



plastic



metal



oxygen



rock



water



steam



tea





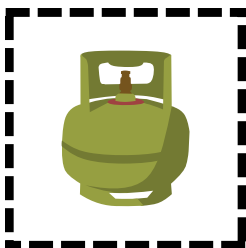
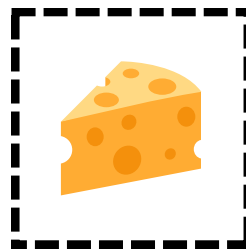
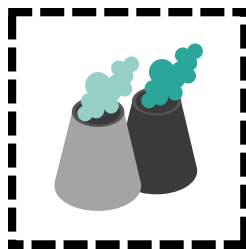
Name \_\_\_\_\_

Date \_\_\_\_\_

# STATES OF MATTER

Cut out and paste the pictures on the chart.

SOLID	LIQUID	GAS

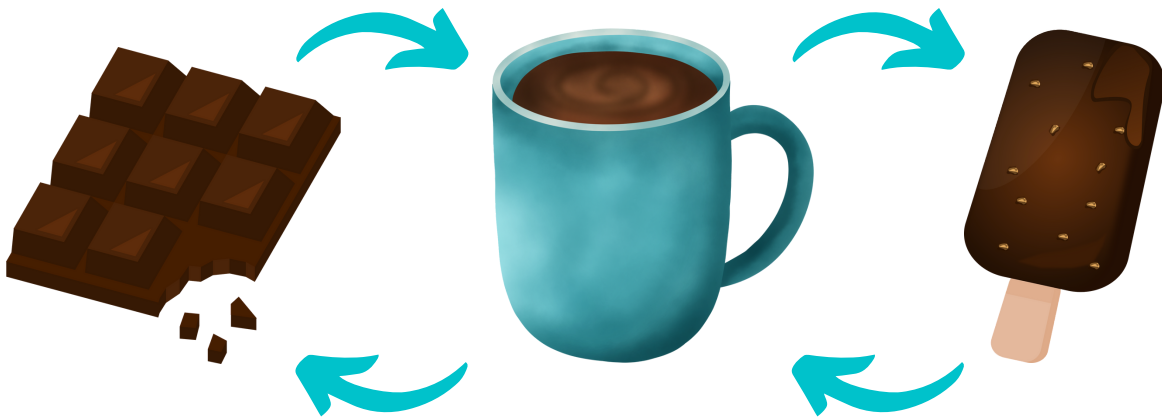


Name \_\_\_\_\_

Date \_\_\_\_\_

## CHANGING STATES OF MATTER

Look at the picture below and complete the sentences with the words in the box.



solid / liquid / melting / freezing

When you heat chocolate, it becomes a .....,  
you can drink it. .... occurs when a solid is  
heated and turns into a liquid. When you cool the  
melted chocolate, it becomes a ..... again,  
you can eat it. .... occurs when a liquid is  
cooled and turns into a solid.

Name \_\_\_\_\_

Date \_\_\_\_\_

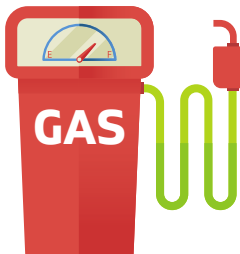
# STATES OF MATTER

Cut out the pictures below and paste into their correct column.

**Solid**

**Liquid**

**Gas**



Name \_\_\_\_\_

Date \_\_\_\_\_

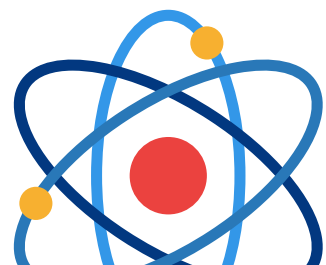
# MATTER

## SEARCH A WORD

M	A	T	T	E	R	T
L	S	O	L	I	D	G
I	S	P	A	C	E	A
Q	Y	R	E	A	S	S
U	G	A	T	O	M	D
I	V	O	L	U	M	E
D	I	M	A	S	S	T

Search for all the words in the list below:

- matter
- solid
- liquid
- gas
- atom
- volume
- mass
- space



Name \_\_\_\_\_

Date \_\_\_\_\_

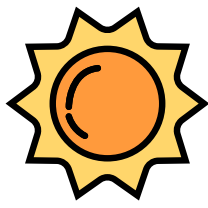
# What's the Matter?

Show how matter changes by completing the puzzles below. What happens when you combine the things in the pictures? Draw the results!



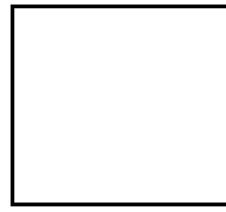
Ice

+

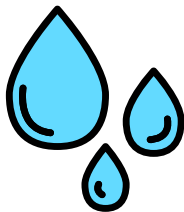


Sun

=



\_\_\_\_\_



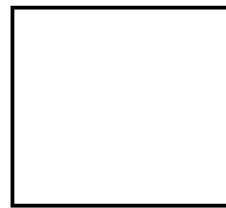
Water

+



Fire

=

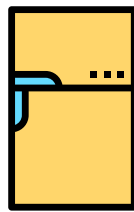


\_\_\_\_\_



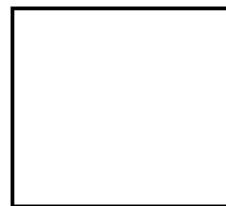
Water

+

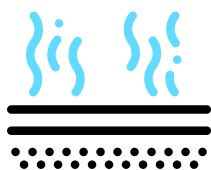


Freezer

=



\_\_\_\_\_



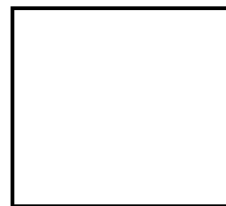
Steam

+



Cloud

=



\_\_\_\_\_