

Solids, Liquids and Gases

Learning Outcome:

- Record observations neatly.
- Recall some properties of some materials and sort into groups.
- Recall that materials are made out of particles.

What are solids, liquids and gases?

How small is small?

- Guess how many particles there are in one teaspoon of water.
- Is water a solid, a liquid, or a gas?



300 000 000 000 000 000 000 000 particles

States of Matter

Matter is the material from which everything is made.

Matter can exist as a:

SOLID

LIQUID

GAS

We call these the three
STATES OF MATTER

Properties of Solids, Liquids and Gases

Looking at our examples of **SOLIDS**, **LIQUIDS** and **GASES**, investigate:

- Does it have a fixed shape?
- Does it flow?
- Does it have a fixed volume?
- Will it compress?

Draw a table showing the properties of **solids**, **liquids** and **gases**? Use the worksheet to help you fill out the table.

	Solids	Liquids	Gases
Properties			



Solid



Liquid



Gas

SOLIDS	LIQUIDS	GASES
<ul style="list-style-type: none"> • Have a fixed shape • Have a fixed volume • Cannot flow • Do not compress 	<ul style="list-style-type: none"> • Take the shape of container • Have a fixed volume • Can flow • Do not compress 	<ul style="list-style-type: none"> • Take the shape of container • Don't have a fixed volume • Can flow • Can be compressed

Make sure your table of properties is correct and add in any you might have missed.

EXTENSION: Did any of the substances have properties of more than one state of matter?

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Answer a combination of 3 questions that form a straight line across the grid.

What are the properties of liquids?	Which of the states of matter can be compressed?	What state of matter is toothpaste?
Does a liquid fill the container it is in?	What are the three states of matter?	What are the properties of gases?
Give three examples of gases.	What are the properties of solids?	Which states of matter don't have a fixed shape?