UNIT 2: Matter and its properties & UNIT3: States of matter.

1.- You can put a video to explain states of matter and change of states.

But before the video you can brainstorm. For example:

a) **How many states of matter are there?**
b) **Can a fourth state of matter exist? (The fourth state would be plasma)**

2.-After, students have to copy this vocabulary in their notebook.

VOCABULARY	
Matter	**Materia**
Material system	**Sistema Material**
Mass	**Masa**
Volume	**Volumen**
Unit	**Unidad**
Density	**Densidad**
State of the matter	**Estados de la materia**
Properties	**Propiedades**
Solid	**Sólido**
Liquid	**Líquido**
Gas	**Gas**
Temperature	**Temperatura**
Change of State	**Cambio de estado**
Solidification	**Solidificación**
Melting	**Fusión**
Evaporation	**Evaporación**
Boiling	**Ebullición**
Condensation	**Condensación**
Sublimation	**Sublimación**
Pressure	**Presión**

1.-READING.

The three states of matter:

Materials exist as either solids, liquids or gases. These are the three states of matter. When we decide if a material is a solid, a liquid or a gas, we examine three important properties: mass, volume and shape.
The mass of a material is the amount of matter it contains. The volume of a material is the amount of spaces it occupies. The shape of a material is the form it takes.

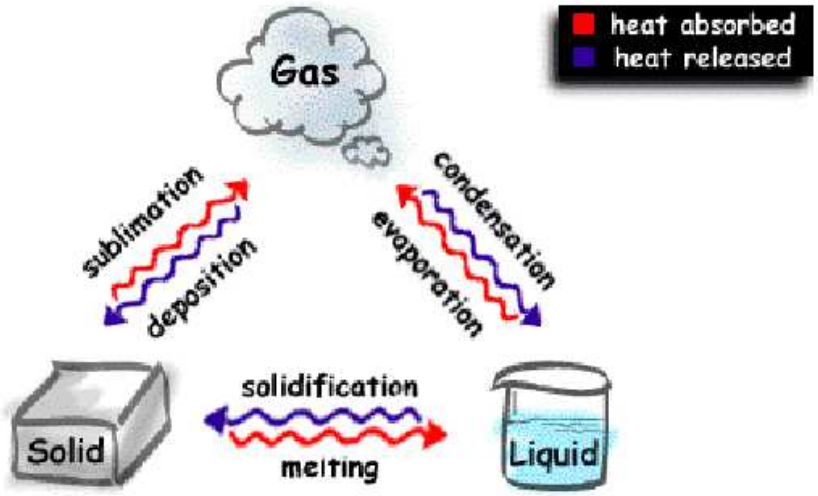
Solids: the mass, volume and shape of a solid can´t change. Some examples of solids are ice, wood and marble.

Liquids: the mass and volume of a liquid can´t change, but liquid can change their shape. Their shape depends on the container they are in. Some examples of liquids are water, oil and orange juice.

Gases: The mass of a gas can´t change. The volume and shape of a gas can change. They can change to fill the container they are in. Some examples of gases are water vapour, carbon dioxide and helium.

Changing states:

Some materials can change state. For example, if ice (a solid) is heated, it changes to water (a liquid). If water (a liquid) is heated, it changes to water vapour (a gas). If water vapour (a gas) is cooled, it changes to water (a liquid). If water (a liquid) is cooled, it changes to ice (a solid).



ACTIVITIES

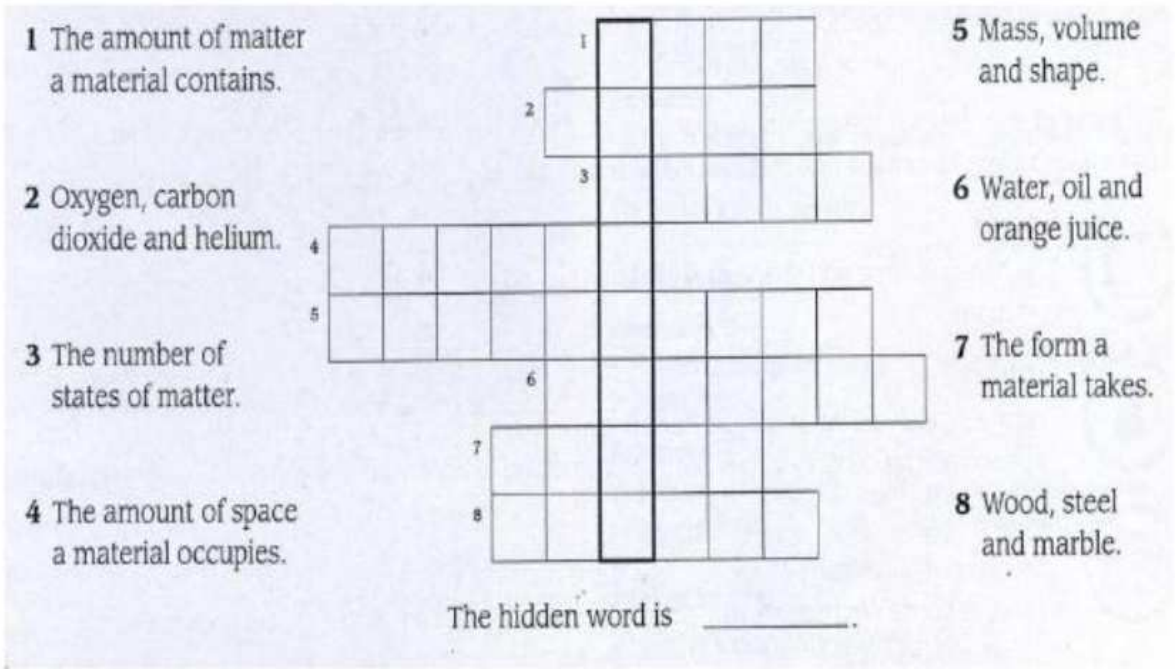
1.- Read the text again. Write S for solids, L for liquids and G for gases.

a) They are the three states of matter. .
b) Their mass, volume and shape can´t change.
c) Their volume and shape can change.
d) They can change shape.
e) Their mass and volume can´t change, but their shape can change.
f) Oxygen, carbon dioxide and helium are examples.
g) Wood, marble and steel are examples.
h) Water, orange juice and oil are examples.

Solutions:

a) S, L and G.
b) S
c) G
d) L and G
e) L
f) G
g) S
h) L

2.- Write the words in the puzzle. Find the hidden word.



Solutions:

1.Mass 2.-Gases 3.-Three 4.-Volume 5.-Properties 6.-Liquids 7.-shape 8.-Solids

The hidden Word is: Material

3.- Complete the summary of changing states.

Solid	liquid	gas	mass	shape	volume	water	ice
heated	cooled	water vapour					

a) If _____ is heated, it changes to_____.
b) If water is _____, it changes to water vapour.
c) Water vapour is a _____, so the _____ can´t change.
d) If _____ is cooled, it changes to water.
e) Water is a _____, so the _____ can change.
f) If water is_____, it changes to ice.
g) Ice is a _____, son the mass, _____ and shape can´t change.

Solutions:

a) ice,water
b) heated
c) gas,mass
d) water vapour
e) Liquid, shape
f) cooled
g) solid,volume