

States of Matter



and their Properties



Matter

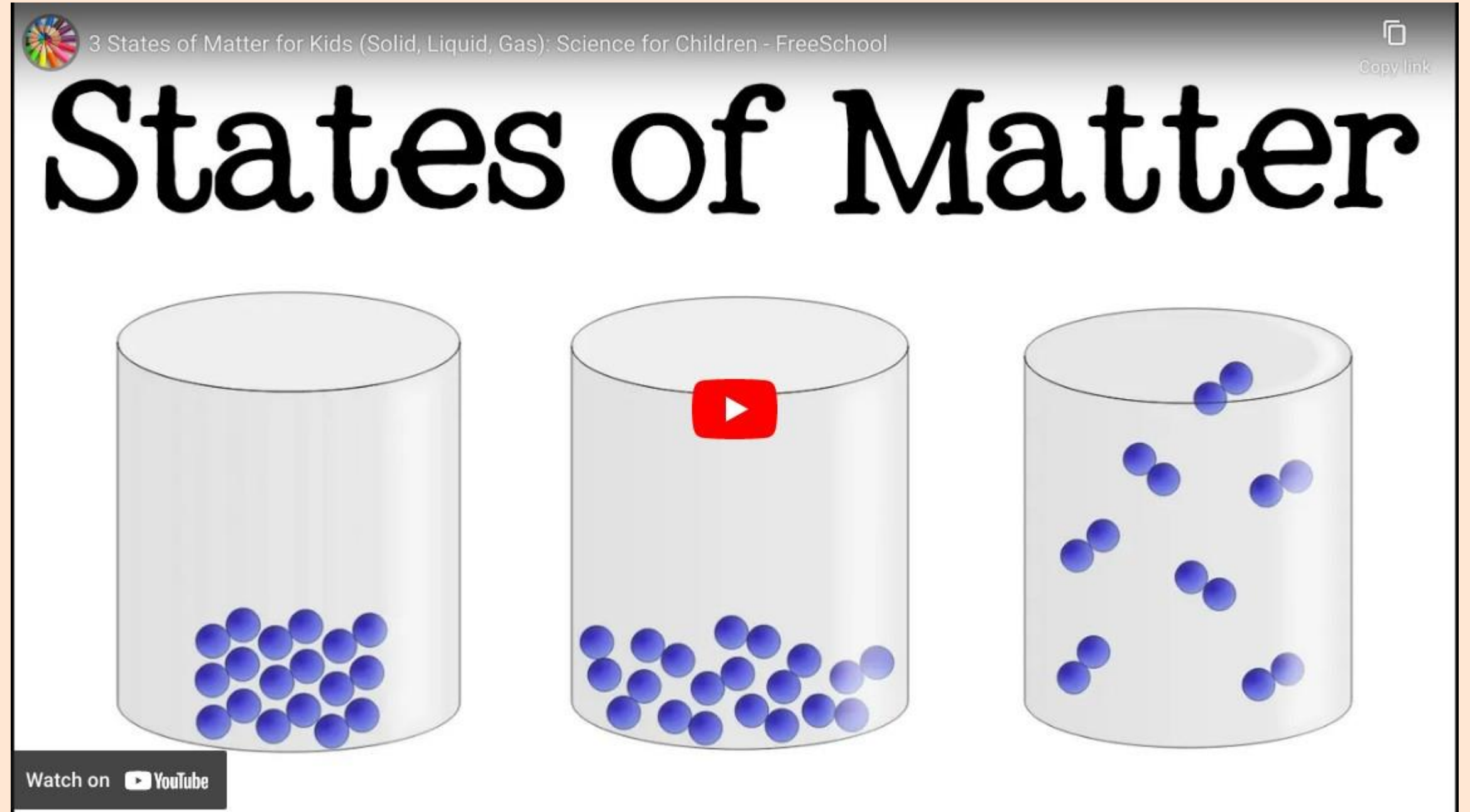


Matter is everything that has mass and takes up space. It can be visible or invisible.





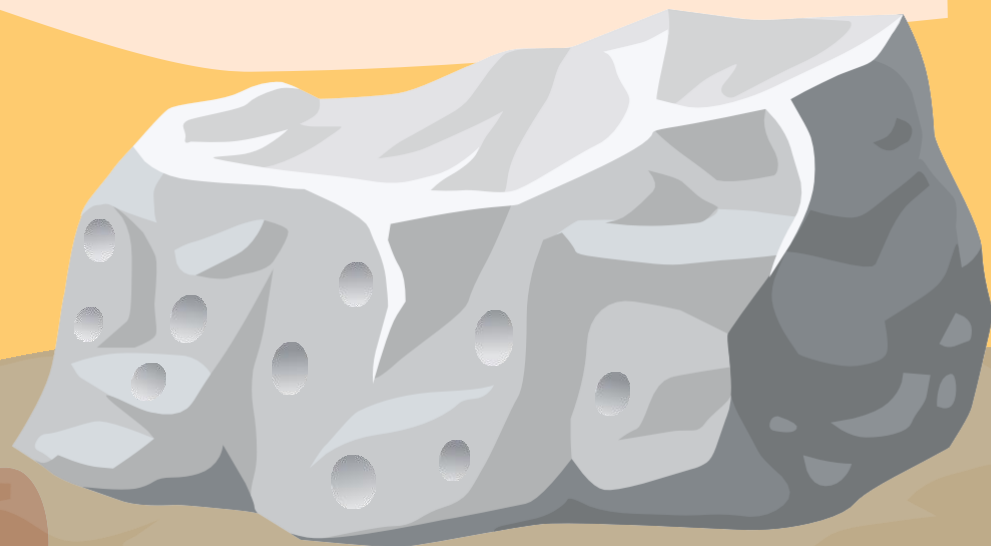
Click &
watch



3 States of Matter

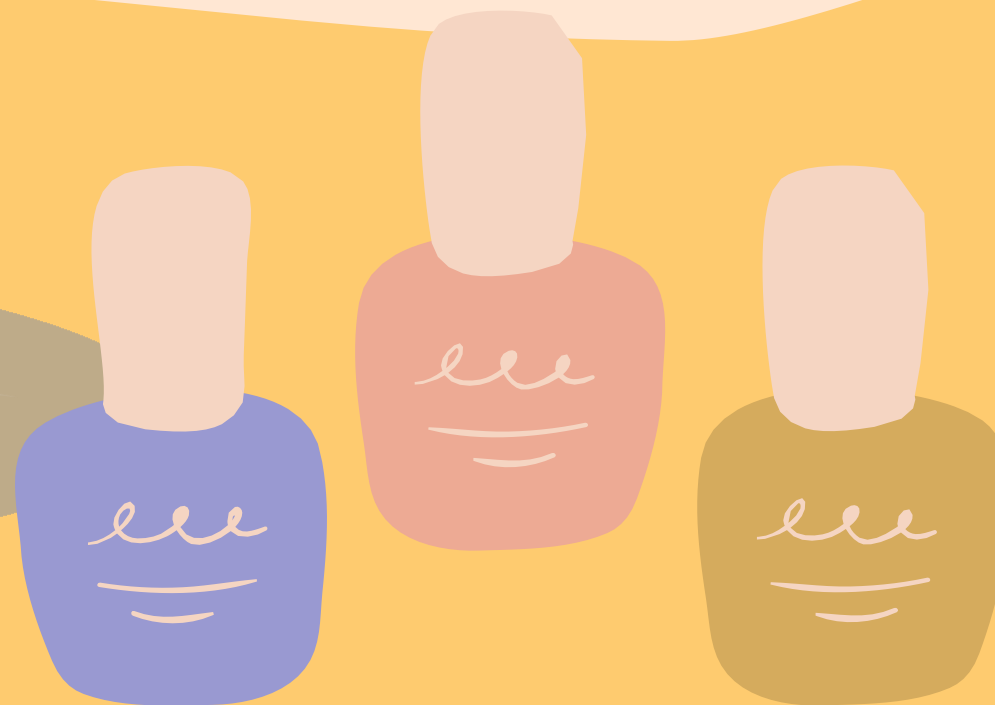
Solid

- Does not change shape or volume



Liquid

- Can change & adapt to shape
- Volume remains the same



Gaseous (Gas)

- Takes shape of the container
- Volume can change based on container





Activity Time

- **3 volunteers**
- **Work together**
- **Move to demonstrate (demostrar) properties of solid, liquid, gas**





What is the state represented?

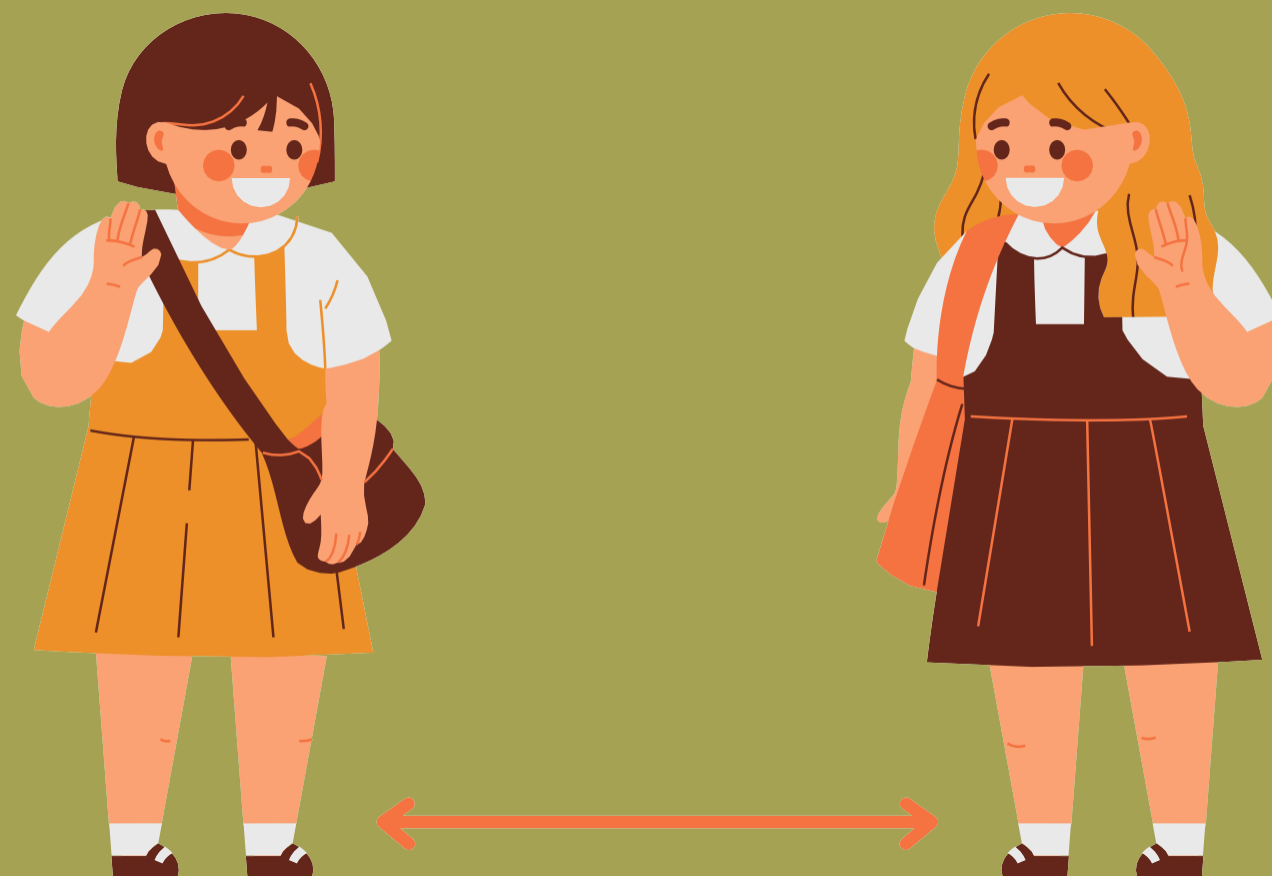


Liquid!

Why?



What is the state represented?

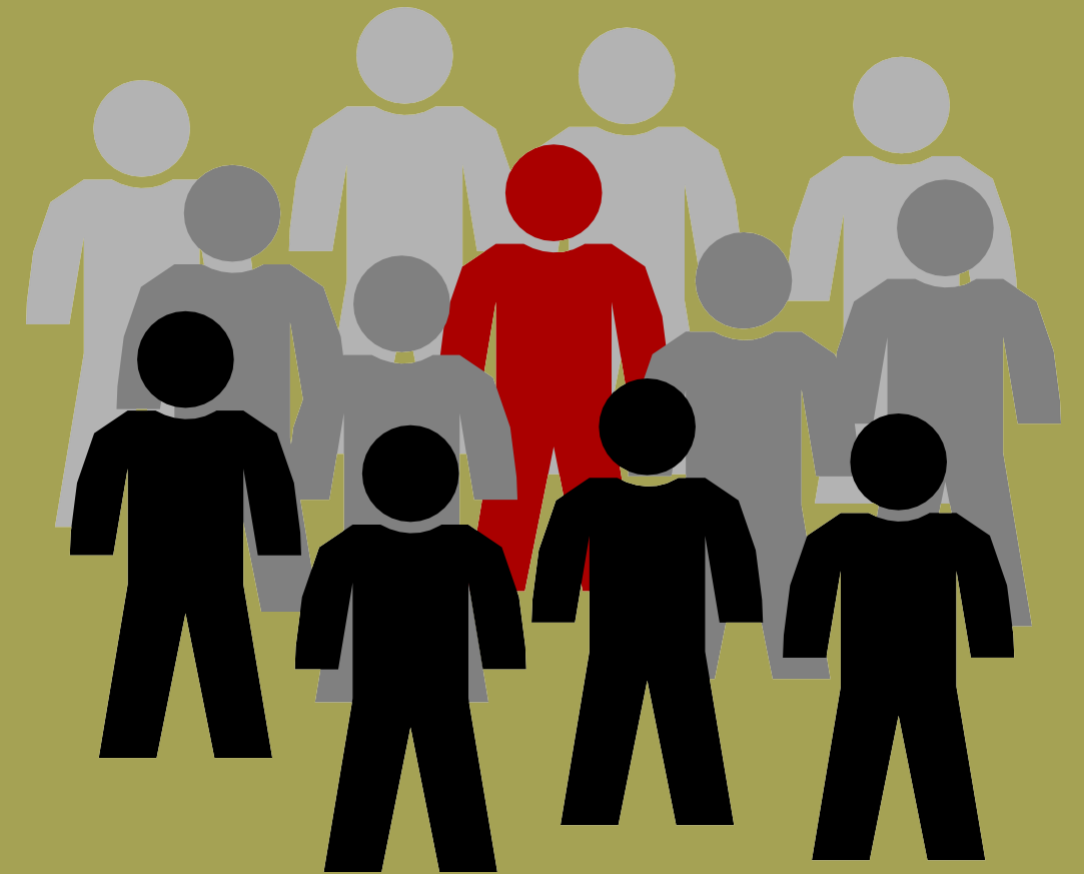


Gas!

Why?



What is the state represented?



Solid!

Why?



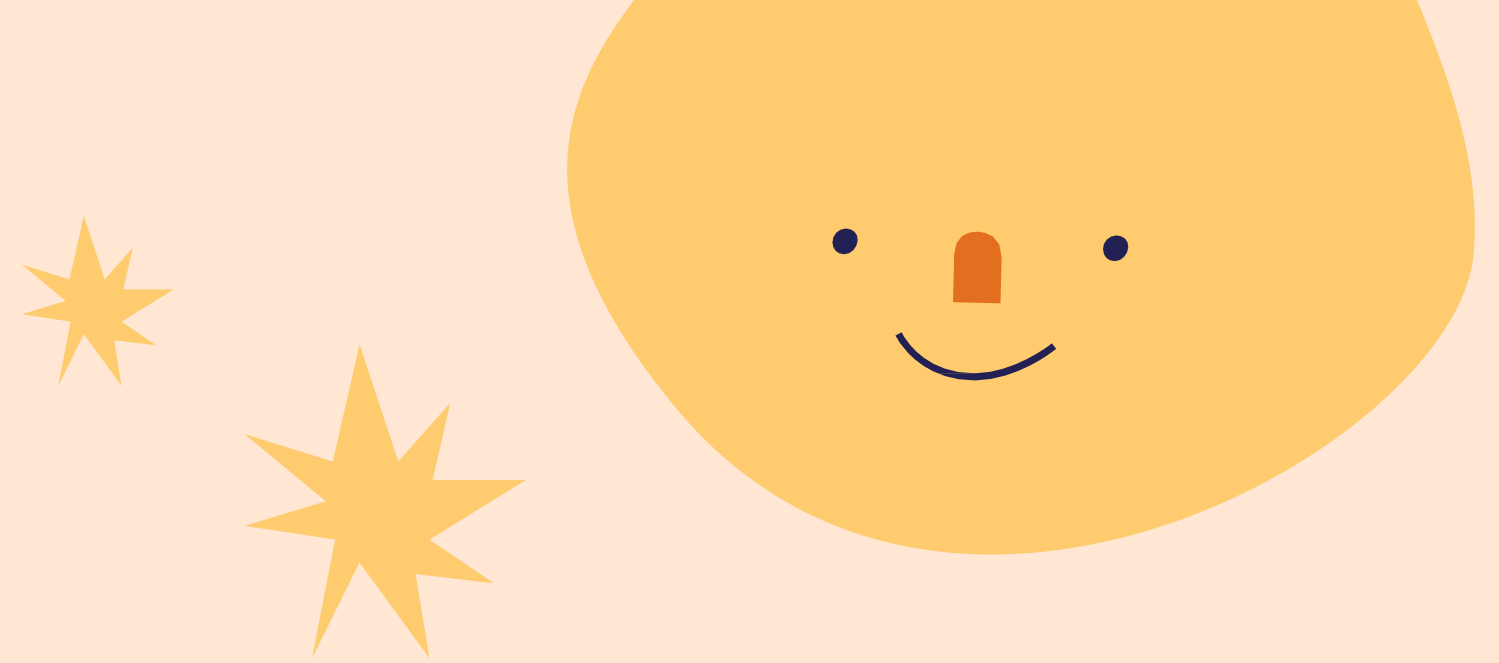
Click &
watch



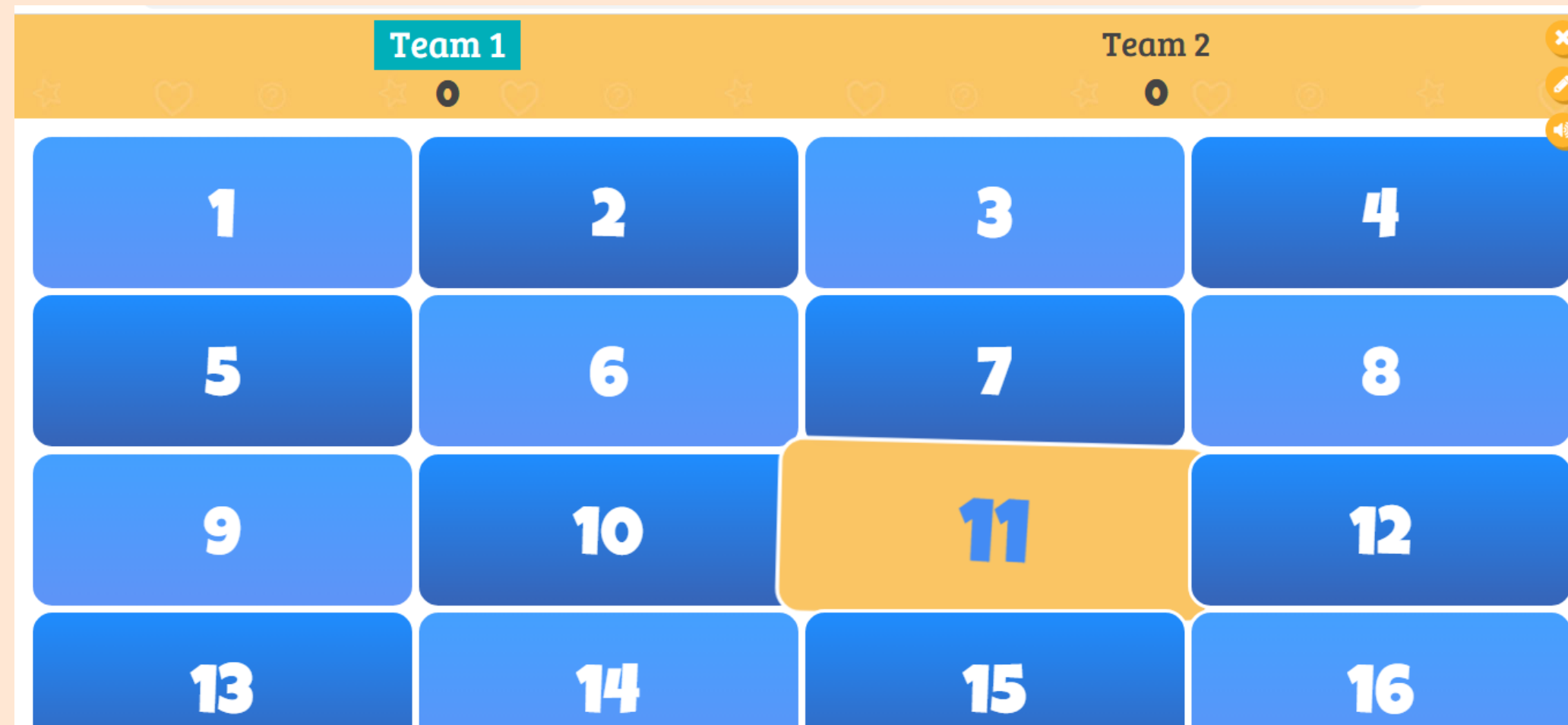
Harry Kindergarten Music @HarryKindergarten

<https://www.youtube.com/watch?v=C33Wdl64FiY>

Activity time: What state is it?



Click &
play

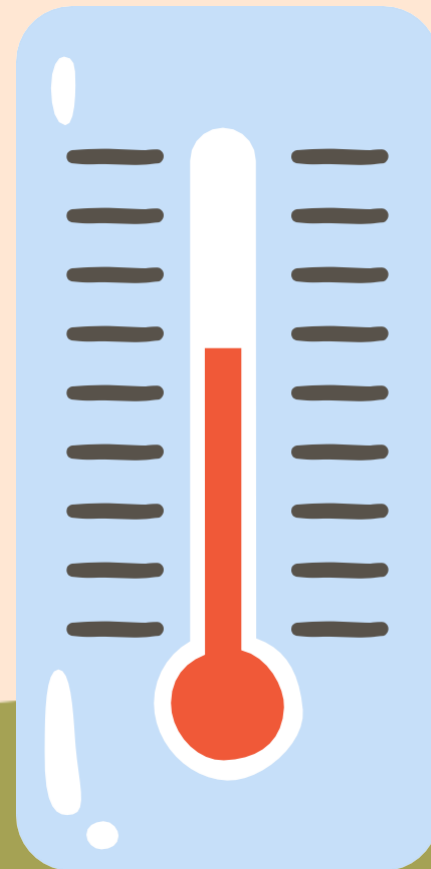


Baamboozle

<https://www.baamboozle.com/game/370422>

Kinetic Particle Theory

Matter behaves differently depending on temperature.



Vocabulary

Cohesion

- Forces of attraction between particles

Aggregation

- How close particles are together

Temperature

- The measurement of the movement of particles

Kinetic Particle Theory

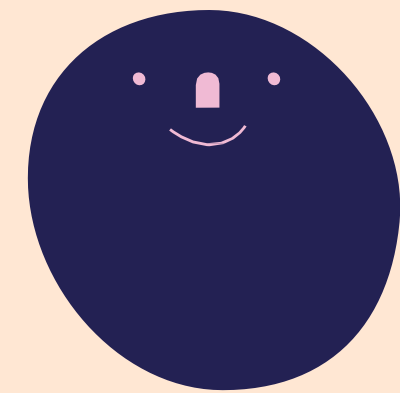


1. Particles make up matter.
2. Particles have cohesion between them.
3. Particles are in continuous movement.

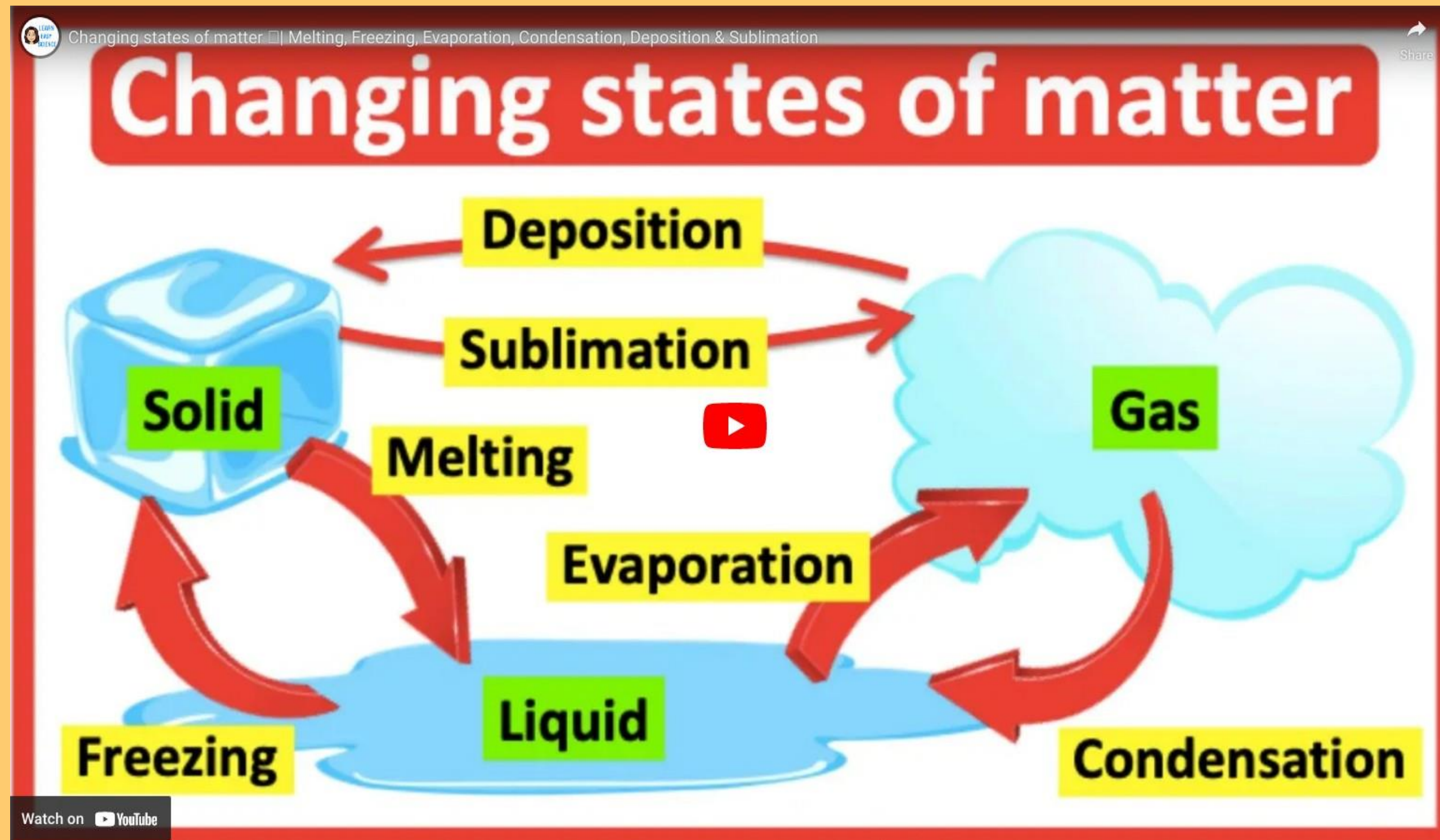
As temperature rises, speed and separation between particles increase, decreasing cohesion

Change of State

A change of state is a change of the aggregation (closeness of particles) without change in chemical composition.



Click &
watch



Vocabulary!

Melting

Transition
from solid to
liquid

Freezing

Transition
from liquid to
solid



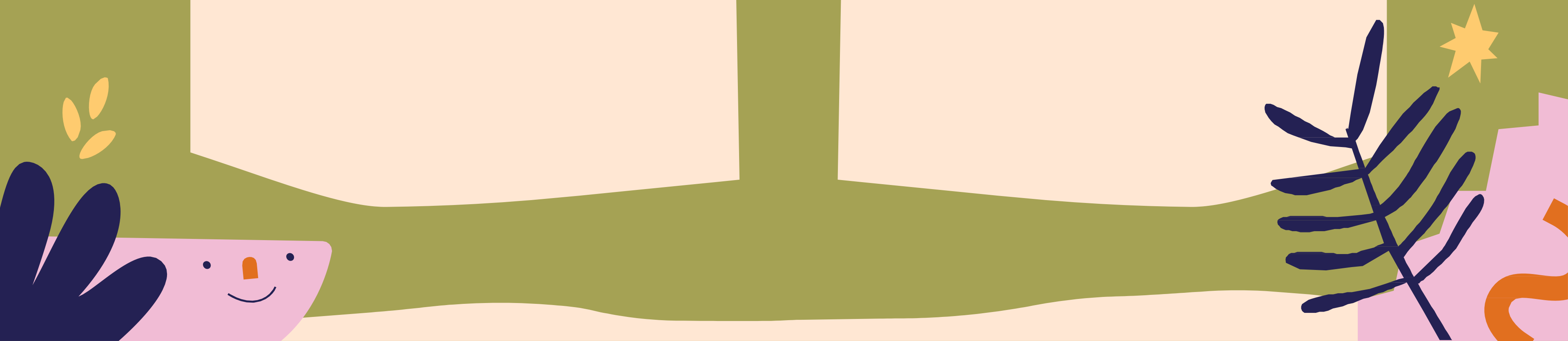
Vocabulary!

Vaporisation

Condensation

Transition
liquid to gas

Transition gas
to liquid



Vocabulary!

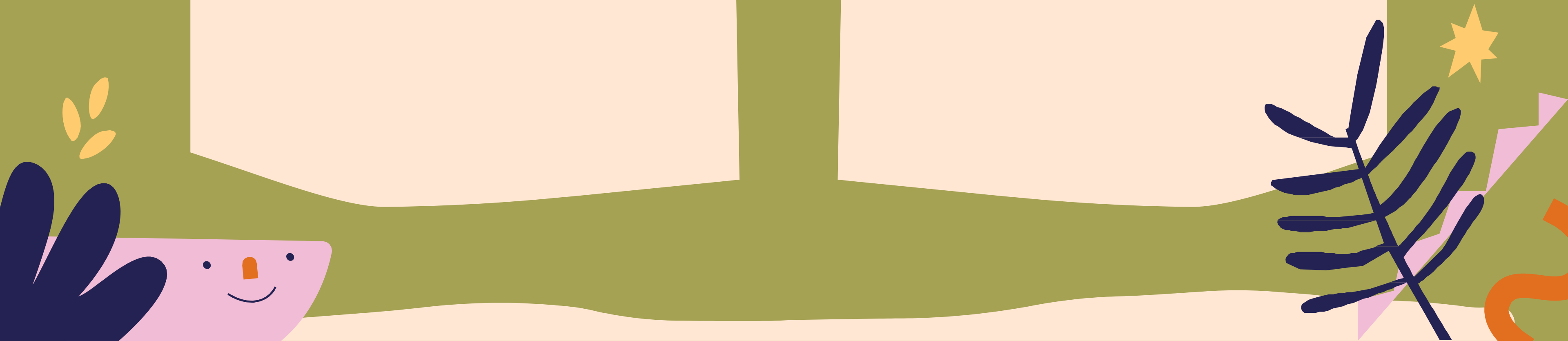


Sublimation

Transition solid
to gas

Deposition

Transition gas
to solid



Activity : Write the physical change



1. We leave a piece of ice at room temperature.
2. We put some water in the freezer.
3. We see tiny droplets form on the outside of a glass of cold soda on a warm day.
4. You can leave your wet towel to dry in the sun.
5. You experiment with dry ice.
6. You see frost on your window on a freezing cold day.

Activity : Write the physical change



1. We leave a piece of ice at room temperature. MELTING
2. We put some water in the freezer. FREEZING
3. We see tiny droplets form on the outside of a glass of cold soda on a warm day. CONDENSATION
4. You can leave your wet towel to dry in the sun. EVAPORATION
5. You experiment with dry ice. SUBLIMATION
6. You see frost on your window on a freezing cold day. DEPOSITION