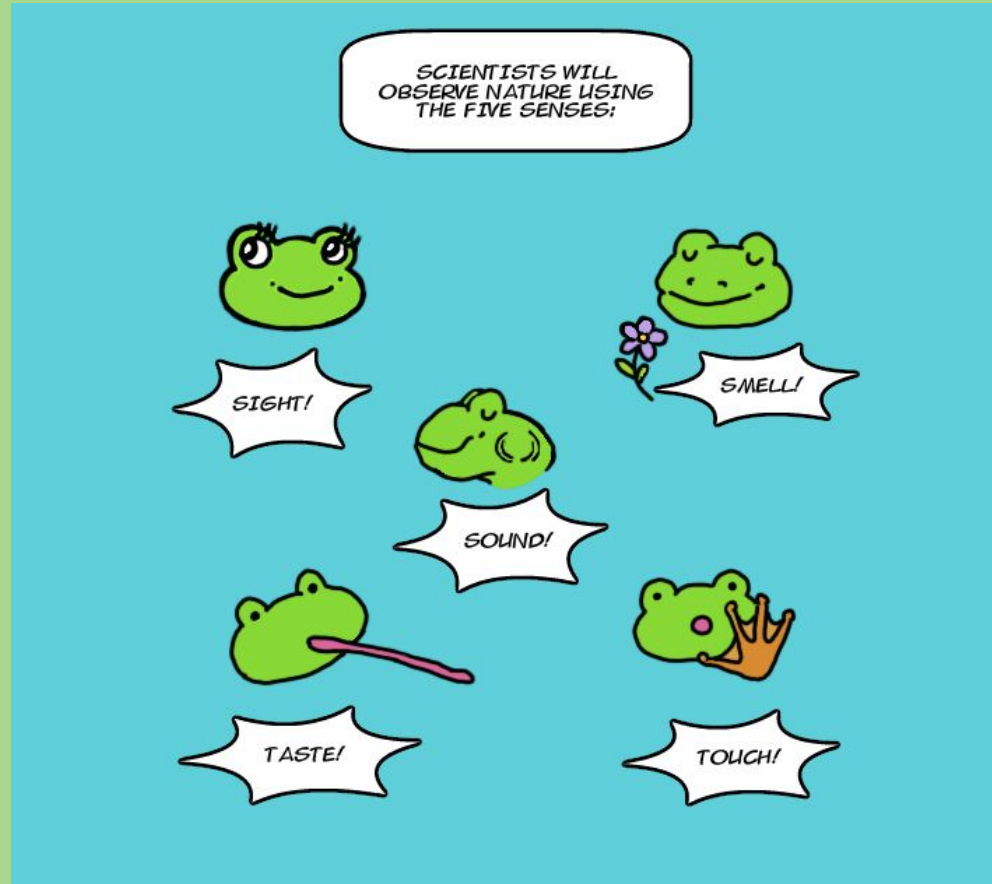




# **Observations, Inferences, Predictions**

# What is an observation?

Observation: uses the five senses to gather information.



## Example of Observations

- Munyari wasn't in class on Monday
- Ms.Kanner is wearing glasses
- There are pencils without erasers

# What is an inference?

Inference: something you think is true based on observations.

## Example of inferences

- Observation: Munyari wasn't in class on Monday.
- Inference: Munyari is home sick today.
- Observation: Ms.Kanner is wearing glasses.
- Inference: Ms.Kanner can not see that well.
- Observation: There are pencils without erasers.
- Inference: Someone ripped off the earasers.



# Bag Game

## BAG GAME RULES

- I will hold up a plastic bag filled with something
- Using your senses describe what is in the bag- like we did with the starburst
- make three observations
- Make an inference about what is in the bag? What is the thing in the bag?
-

# Bag game

## Bag 1

- Solid object

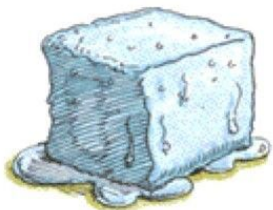
## Bag 2

- Liquid object

## Bag 3

- Gaseous object





SOLID



LIQUID



GAS

## STATES OF MATTER

Solid, liquid, gas

Definition: anything  
that has weight and  
takes up space

Yes air has matter.

# What is a solid?

- a state of matter that maintains its own shape instead of conforming to the shape of its container

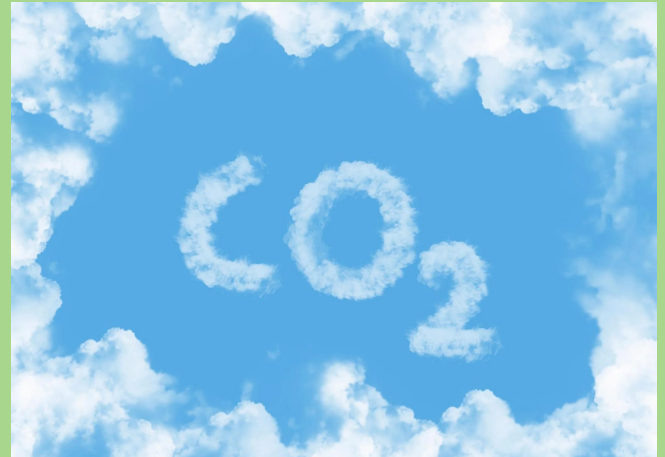
Examples:



# What is a gas?

- a state of matter that has no fixed shape and no fixed volume.

Examples:



# What is a liquid?

- An intermediate state of matter between a gas and a solid.

Examples:



# Liquids have different Viscosities

You can think of viscosity as how thick a liquid is. A liquid with high viscosity

Examples:

Low Viscosity



High Viscosity



# Non newtonian fluid

What if something doesn't fit into one category? Or What if something's viscosity changes when you squeeze it?

Well then it's a Non Newtonian Fluid!

That is a fancy name for when the viscosity of an object can change when under force to either more liquid or more solid.

# What are the states of matter

- Solid
- Liquid
- Gas

# What is viscosity?

- how thick a liquid is.

EXAMPLES:



# What is a Non Newtonian Fluid?

- when the viscosity of an object can change when under force/pressure to either be more liquid or more solid.

# Oobleck

- A non newtonian fluid made out of water and cornstarch



## LAB DAY

Follow instructions closely or  
you will sit out of today's  
lab

**WARNING THIS LAB WILL BE MESSY**

# LAB INSTRUCTIONS!!

Go to the Oobleck lab page of your packet. DO NOT TOUCH YET

- Before touching the oobleck, use your senses (sight, smell, hearing) to make observations about it.
- Then start with the first thing in the what to try column. Before you do the action, make a prediction in the second column.
- Then do the action and write down your observations.
- Try your best to write down inferences (at least three rows)
- Continue moving through the worksheet in that order: make a prediction, do the action, write observations, and make an inference.