# **Describing Matter**

## What is Chemistry?

 The study of the properties of matter and how matter changes

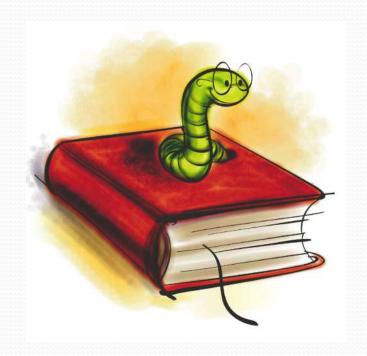
### What is matter?

- Anything that takes up space and has mass
- Made up of atoms that vibrate due to kinetic energy

# Desk?



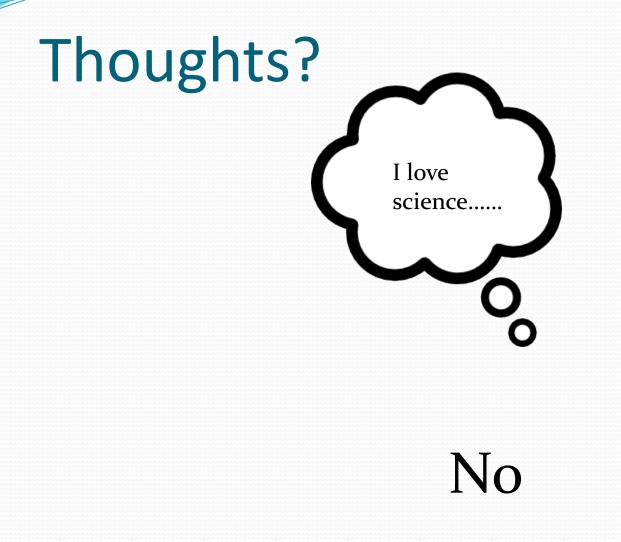
# Book?



# Person?



Yes!



# Water?



# Light?

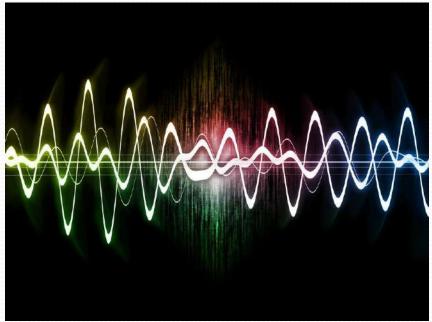


### No

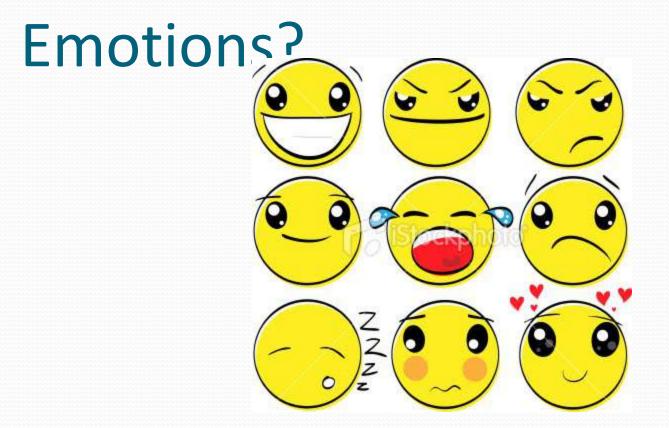
# Air?



## Sounds?



#### No



No

## **Examples of Matter**

- Book
- Desk
- Person
- Air
- Water

## Non-examples of Matter

- Light
- Sound
- Thoughts
- Emotions

## **Physical Properties of Matter**

• Characteristic of a substance that can be observed without changing it into another substance.

- Texture
- Smell
- Taste
- Color
- Flexibility
- Hardness
- Weight

- Freezing point
- Melting point
- Boiling point
- Ability to dissolve (solubility)
- State of Matter (s, l, or g)

## **Chemical Properties of Matter**

 Characteristic of a substance that describes its ability to change into a different substance

- Ability to burn (Flammability)
- Ability to rust
- Ability to tarnish
- Ability to react with other substances (ie: acids)