Matter

the stuff of everything

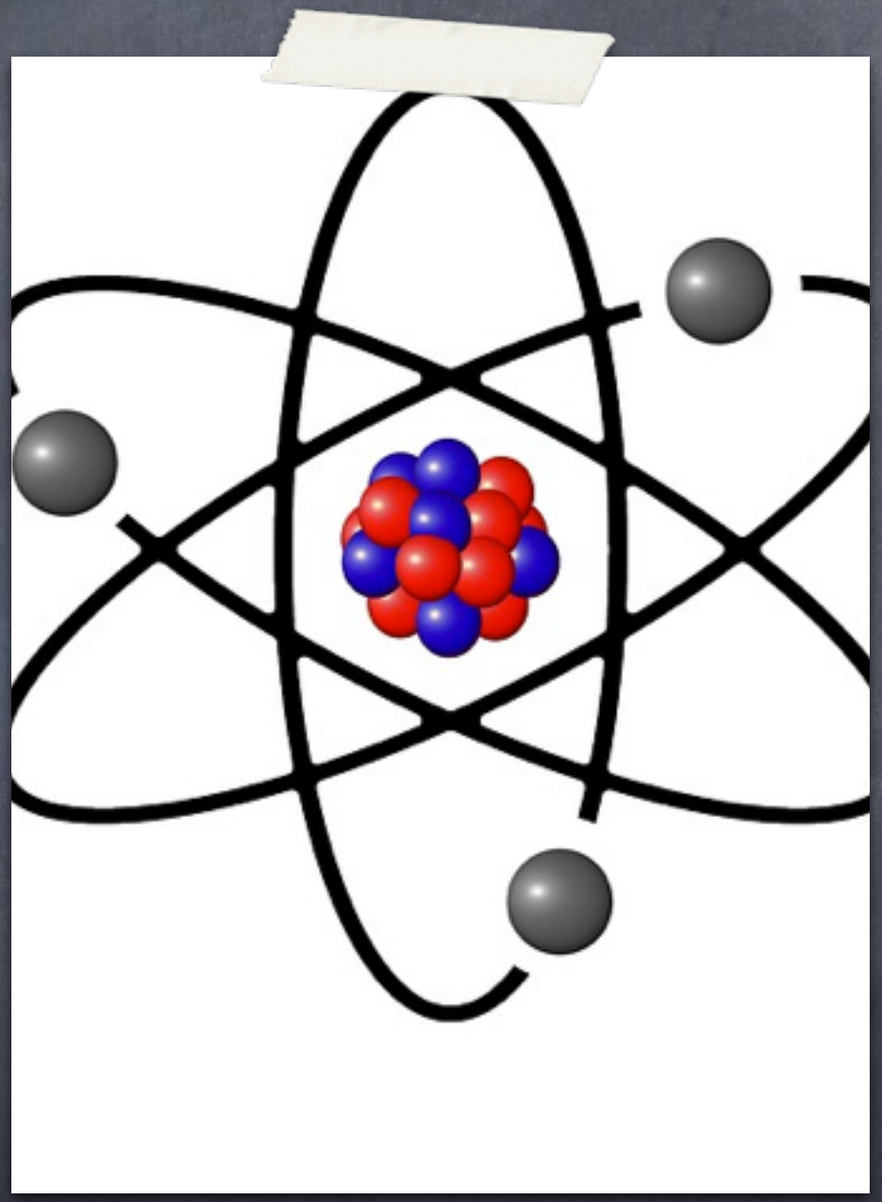
2 conditions

has mass (mass)

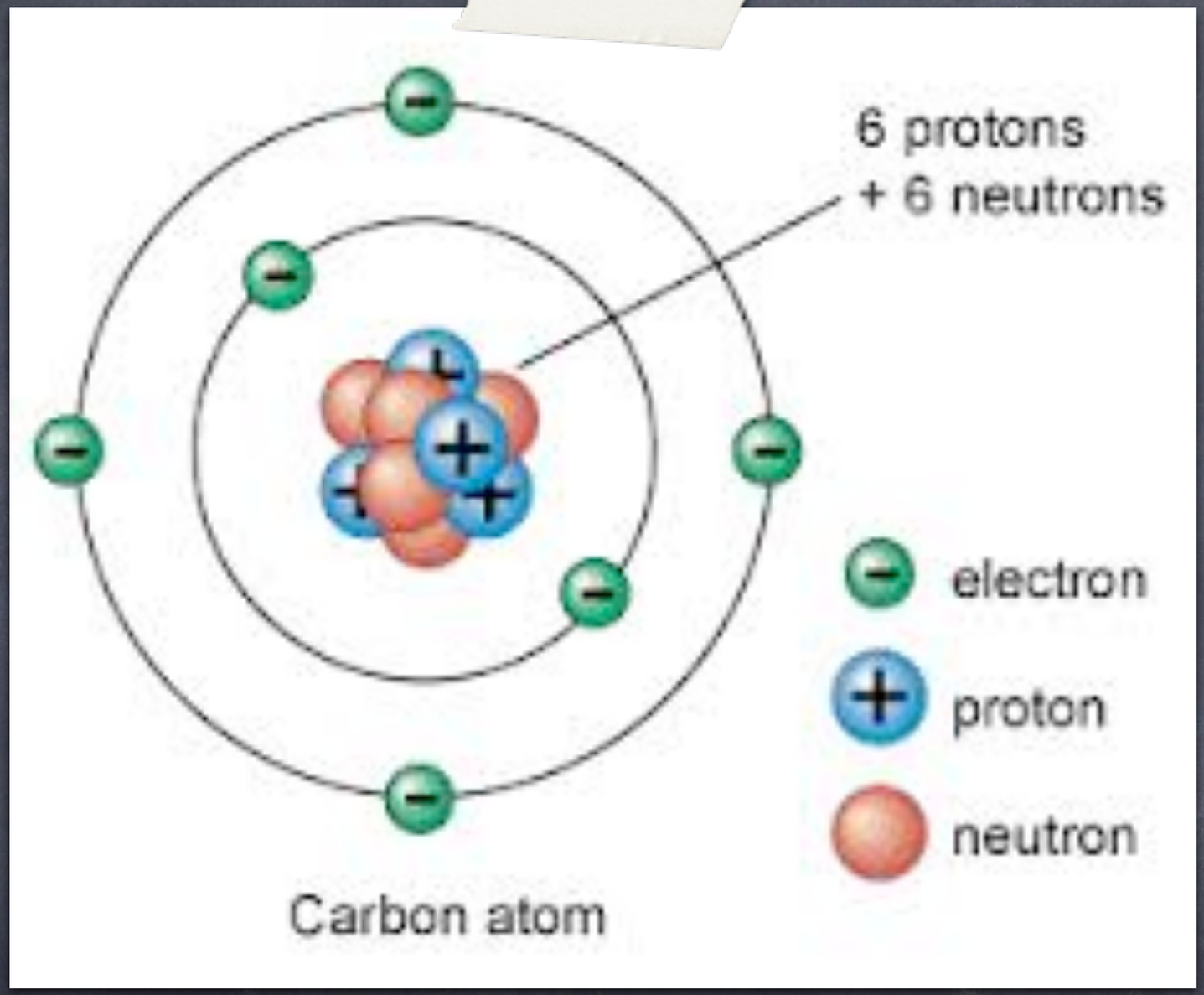
takes up space (volume)

Atoms

have mass
take up space

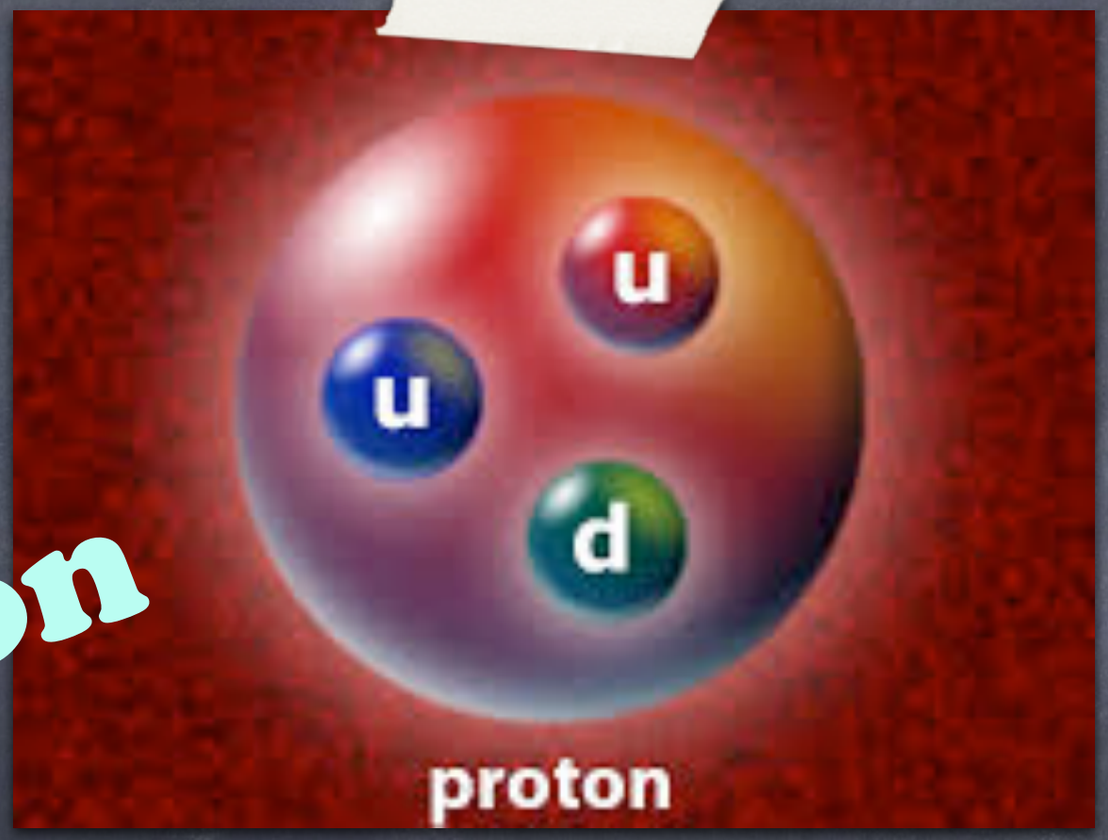


Atoms = Matter

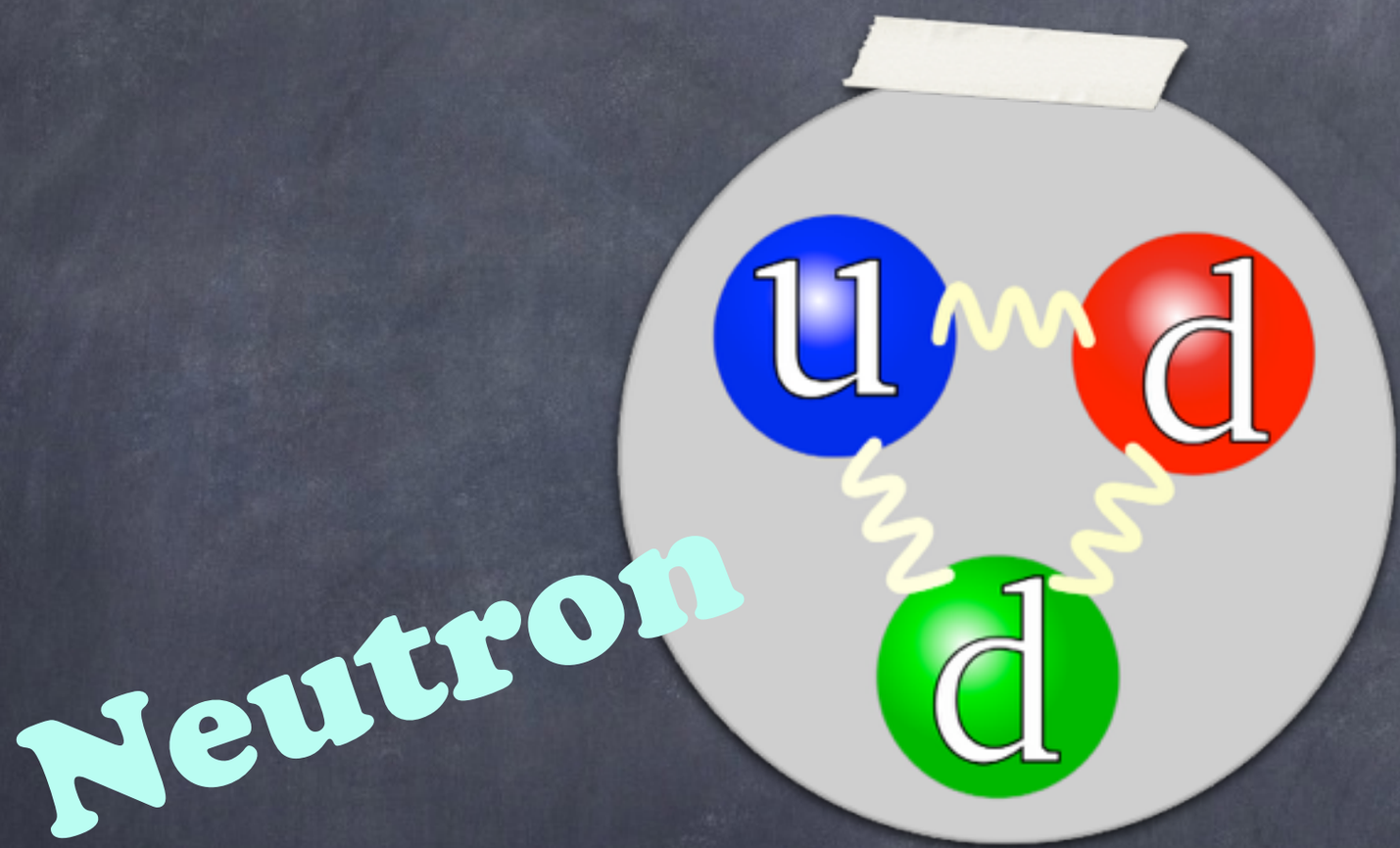


Basic Model

Proton

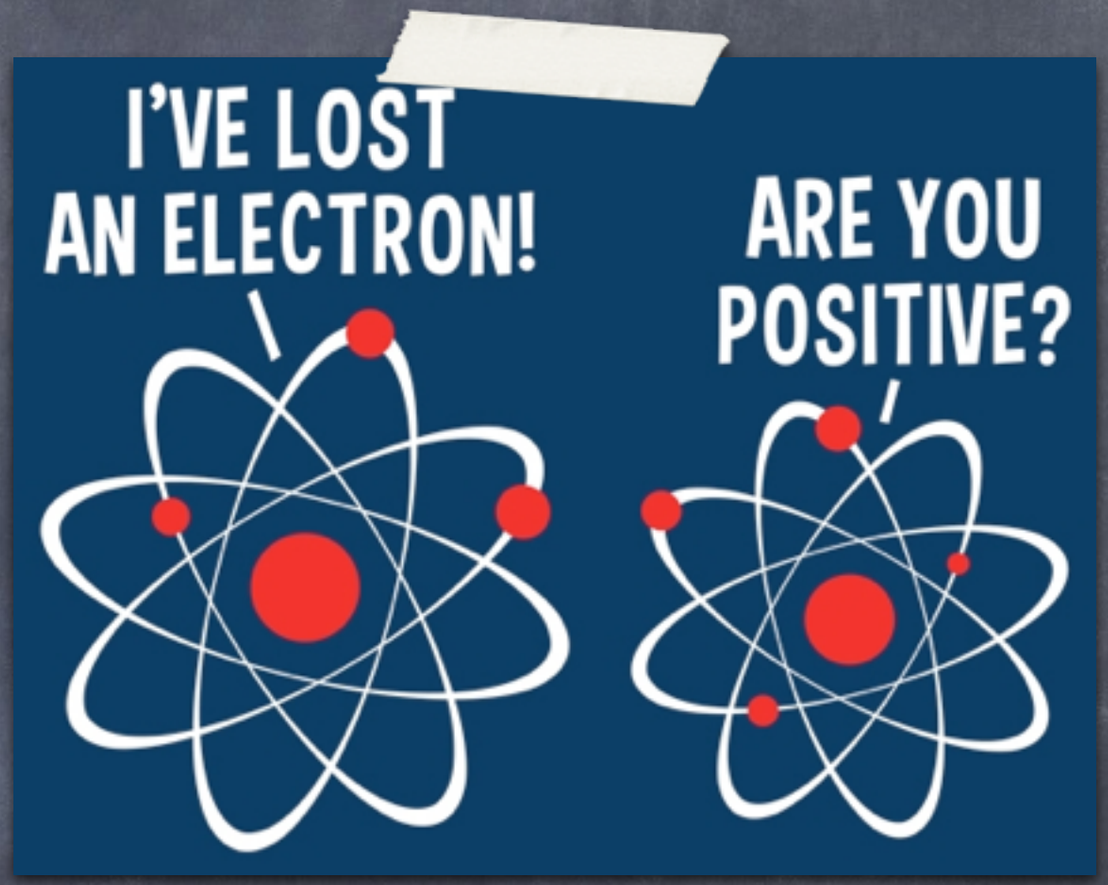


Positive Charge (+)
In the nucleus



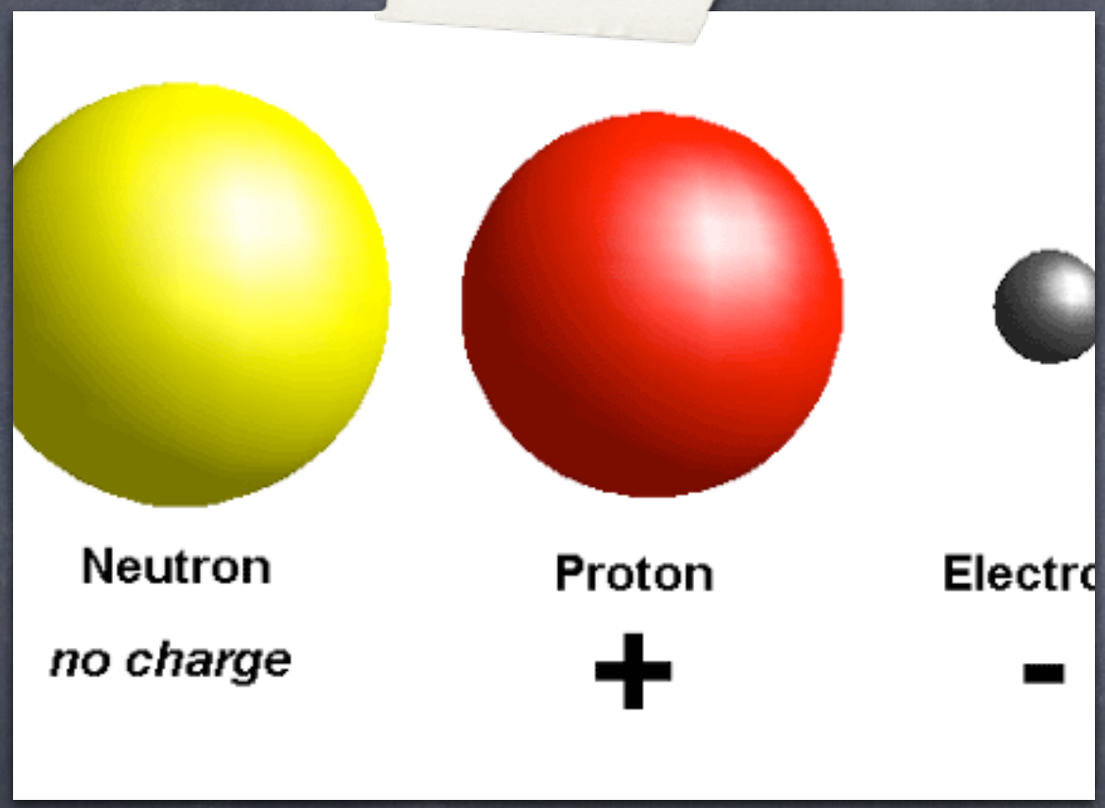
neutral charge (ø)

In the nucleus



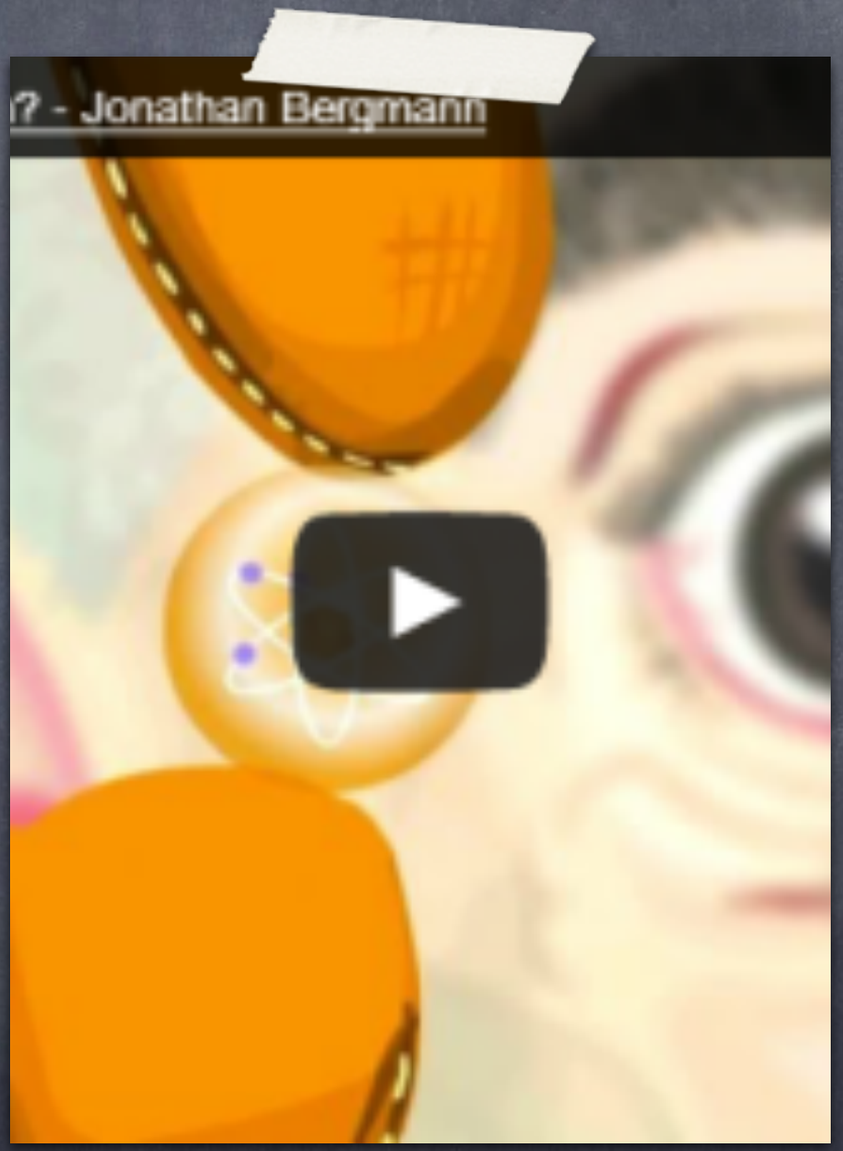
Electron

Negative Charge (-)
swirling around the nucleus



Atomic charges

How big is an atom?



In your heads...

What are the charges and locations of each of the atomic particles?

- proton -
- neutron -
- electron -

In your heads…

What are the charges and locations of each of the atomic particles?

- **proton** - **(+) positive:** in the nucleus
- **neutron** - **(ø) neutral:** in the nucleus
- **electron** - **(-) negative:** outside of the nucleus

In your heads…

What is the connection between matter and density?

Think about what we learned about atoms

Matter

the stuff of everything

<u>2 conditions</u>

has mass (mass)

takes up space (volume)