

Page 68: Atoms- page 120 CPO
What does the model mean?

What I read...	How it relates to the video	How it relates to Hit the Penny

Individual Reflection

Reflect/ Make predictions about your reading:

- How hard was it?
- How did you adjust your reading processes to get through it?
- What did you already know that helped?

What does the "Hit the Penny" model mean?

Why did so few alpha particles hit the nucleus?

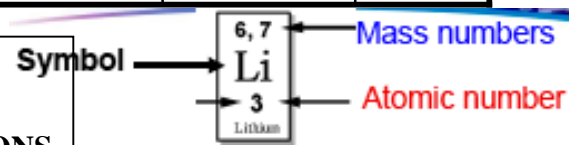
Why did they bounce off? (2 reasons)

Why did so many alpha particles miss the nucleus?
Because the atom is mostly....

The Atom Game

Particle	Location	Charge	MASS
PROTON			1
NEUTRON			1
ELECTRON			0*

- BLUE = NEUTRONS
- RED = PROTONS
- YELLOW = ELECTRONS



A) # below symbol = atomic number

Atomic # = # of protons(reds)

B. # above the symbol = mass number

Mass number =particles inside the nucleus (**reds and blues**)

C. Sometimes there is more than one mass number-
 Atoms can have different numbers of neutrons (**blues**)

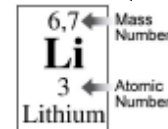
These are called **isotopes**.

D) What about yellows?

Yellow = electrons

Electrons equal protons

Yellow = Red



- The Three Rules**
- 1 # Red = Atomic Number
 - 2 # Red = # Yellow
 - 3 # Red + # Blue = Mass Number

Na

Q: Find the element Sodium (Na). How many red, blue and yellow marbles will it have? Draw Periodic Table box

Sodium(Na): Reds: ___

Blues: ___

Yellows: ___