

Science Notebook Layout **DON'T COPY UNDERLINED TEXT**

Mrs. Aguirre's Webpage: <http://www.quia.com/profiles/caguirre>

Rutherford Model	Hit the Penny Model
Alpha particle (+2 protons, 2 N)	
Nucleus of gold atoms	
Empty space of gold atom	
Electrons	

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....

Findings	Evidence
• Small positively charged nucleus with most of the atom's mass	
Most of the atom is empty space	

62

Hit the
~~Nucleus~~
Penny 

PROBLEM: What is the Structure of the Inside of an atom?

Watch video segment- write 3 notes

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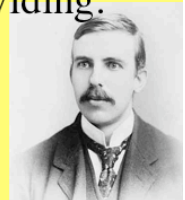
HYPOTHESIS:

Rutherford expected the positively charged alpha particles to pass through the gold atom

Person 1		Person 2	
Hits	Misses	Hits	Misses
Leave 3 lines for tallying hits and misses			

Calculate the percentage of hits by dividing:

$$\frac{\# \text{ hits}}{\# \text{ tries}} \times 100 = \underline{\quad} \%$$



63