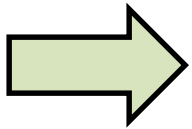


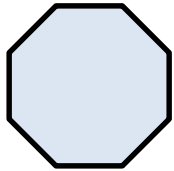
# Teacher Directions

Use these INB templates as reinforcement as you work through a lesson.

Some INBs are better filled out throughout a lesson, while others should wait till after their topic is covered. Each is marked on their instructions.

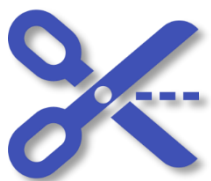


Use throughout the lesson

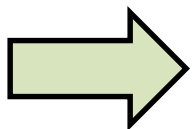


Use after this topic is covered

Photos of sample completed INBs are at the end of this file.



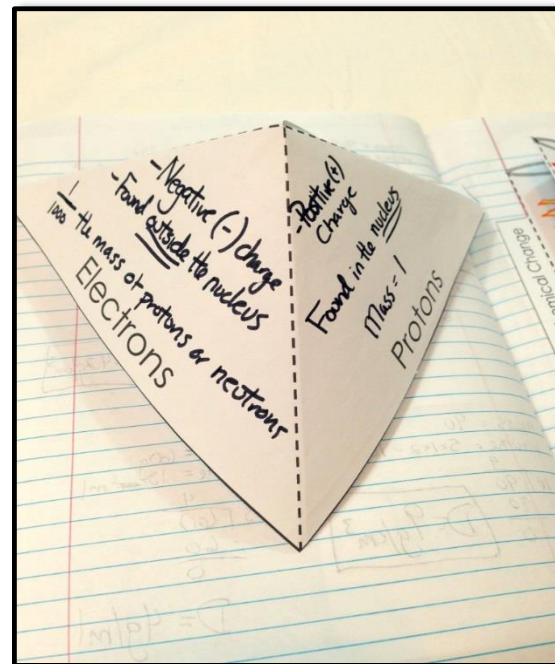
# Quick Action – Atom INB Template



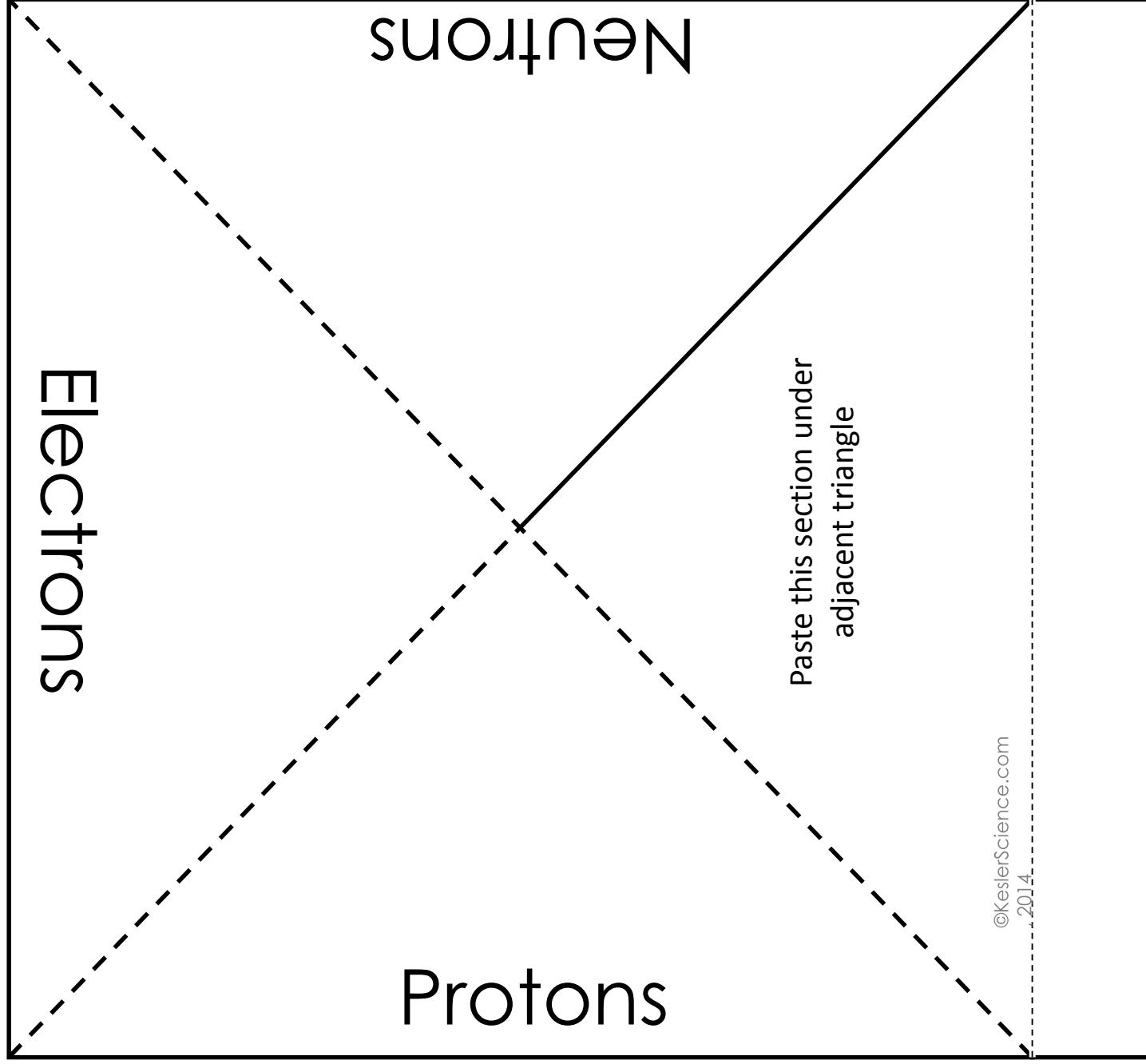
Use throughout the lesson

- Cut out the INB Template including the solid line between triangles.
- Fold along the dotted lines, including the one along the tab. (You should be able to make a pyramid shape.)
- Write notes as you go through the lesson.
- Paste the tab into your notebook.

Subatomic Particles Pyramid

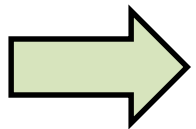


# Subatomic Particles Pyramid





# Quick Action – Atom INB Template



Use throughout the lesson

## Checking for Understanding

- Cut out the INB template including all solid lines.
- Fold on the dotted line.
- Paste the solid back into your notebook so that you have a flipable.
- On the top inside part of each section draw the structure of an atom showing the charge and location of the particle.
- On the bottom write notes including the charge, the location and the mass of each particle.

Subatomic Particles Flipable

	Electrons
	Neutrons
	Protons

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# Quick Action – Atom INB Template



The diagram shows a hand-drawn atom with three sections. The first section shows a nucleus with a '+' sign and the word 'Protons'. The second section shows a nucleus with the word 'Neutrons'. The third section shows a nucleus with a '-' sign and the word 'Electrons' with an arrow pointing to a dot on the outer shell.

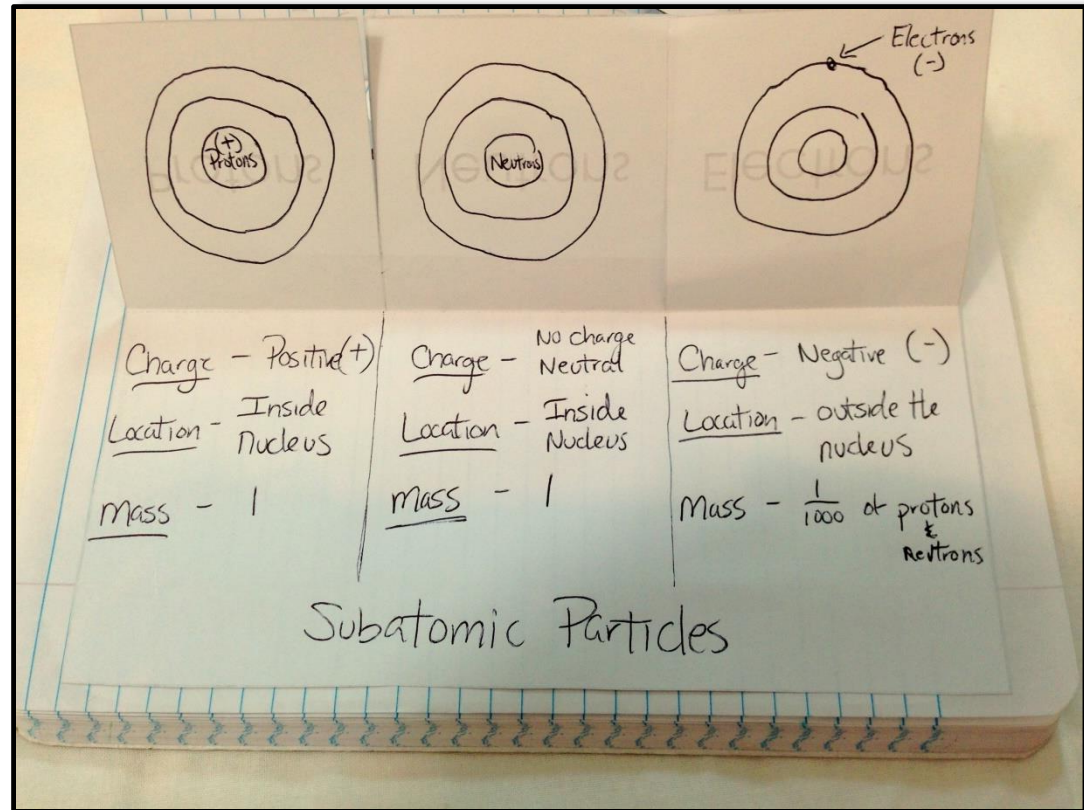
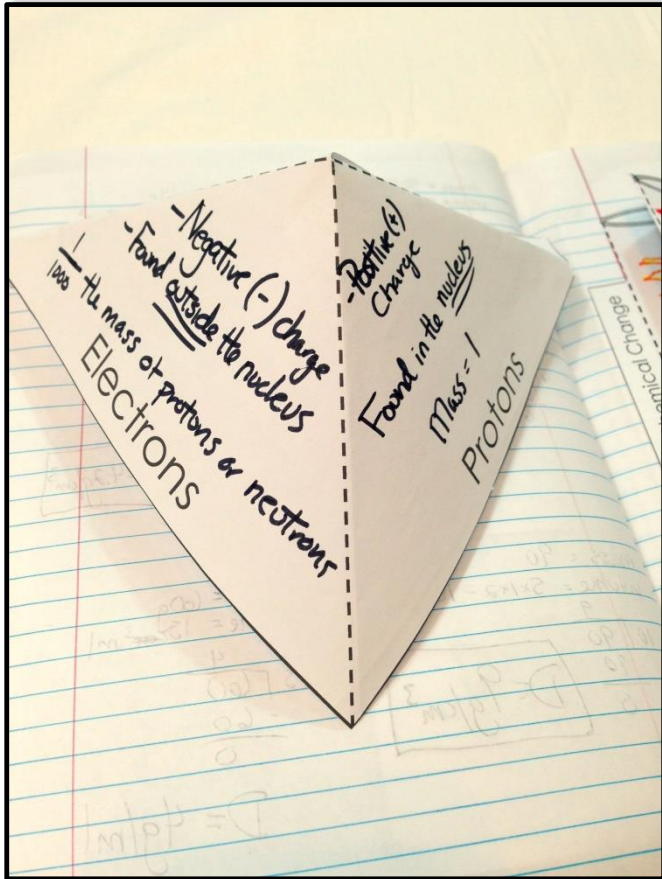
<u>Charge</u> - Positive(+)	<u>Charge</u> - No charge Neutral	<u>Charge</u> - Negative (-)
<u>Location</u> - Inside Nucleus	<u>Location</u> - Inside Nucleus	<u>Location</u> - outside the nucleus
<u>mass</u> - 1	<u>mass</u> - 1	<u>Mass</u> - $\frac{1}{1000}$ of protons & neutrons

Subatomic Particles

# Subatomic Particles Flipable

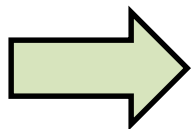
	Electrons
	Neutrons
	Protons

# Subatomic Particles





# Quick Action – Atom INB Template



Use throughout the lesson

## Checking for Understanding

- Cut out the INB template and paste tab in notebook.
- This is a way for you to remember how to calculate subatomic particles. “Ape Man”.

A = Atomic Number

P = Proton

E = Electron

All are equal is a neutral atom.



M = Mass Number

A = Atomic Number

N = Neutrons

$M - A = N$

Periodic Table

APE	MAN
	
A _____	M _____
_____ = (equals)	_____ - (minus)
P _____	A _____
_____ = (equals)	_____ = (equals)
E _____	N _____



## APE



**A** \_\_\_\_\_

**=(equals)**

**P** \_\_\_\_\_

**=(equals)**

**E** \_\_\_\_\_

## MAN



**M** \_\_\_\_\_

**- (minus)**

**A** \_\_\_\_\_

**=(equals)**

**N** \_\_\_\_\_

# Periodic Table

Si

14

28.086

Silicon

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# Periodic Table

APE	MAN
	
<u>A</u> tomic Number	<u>M</u> ass
=(equals)	- (minus)
<u>P</u> rotons	<u>A</u> tomically
=(equals)	=(equals)
<u>E</u> lectrons	<u>N</u> eutrons

14	<u>Atomic #</u> tells us protons and electrons
Si	<u>Element Symbol</u>
28.086	<u>Atomic Mass</u> protons + neutrons
Silicon	<u>Element Name</u>