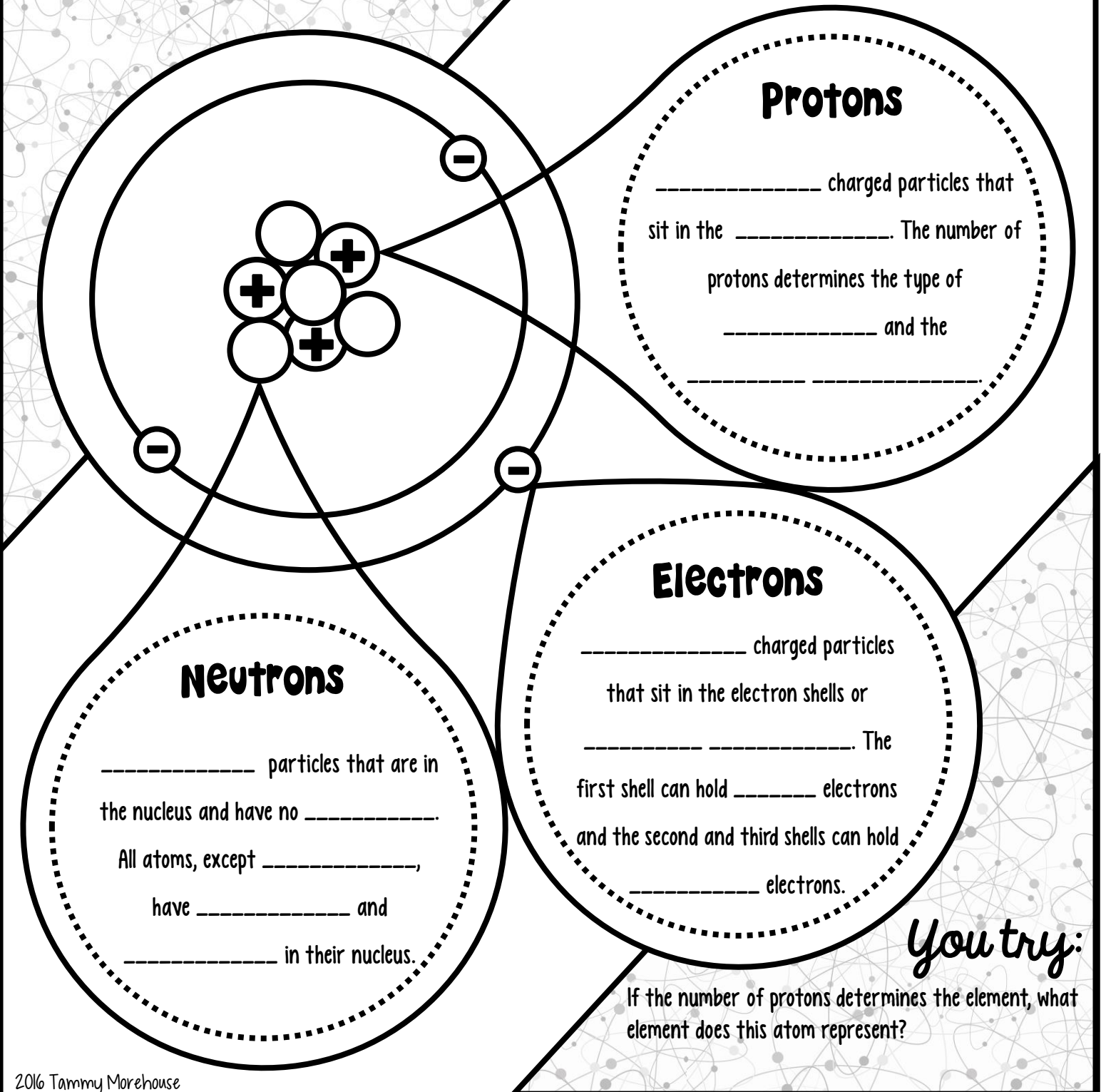


Name: _____ Date: _____ Period: _____

Atoms are the basic units of _____. They have 3 parts - _____, _____, & _____.

Atoms are _____ because they have the same number of _____ (+) and _____ (-).

ATOMIC STRUCTURE



You try:

If the number of protons determines the element, what element does this atom represent?

Name: _____ Date: _____ Period: _____

A substance that cannot be _____ into simpler substances by _____ means. An element is composed of _____ that have the same _____, that is, each atom has the same number of _____ in its _____.

ELEMENTS

Every element has a unique _____.

It indicates the total _____ of _____ in the _____ of the atom. Normal atoms are _____, so it is also the number of _____.

Atomic Number

12

Element Name

Every element has its own unique name. Many element names are very _____. Like _____, many are based on other languages. _____ is named after khloros, the Greek word for "greenish yellow." New names are approved by an _____.

Mg

Magnesium

24.305

Every element is _____.

using a unique _____ of one or two letters. The first letter is always _____ and

if there is a second letter, it is _____.

Some are based on other languages — Fe is _____, from the Latin "ferrium."

Chemical Symbol

Atomic Mass

Atomic mass is the mass of _____ and _____ in an atom. _____ are so small, they do not add to the mass. The mass is a _____ because it is an average of the _____, which are atoms of the _____ that have more or less _____.

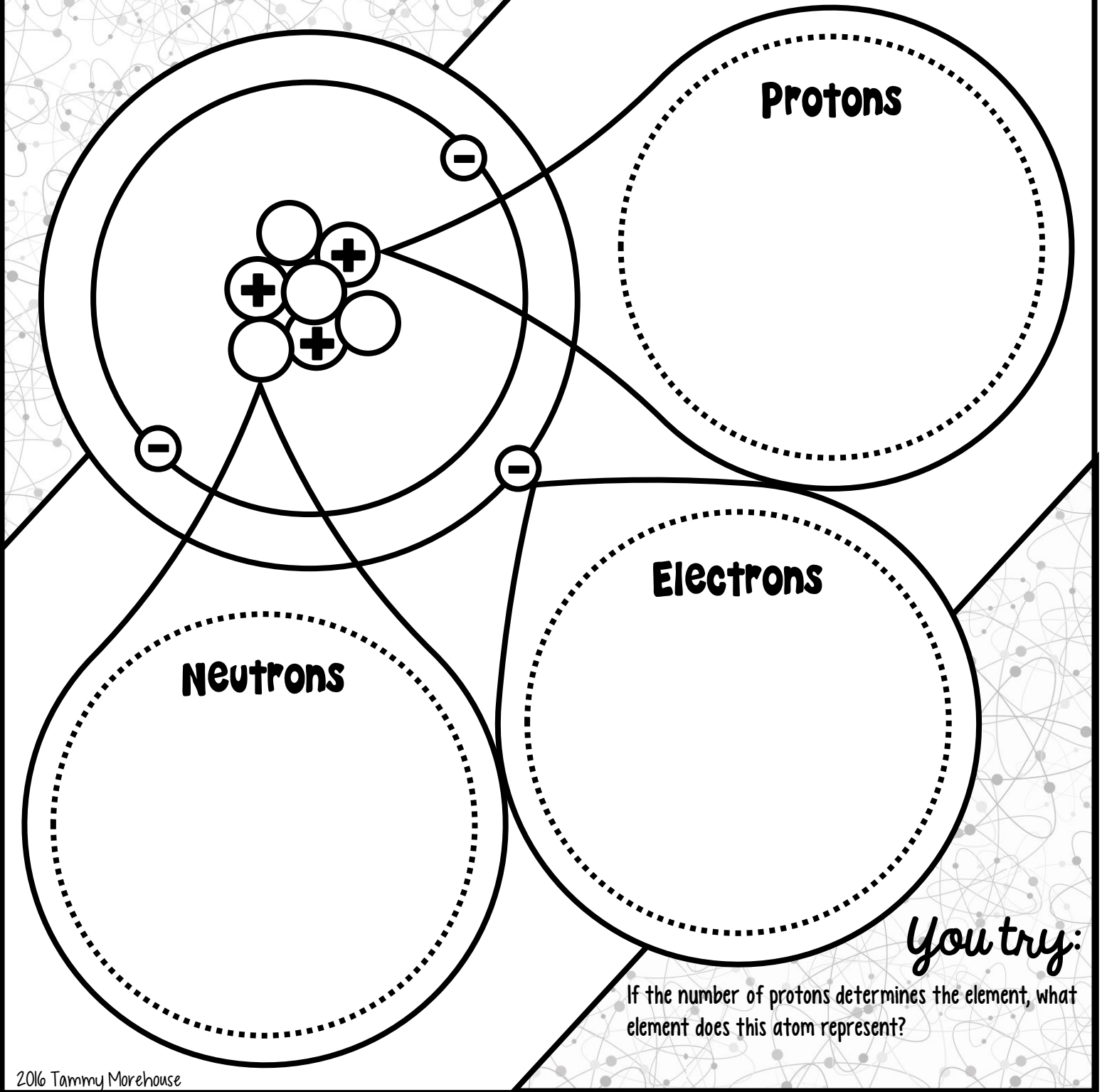
You try:

What element's neutral atom has 17 electrons?

How many neutrons are in a lithium atom?

Name: _____ Date: _____ Period: _____

ATOMIC STRUCTURE



Name: _____ Date: _____ Period: _____

ELEMENTS

Atomic Number

12

Element Name

Mg

Magnesium

Chemical Symbol

Atomic Mass

24.305

*You
try:*

What element's neutral atom has 17 electrons?

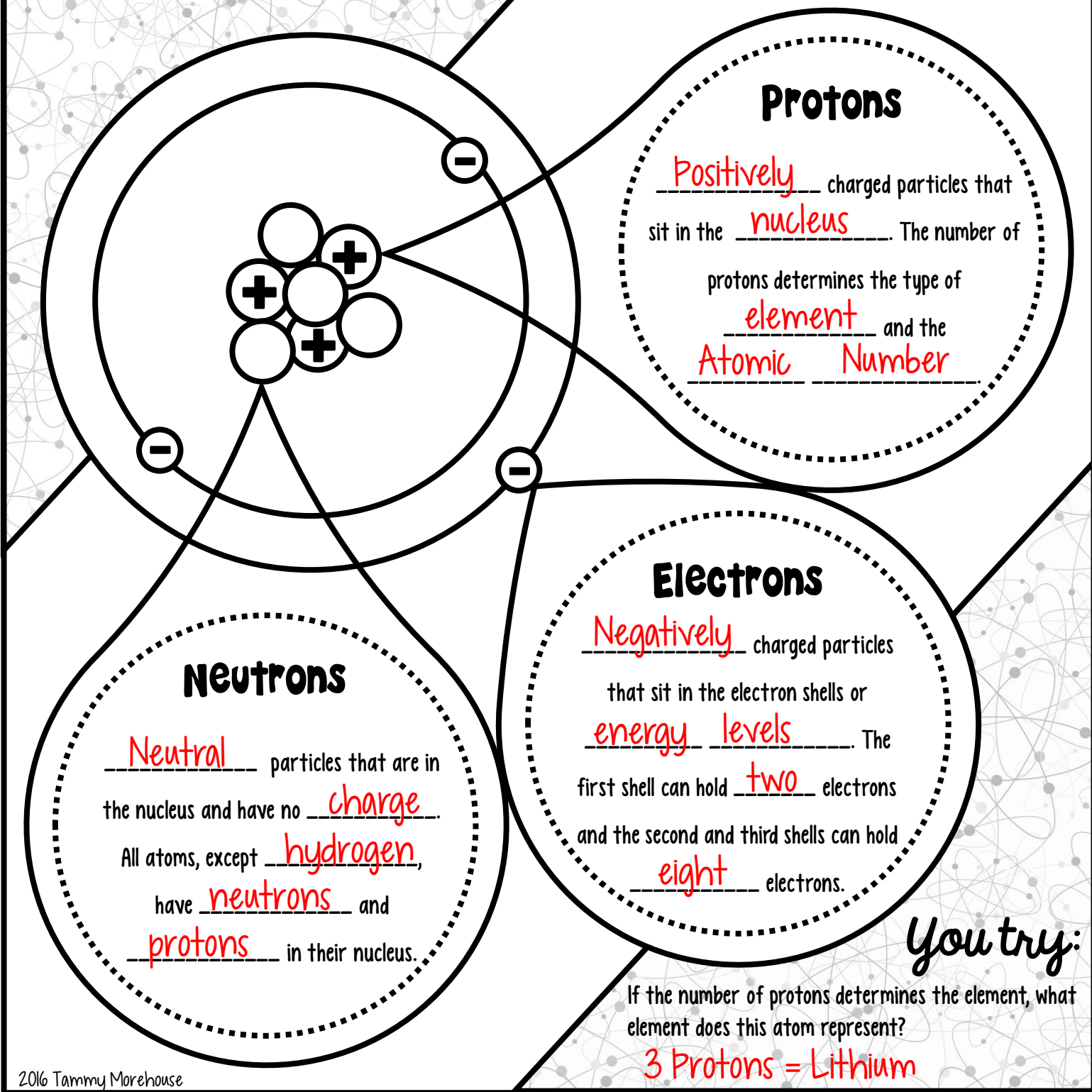
How many neutrons are in a lithium atom?

Name: Teacher Key Date: _____ Period: _____

Atoms are the basic units of matter. They have 3 parts - protons, neutrons, & electrons.

Atoms are neutral because they have the same number of protons (+) and electrons (-).

ATOMIC STRUCTURE



Name: Teacher Key Date: _____ Period: _____

A substance that cannot be broken down into simpler substances by chemical means. An element is composed of atoms that have the same Atomic Number, that is, each atom has the same number of protons in its nucleus.

ELEMENTS

Every element has a unique Atomic Number. It indicates the total number of protons in the nucleus of the atom. Normal atoms are neutral, so it is also the number of electrons.

Atomic Number

Element Name

Every element has its own unique name. Many element names are very old. Like Chemical Symbols, many are based on other languages. Chlorine is named after khloros, the Greek word for "greenish yellow." New names are approved by an International Committee.

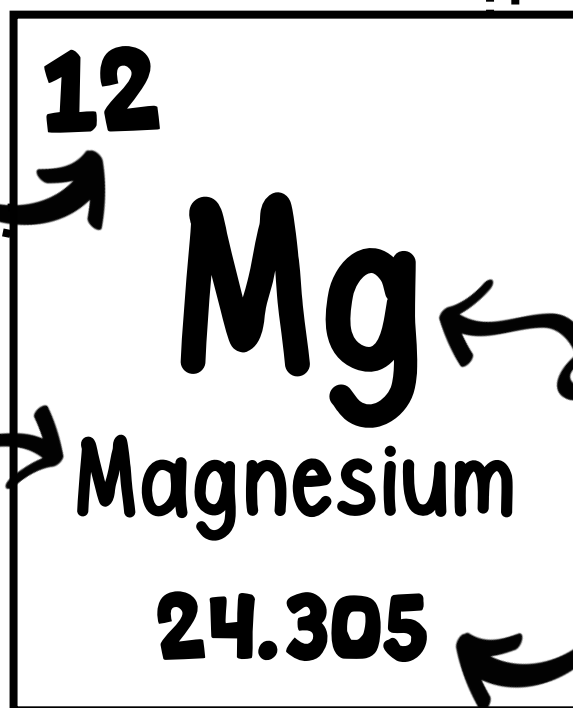
Every element is abbreviated using a unique symbol of one or two letters. The first letter is always capitalized and if there is a second letter, it is lower case.

Some are based on other languages — Fe is Iron, from the Latin "ferrium."

Chemical Symbol

Atomic Mass

Atomic mass is the mass of protons and neutrons in an atom. Electrons are so small, they do not add to the mass. The mass is a decimal because it is an average of the isotopes, which are atoms of the elements that have more or less neutrons.



You try:

What element's neutral atom has 17 electrons?

17 - Chlorine

How many neutrons are in a lithium atom?

Atomic #3 Atomic Mass 7
 $7 - 3 = 4$ Neutrons

SAMPLE

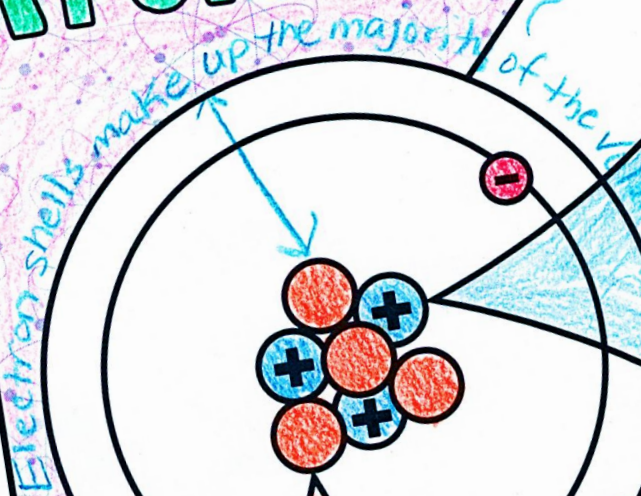
Name: Mrs. Morehouse

Date: 9/18/16 Period: 1

Atoms are the basic units of matter. They have 3 parts - protons, neutrons, & electrons.

Atoms are neutral because they have the same number of protons (+) and electrons (-).

ATOMIC STRUCTURE



Protons

Positively charged particles that sit in the nucleus. The number of protons determines the type of element and the atomic number.

Electrons

Negatively charged particles that sit in the electron shells or energy levels. The first shell can hold 2 electrons and the second and third shells can hold eight electrons.

Neutrons

Neutral particles that are in the nucleus and have no charge. All atoms, except hydrogen, have neutrons and protons in their nucleus.

You try:

If the number of protons determines the element, what element does this atom represent?
Lithium - 3 protons

LOTS OF ROOM FOR NOTES
AND EVEN ADDITIONAL
NOTES AND DOODLES!

SAMPLE

Name: Mrs. Morehouse

Date: 9/18/16 Period: 1

A substance that cannot be broken down into simpler substances by chemical means. An element is composed of atoms that have the same atomic number, that is, each atom has the same number of protons in its nucleus.

ELEMENTS

IONS - are atoms that have gained or lost electrons.

Every element has a unique atomic number. It indicates the total number of protons in the nucleus of the atom. Normal atoms are neutral, so it is also the number of electrons.

Atomic Number

Element Name

Every element has its own unique name. Many element names are very old. Like chemical symbols, many are based on other languages.

Chlorine is named after Khloros, the Greek word for "greenish yellow." New names are approved by an International Committee.

You try:

What element's neutral atom has 17 electrons?
Chlorine - atomic # 17 means 17 protons and 17 electrons

Every element is abbreviated using a unique symbol of one or two letters. The first letter is always capitalized and if there is a second letter, it is lower case.

Some are based on other languages - Fe is Iron from the Latin "ferrium."

Chemical Symbol

Atomic Mass

Atom mass is the mass of protons and neutrons in an atom. Electrons are so small, they do not add to the mass. The mass is a decimal because it is an average of the isotopes, which are atoms of the element that have more or less neutrons.

*protons make the element

How many neutrons are in a lithium atom?
4 - atomic # is 3 and atomic mass is 6.9, which means $7 - 3 = 4$.

LOTS OF ROOM FOR NOTES AND EVEN ADDITIONAL NOTES AND DOODLES!