16.1 The Structure of Matter



Summarize main points from each video.

Video Title / topic							
Video Title / topic							
Video Title / topic							

Topic Introduction



Summarize your understanding of each paragraph.

word "compound" is an important word in chemistry. The word "compound" refers a combination of elements. The word "compound" refers to two or more chemically combined elements (or atoms).
Individual atoms by themselves are not compounds. Atoms of one type when combined with atoms of another type through a chemical bond are called compounds. Atoms combined with other atoms of a different type through a chemical bond are compounds.
There are several types of chemical bonds. Ionic bonds are one type of chemical bond. Ionic bonds form a "network" of atoms. Covalent bonds share electrons between atoms. Covalent bonds form molecules. Ionic bonds and covalent bonds each form compounds.
Ionic bonds do not form molecules. Ionic bonds form a network of atoms, bonded to each other through the transfer of electrons. Covalent bonds do form molecules. Covalent bonds share electrons between atoms.

Read/Summarize Text



- 1. Read the passage.
- 2. Underline key expressions in each sentence.
- 3. Re-write each word (or expression) you underlined.
- 4. Summarize the passage.

Title of Passage.					
Discussions about compounds and bonds can be confusing. Several new words are used to describe the concepts.	2				
Most students are initially unfamiliar with several words used to describe chemical compounds. Memorizing a few of these words and expressions is helpful. New students should consider memorizing the following words.					
Ionic Bonds. Covalent Bonds. Metallic Bonds. Polyatomic Ions.					
Memorize these words, even if you do not yet fully understand their meaning.					

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Re-write words yo	u underlined			3
Using a complete	sentence, summ	arize or rephra	ase the passage	4

Read Text for Comprehension

Read this article for deeper understanding. No summary is required, although you may want to circle, underline, or mark key ideas and words.

EXTRACT FROM WIKIPEDIA

Ionic bonding is a type of chemical bond that involves the electrostatic attraction between oppositely charged ions, and is the primary interaction occurring in ionic compounds.

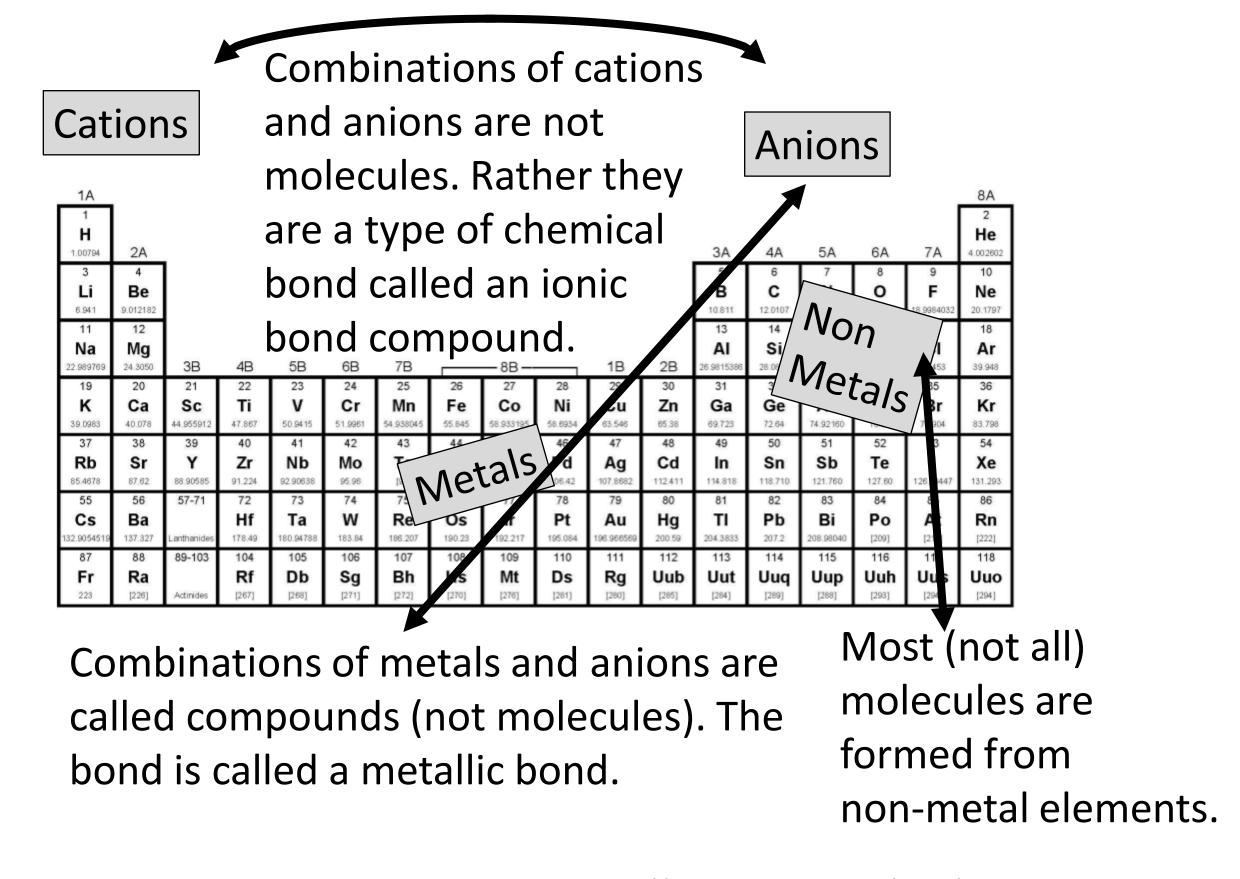
The ions are atoms that have gained one or more electrons (known as anions, which are negatively charged) and atoms that have lost one or more electrons (known as cations, which are positively charged).

This transfer of electrons is known as electrovalence in contrast to covalence. In the simplest case, the cation is a metal atom and the anion is a nonmetal atom, but these ions can be of a more complex nature, e.g. molecular ions like NH4+ or SO42–.

In simpler words, an ionic bond is the transfer of electrons from a metal to a non-metal in order to obtain a full valence shell for both atoms.

EXPLANATION F ROM HONEYCUTTSCIENCE.COM

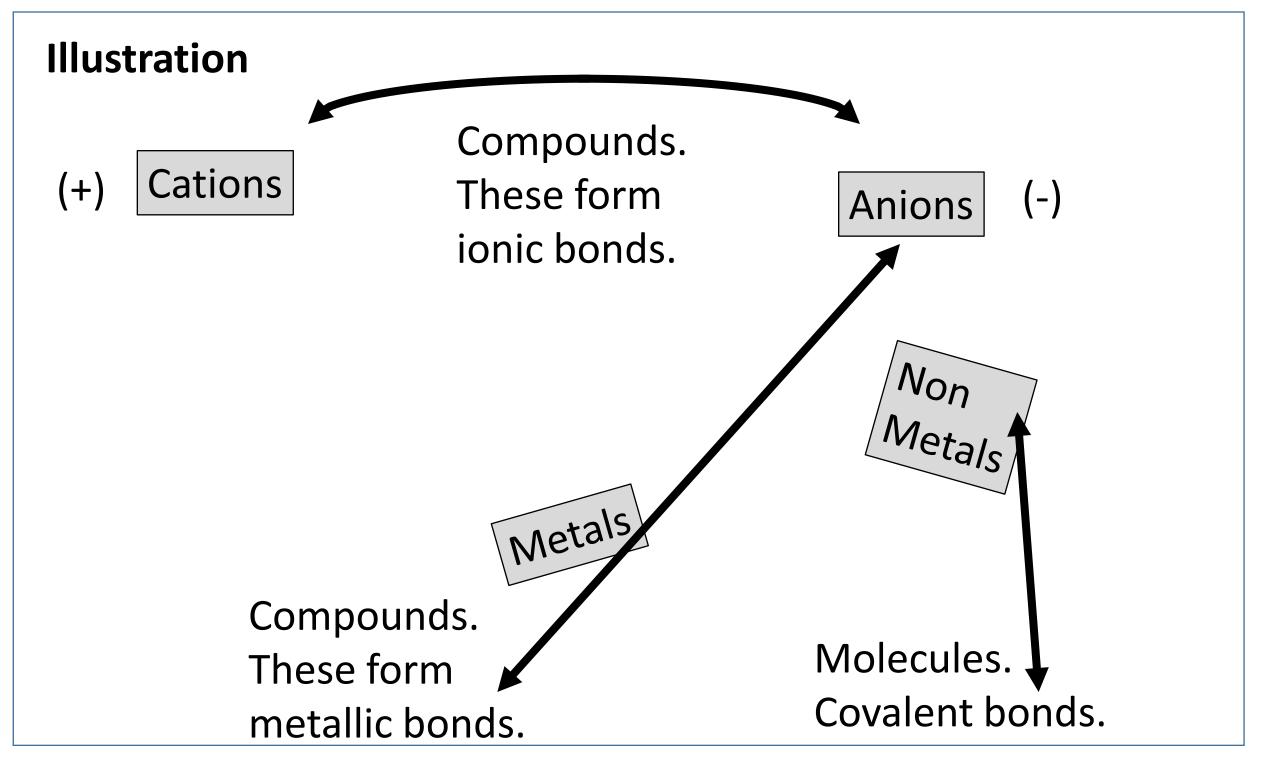
The illustration here is a generalization ... it is not fully descriptive or precise.



Draw Illustration



Copy and Label the Illustration in the Space Provided



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Draw (Copy) the Illustration Here

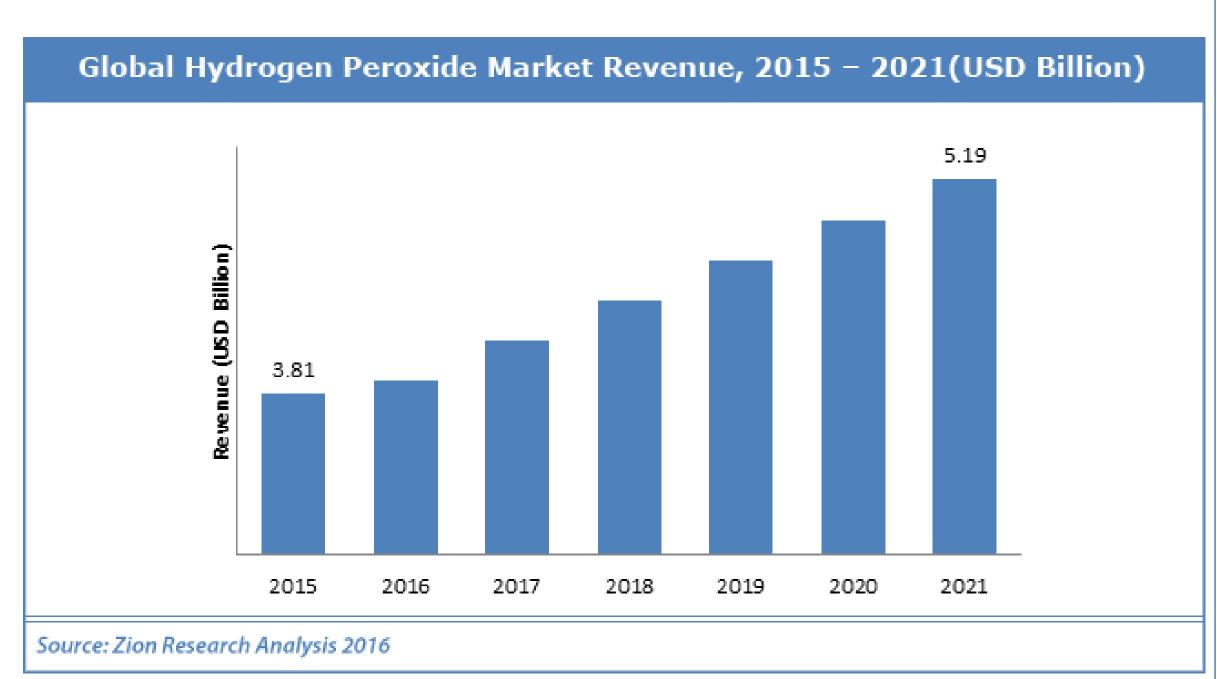
Interpret a Graph



Write the title of the graph						
Circle the type of chart this represents						
Bar Chart	Line Chart	Pie Chart	Other			
If applicable, What does the X-axis represent						
What does the Y-axis imply						
Summarize what this graph represents or conveys						

https://www.zionmarketresearch.com/news/global-hydrogen-peroxide-market

Hydrogen Peroxide Global Market Projections



Hydrogen peroxide is a chemical compound with the formula H_2O_2 . In its pure form, it is a colorless liquid, slightly more viscous than water. Hydrogen peroxide is the simplest peroxide. It is used as an oxidizer, bleaching agent and disinfectant. (wikipedia.com)

Show-Off Your Smarts!



Instructions

- Complete as an individual or small group.
- Discuss your ideas/answers/responses in a small group.
- Select one person to present your responses to the class.

Q1. How can this information be applied to a young-person's life?
Q2. How does this information apply to (or impact) communities?

- Q3. When do scientists need to apply this information? How?
- Q4. How would a person from 100 years ago view this information?
- Q5. How does this topic connect to other science topics or math?

Write down at least three words introduced or covered by this topic.

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Make a Poster

