

You **MUST** copy the question if given on the board and answer it using complete sentences.



Reading Minute Monday

\$2.00 Summary

Directions: Each word you write is worth 10¢. Your task is to write a summary worth \$2.00 or 20 words!

Title: _____

Remember to Staple your article to your starter!



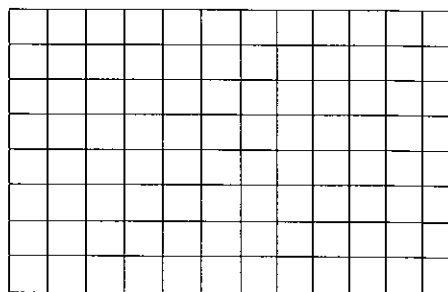
"Chart"ering New Territory Tuesday
(Charts and Graphs)

Directions: Create a graph using the data below.

Students Favorite Type of Snacks

Snack Type	Number of Votes
Popcorn	12
Crackers	4
Trail Mix	8
Cheese	16
Veggies	10
Fruit	18

Title: _____



Teacher's Choice
"Throwback Thursday"

Directions: Underline the Independent Variable and circle the dependent variable.

1. Pamela works as a consultant at a software company. The amount of her annual bonus is based upon the number of hours she works.
2. Every morning, Mei runs laps around the track for one hour. The faster her speed, the more laps she is able to run in the hour.
3. A committee is organizing a music festival in Crawford County. The number of bands that will be able to play at the festival is determined by the amount of time that the venue has been reserved for.
4. Charlie is buying birthday candles for his grandmother's birthday cake. The number of boxes of candles he will purchase is based on her age, in years.



Flocabulary Friday

Identify whether each of the following is a compound, mixture or element.

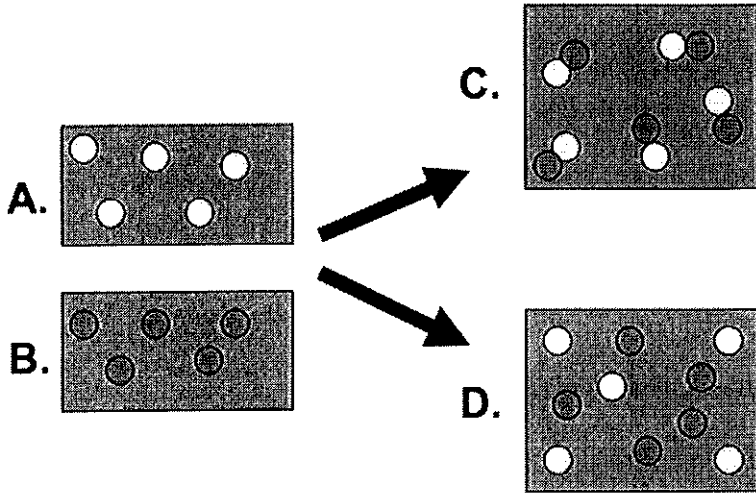
- a. Br₂
- b. NaHCO₃
- c. C₆H₁₂O₆ & H₂O
- d. Cu & Zn
- e. CO₂
- f. Al

WEDNESDAY WILD WRITING EXPLORATION!

Directions: Answer the following question. Be sure to use the rubric provided to check your writing after you have answered the question.

Question: The diagram below shows how two elements can be mixed together.

Which is a compound? Which is a mixture? Explain your reasoning with evidence. You may use your notes to help you.



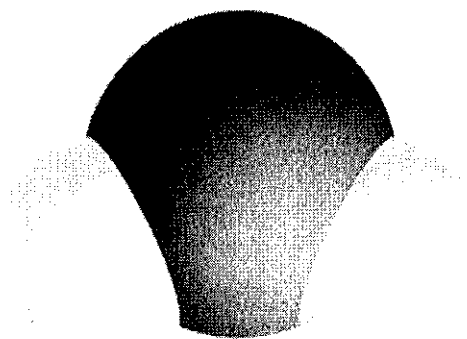
	I have read over my response now that I have finished writing it.
	I restated the statement/question in my response (HIGHLIGHT IN GREEN)
	I provided supporting details (HIGHLIGHT IN YELLOW)
	My concluding sentence brings all of the ideas together (HIGHLIGHT IN PINK)
	I have <i>at least 3 sentences minimum</i> in my response.
	I used proper punctuation and capital letters where needed
	I wrote so neat, others can read it
	My response makes sense and is accurate/relevant.

Molecules

Any time two atoms join together, they make a molecule. All the stuff around you is made up of molecules. This includes you! You are actually made up of trillions and trillions of different types of molecules.

Compounds

When atoms of different types of elements join together, they make molecules called compounds. Water consists of compound molecules made up of 2 hydrogen atoms and 1 oxygen atom. This is why it's called H_2O . Water will always have 2 times the number of hydrogen atoms as oxygen atoms.



Water Molecule showing 1 Oxygen atom and 2 hydrogen atoms

Molecular Formula

There are only just over 100 types of atoms, but there are millions and millions of different types of substances out there. This is because they are all made up of different types of molecules. Molecules are not only made up of different types of atoms but also different ratios. Like in the water example above, a water molecule has 2 hydrogen atoms and 1 oxygen atom. This is written as H_2O .

Other examples are carbon dioxide (CO_2), sodium chloride ($NaCl$), and sugar or glucose ($C_6H_{12}O_6$). Some formulas can get quite long and complex.

Let's look at the molecule for sugar:

C_6 - 6 carbon atoms

H_{12} - 12 hydrogen atoms

O_6 - 6 oxygen atom

It takes these specific atoms in these specific numbers to make up a sugar molecule.



3D Molecule

Bonds

Molecules and compounds are held together by forces called chemical bonds. There are two main types of bonds that hold most compounds together: covalent bonds and ionic bonds. Some compounds can have both types of bonds.

Both main types of bonds involve electrons. Electrons orbit atoms in shells. They want these shells to be full. When they aren't they will try to bond with other atoms to try and fill their shells.

Covalent Bonds - Covalent bonds share electrons between atoms. This happens when it works out for atoms to share their electrons in order to fill their outer shells.

Ionic Bonds - Ionic bonds form when one electron is donated to another. This happens when one atom gives up an electron to another in order to form a balance and, therefore, a molecule or compound.

Fun Facts about Molecules

- Oxygen gas normally is the molecule O_2 , but it can also be O_3 which we call ozone.
- 66% of the mass of the human body is made up of oxygen atoms.
- Molecules can have different shapes. Some are long spirals while others may be pyramid shaped.
- Organic compounds are compounds that contain carbon.
- A perfect diamond is a single molecule made of carbon atoms.
- DNA is a super long molecule that has information uniquely describing every human being.