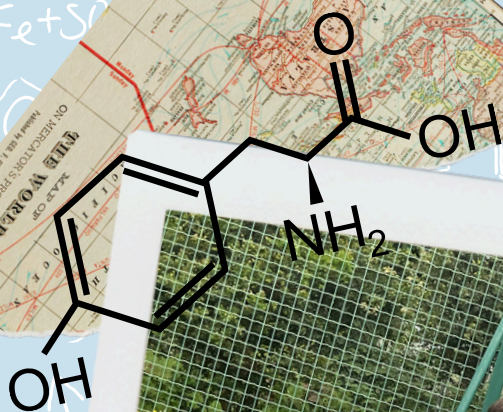


Special Edition **THE WORLD OF SCIENCE**

April | 2025



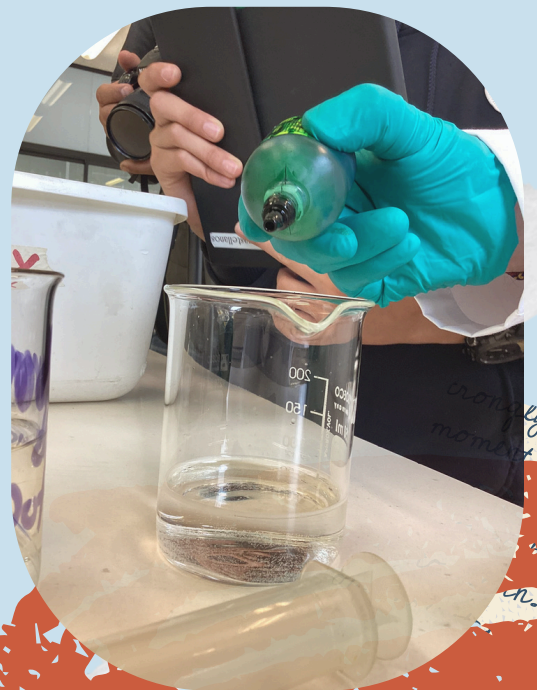
**Learn about chemistry,
and it's history!**

VOL#1



TABLE OF CONTENTS

- Editorial text
- How did science begin?
- Elements in poems
- Articles (mixture edition)
- Biographies
- Games
- Comics



CONTRIBUTIONS

Editor

Luciana Marroquín

Graphic designer

Jacobo Rojas

Photographers

Sofia Aljure, Luciana Martínez .

Contributing Writers

Salomon Gomez, Luciana

Martínez, Valeria Pachón, Alicia

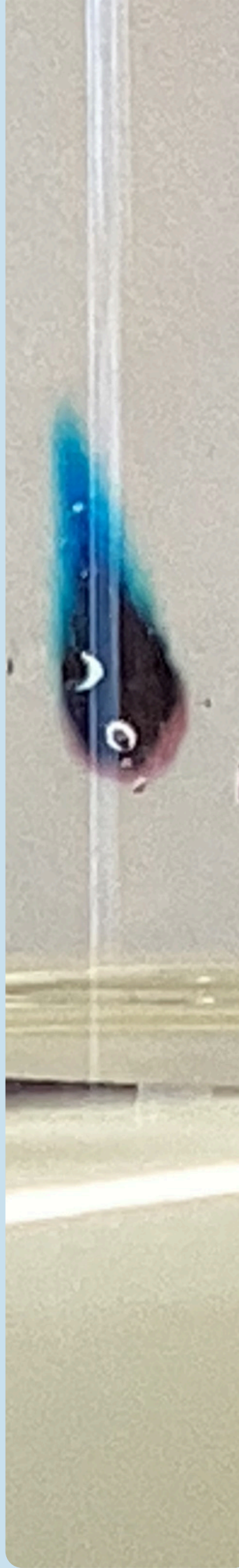
Troncar, Manuela Forero, Andrés

Felipe Figueroa, Pedro Vélez,

Tomas Halliday, Oliver Vargas,

Maya Quiche, Luciana Marroquín,

Jacobo rojas, Sofía Aljure.



Editorial Text

LUCIANA MARROQUIN

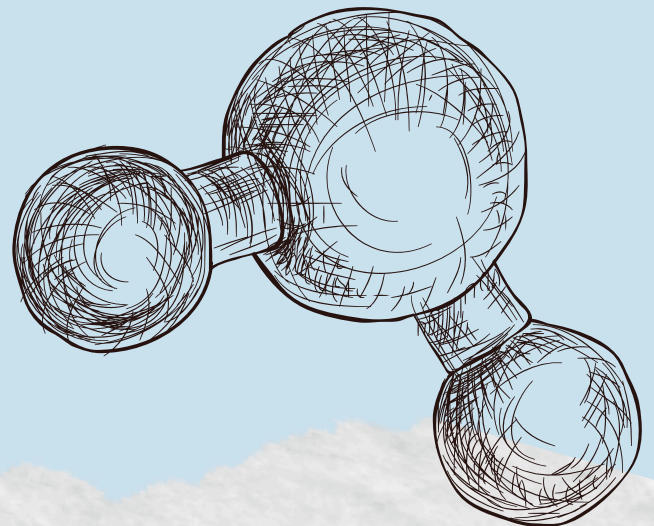
In the last month, we have been working on a combination of subjects named LED which stands for Learning Experiences through Discovery, in which we learned about the history of chemistry and how different “genius” people made the advancements that now lead humanity. When we were clarified in the topic, then we started creating a magazine in which we included entire texts of a specific scientist. We made the incredible effort of building a poem about an element, and we read a book about the elements “The mystery of the periodic table”. Afterwards we did some grammar exercises that helped us write our texts in a better and more complete way.

During the construction of this magazine, we had different researches about the types of mixtures and advances in chemistry in the long book of history of the world. After facing challenges in the group, trying to do our best in time management, the ideas came to our group and together we built our final product. Throughout this project we have developed the ability of teamwork and we’ve suggested what these learnings and discoveries should be used for. In this magazine we have also included some previous knowledge and experience of previous projects . This project was the only one that did not have the theme of environmental issues or how to fix our planet, but learning about how to lead humanity to a better future. Hope you enjoy our series magazines and learn something new about the world of chemistry .





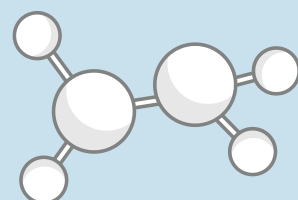
How Did Science Begin?



History Of Chemistry

Chemistry has changed over the years, making new discoveries, and creating a history. It has a long and fascinating history, beginning with ancient metalworkers who discovered and manipulated pure metals like gold, silver, and copper. These early discoveries laid the foundation for metallurgy and alchemy, where the dream of transforming base metals into gold drove experimentation. Over centuries, alchemists developed fundamental laboratory techniques and identified new substances, paving the way for modern chemistry.

The systematic study of elements led to the creation of the periodic table in the 19th century, a groundbreaking tool that organizes elements by their atomic number and properties. Today, chemistry has evolved into a sophisticated science with advanced methods for studying mixtures, compounds, and reactions, all while continuing to build on its ancient roots. From simple metals to complex compounds, chemistry's journey reflects humanity's quest for understanding and innovation.



How it started

The beginning of chemistry on Ancient Egypt

Scientific and technological developments:

Egypt was ruled by a pharaoh considered a living god.

Gold, copper and iron, were extracted on Egypt (3000 BCE-332 BCE).

Sodium compounds like natron were used to dehydrate bodies.

The first chemists:

The first chemists are considered to be the metal workers of the 14th century, because they discovered the first elements as well as some metals.

The development

Scientific contributions: The four elements theory, the proposition of atoms and creation of libraries with information from Greek and Hellenistic scholars.

important people: Empedocles, Democritus, Zosimos, Ana Ximandes, heraclitus and Thracian.

Islamic Golden Age

Chemistry, Alchemy, and Knowledge Expansion (c.750–1400 CE)

Scientific and technological developments:

The first laboratories were created, and because of this, Acids and Alkalis were discovered as well as early distillation and purification.

Key events, people and places:

Jabir ibn Hayyan (c.721–815 CE) developed distillation, crystallization and early acid classification. On the other hand, Al-Razi (854–925 CE) experimented with chemical reactions to create medical treatments, and experimented with chemical reactions to create medical treatments.

Lastly, Ibn Sina (980–1037) wrote a book with chemical medicine.

Islamic Society, Government, and Economy (c.750–1400 CE):

The government supported scientific research through government funds.

Access to Knowledge:

There existed the world's largest research center.

People from different religions and regions were accepted, everywhere.

Trade and Economy:

In the Islamic world, trade was a major route where knowledge and materials were spread through God's world, starting the scientific revolution.

The Return of the Atomists and the Spirit Unknown

Johann Baptista in 1579-1644 was the first that turned gas, and he had a theory about gas and later on discovered it.

We learn about Galileo's thought and the atomism of Democritus, Epicurus, and Lucretius. Robert Boyle thought that earth, fire, water and air are not the fundamental elements that there are silver, gold, lead, arsenic and so on in 1627-1691..

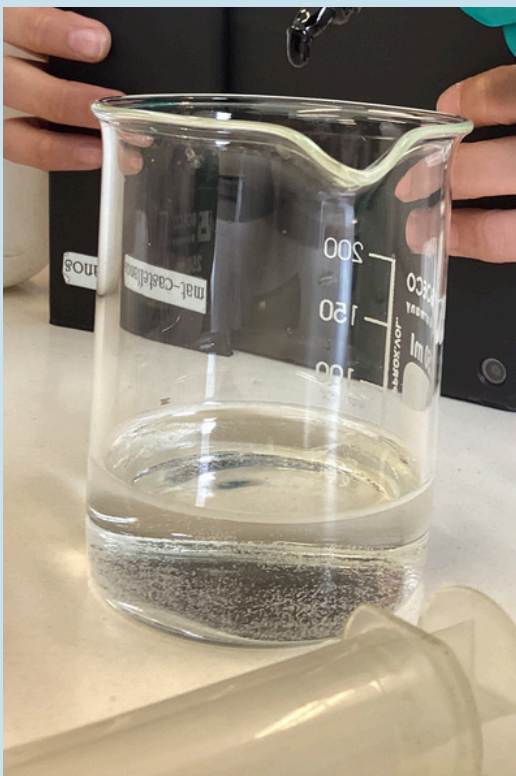
The European renaissance

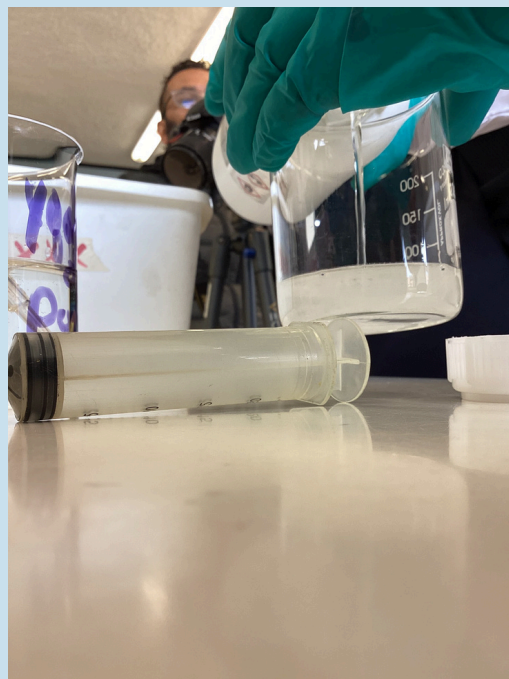
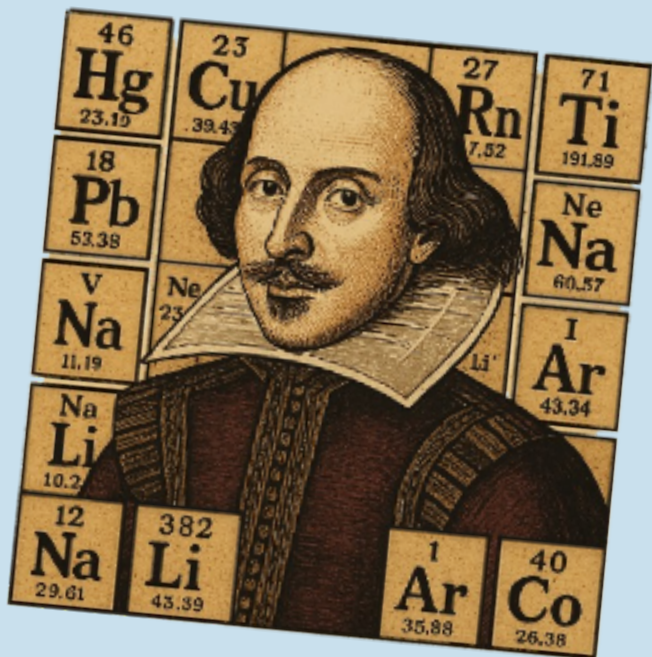
The European Renaissance (14th century CE) and highlights its impact on scientific progress.

Universities Contributed to increased research, spreading scientific discoveries across Europe. This era influenced society, government, and the economy. Colonization during this period brought new raw materials, further fueling development. The European renaissance this happens from 1743 to 1794 on the middle of the French Revolution. The main chemist on this years was Antoine Laurent Lavoisier he was really important because he named oxigen and hydrogen. Also he showed that phologiston didn't existed. In history there are many events that shaped the future. Each event is important because maybe if something wasn't done, there might not have found one element, or we may even not have alchemist! This is why every event in history is important.

Henry Cavendish

Henry Cavendish at 1731–1810 found dephlogisticated air (oxygen) and inflammable air (hydrogen). He also found out that when you mix oxygen and hydrogen it makes water, but he still believed on phlogiston.



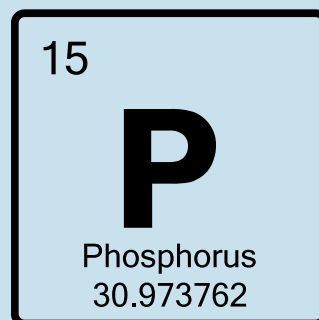


Poetic Elements



Phosphorus

I'm sitting in my lab wondering about p,
Seeing that in nature is not so free
But yet full of ability,
And a lot of capability.



This element was discovered by Henning brand in 1669,
By heating human urine,
Which led to see that is in our body, dna matches food and more,
And that this element must be adored,

A radiant beam of light, as it glows in the dark,
Almost as a greenish spark,
But in ancient times scary,
But at the same time great to carry,

It's atomic number is 15,
The same number of the age when people become teens.
It is part of the group of nonmetals
Which makes it very special.

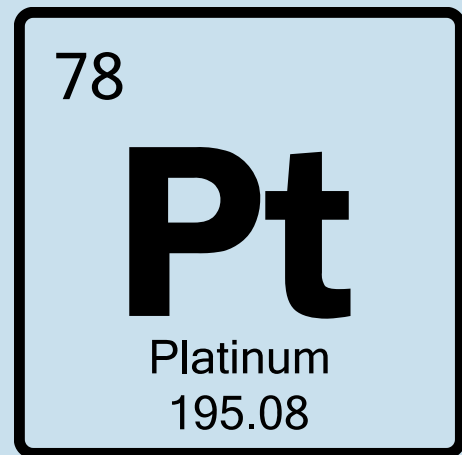
It is dangerous having a lack of it,
Because it weakens bones,
So when you get hit,
You can get hurt more easily.

Even tough being called the devil's element because of its unique glow,
It is great for the body to grow,
And many other things,

Luciana Martinez



Platinum



My name is platinum, and I'm in the sixth period,
I'm as hard as cristal but I don't fear a pistol,
you can find me with nikle
but I'm as valuable as gold

.

My major producers are Zimbabwe and Russia
with Africa and the USA
you can see me at plain day,
but you shouldn't grab me if I'm at display
because you might go to jail.

I'm silvery white and a good conductor,
but I'm am also resistant to corrosion,
even at high temperatures I don't oxidante
but be careful when you aproxímate

I'm also traded like billion and coins,
I can only melt at high temperatures,
but I'm used in medical operations
mostly for teeth remplasations.

Pedro Velez

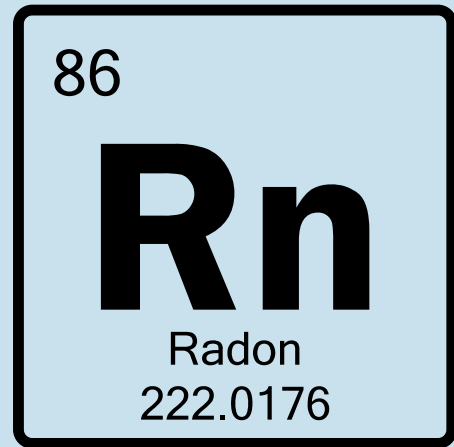


Radon

Radon discover in 1899,
It could be brown.
And it can trouble from up to down.
Radioactive and deadly, come on.
If someone smells it they will be knocked down.
Radon is denser than air.

If I think about it I drown.
It emits alpha particles so look on.
If you don't take care of yourself,
It is difficult for you to have a chance.
Radon gas is the second highest exposure to lung cancer.

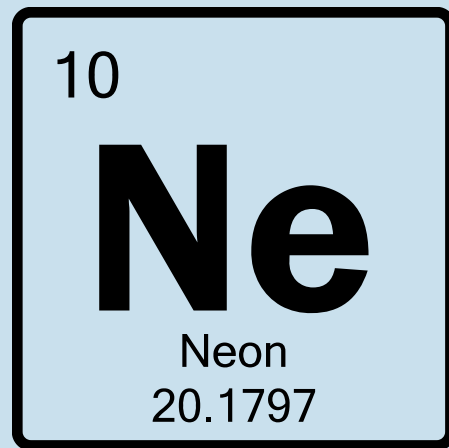
Dangerous and difficult to treat,
But interesting, and fun to know.
It could be good or it could be bad.
Radon is unpredictable and difficult to understand. Friederich Darn the man
that discovered Radon



Oliver Vargas



Neon



Hi I'm Neon and I am a noble gas that floats,
and also glow.

my melting point is, -248.59 C

my boiling point is, -246.08 C

in room temperature I'm a gas.

I am a colorless,
also odorless,
and tasteless gas,
that is hard to find.

My atomic number is ten,
and my symbol is Ne.

I am used in electronics,
and I'm not toxic.

I am really hard to find
but, I don't represent harm.

I got discovered in 1898,
and my concentration in the air is 0.0018%.



Salomon Gomez

Fluorine

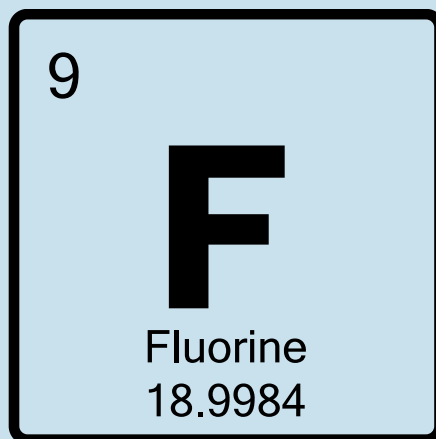
My name is fluorine.
I wash my clothes with chlorine.
My atomic number is nine.
I'm very fine.

I'm pale yellow.
And I love marshmallows.
My category is halogen.
And I'm very masculine.

I'm on group 17 on the periodic table.
I love maple.
I have a high reactivity.
And I love festivities.

Especially Christmas.
A day of forgiveness.
Because I mind my own business.

Manuela Forero



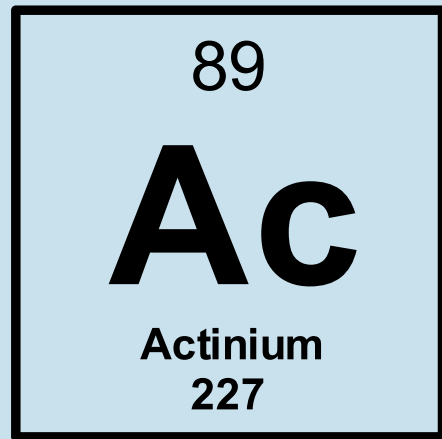
Actinium

I glow in the dark
and I'm very light
I am very radioactive
and people think that I'm unattractive

I have the answer
to combat cancer
Also you can find me
but I'm very tiny

I'm not found in the ocean
but I have a lot of emotions
If you touch me, worry
you will be an atomic mortuary.

I'm very smooth and that's the truth
I am Actinium and I am very minimum.



Jacobo Rojas



Nickel

Hello, my name is Nickel.
I am a transition metal.
I am microscopical,
And as hard as a kettle.

My atomic number is 28,
And I am found on the earth's crust.
1751 is my discovery date,
And in missiles I'm a must.

I am inside your body,
But I am toxic in my compounds.
I am always with somebody,
And I make a lot of sounds.

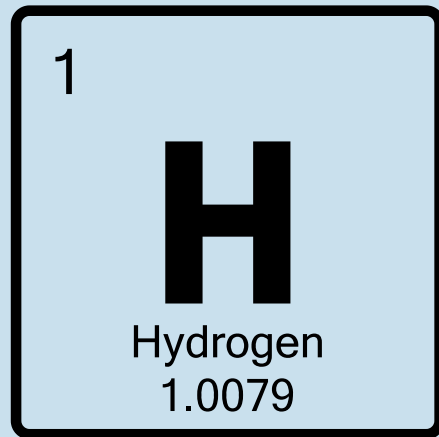
I am found in many coins,
And I am a great conductor of heat.
2,913 C and 5,275 F are my boiling points,
And I am always very neat.

So this is my story,
Nikel I am.
In all of my glory,
On the periodic table I stand.

Maya Quinche



Hydrogen



Hi my name is Hydrogen
I have one sister named Nitrogen.
I am basically a gas
which is actually difficult to catch

I am the first element in the periodic table,
you can find me as the symbol H
which is actually my name.
It is difficult to catch, but at the end it is fun to watch.

You can find me everywhere
like for example, in your hair.
And even in your brain,
including the air.

Without me nobody would survive,
that's why I always give you a good vibe.
And always remember I am even on a bee
I hope you had a great time learning about me.

Sofia Aljure



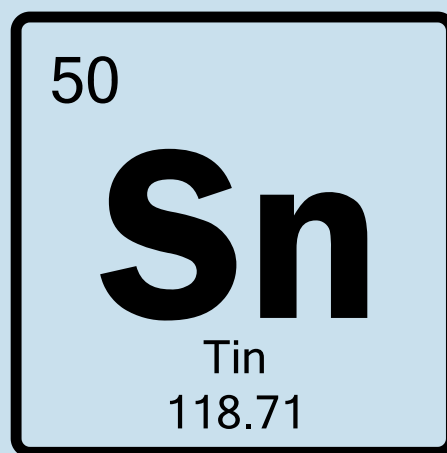
Tin

My name is Tin
I have soft skin
I protect the steel
While I use high heels

Im silvery white
And I shine in the night
My atomic is fifty
Just because im really shifty

Im known for my mellability
That's why I have an ability
My density is seven
People get confused and think is eleven

People say im solid
But I'm actually atomic
You might not belive me but im really, really soft
And when I travel I stay on a loft.



Alicia Troncar



Magnesium

Magnesium helps us move and play.
It helps our pain to beat every day.
It is on our bones that help us grow.
And it's on the grow, it makes plants glow.

Magnesium helps our muscles to work and grow.
If you eat nuts, you are going to glow.
Magnesium is a good reducing agent.
When you're going to grow or get stronger, it's
because you are patient.

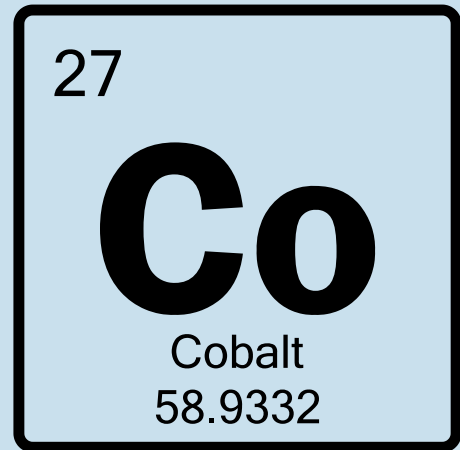
Magnesium force makes you strong.
That helps you through the day long.
A crucial mineral, strong and light.
It shines everywhere, just right.

Magnesium plays a key role in every mix.
That helps our bones to fix.
A element that work so right.
In every use, its bright.

Tomas Halliday



Cobalt



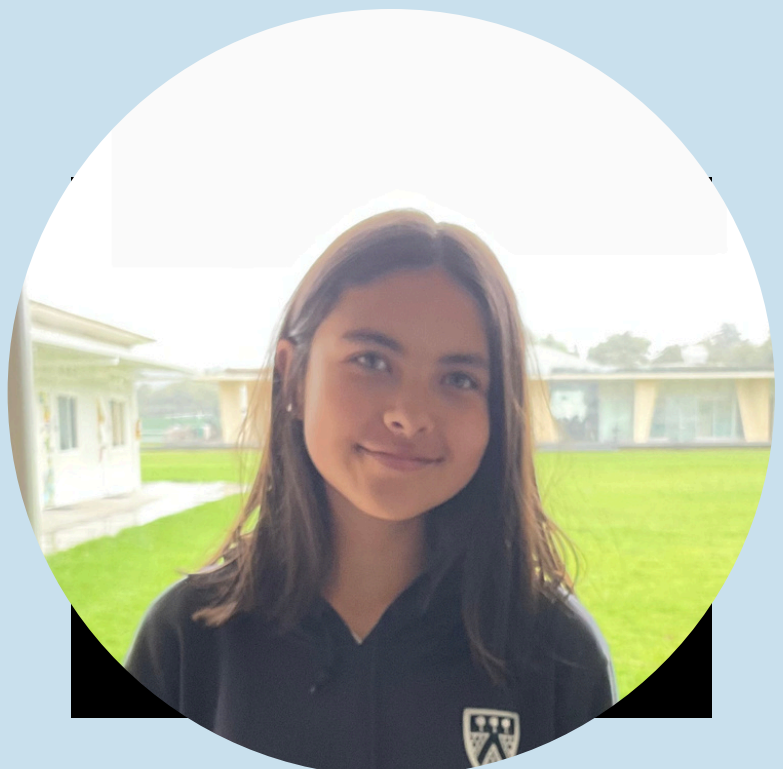
Think about an element
that is a complement.
Think about its symbol
It is cobalt (Co).

It is the metal.
that is not very common,
so it is uncommon.
Cobalt is the hidden fire in powerful magnets.

Georg Brand is so cool;
although cobalt-60 is not for pools.
You can use beautiful jewelry.
Basically, Georg shared cobalt with the world.

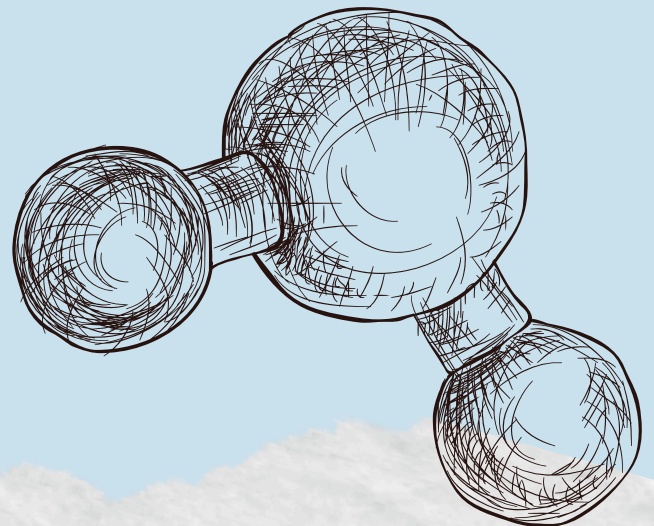
Sweden is its house.
Cobalt is so important for us,
and I cannot discuss

Valeria Pachon





Articles



MIXTURES EDITION

Articles

Salomon Gomez

First a better understanding of a mixture is really important to understand this text. A mixture is a compound made out of two or more chemical components that are not chemically linked. In a mixture the two or more chemicals maintain their identities. The two types of mixtures homogeneous and heterogeneous have some differences. Homogeneous mixtures are mixtures which possess the same properties and combination throughout their mass like water and sugar.

On the other hand, heterogeneous mixtures have different properties and compositions in various parts such that properties are not uniform in the mixture like water and sand. What does it mean that the two elements are not chemically combined? For example if iron filings and sulphur powder are mixed they can still be separated from each other. But if they are heated they can't be separated because the atoms have been rearranged and bond together. Now you understand what mixtures are, this will help you in your everyday life.

Mixtures affect people in many ways and these are some ways. Well many people think mixtures are dangerous but actually many are not like: sand and water or sugar and water (etc...). But to better understand mixtures we should first look at some kinds of mixtures (subdivision of heterogeneous and homogeneous) . They are colloids, solutions, and suspensions. First let's start with solutions. A solution is made from a solute + solvent= solution. A solution example can be: solute (sugar and instant coffee)+solvent (hot water)= solution (coffee). Solutions are a kind of homogeneous mixture.

Suspensions are a mixture that happens when the solid is suspended in a liquid but it is not evenly distributed, suspensions are heterogeneous mixtures. For example if you put sand instead of sugar in hot tea the sand will rest in the bottom of the glass. This is called a sediment. Finally Colloids are mixtures that are like suspensions but the particles of solids are too small to get to the bottom and too big to dissolve so they float inside the liquid. For example some rivers look brown because of the tiny particles. This is a type of heterogeneous mixture. So many mixtures don't affect us but some are dangerous for example like if you are cleaning the bathroom and mix bleach and ammonia it makes a highly poisonous chlorine gas that can be deadly or harmful. Other chemicals alone are not dangerous but if they mix they can be deadly or harmful. So always watch out for dangerous substances that can make deadly mixtures.

In the world there are many mixtures and many are in your everyday life. Well in your everyday life you will see a lot! Some mixtures are blood, alloys, orange juice, mineral oils, immiscible liquids, colored candies, shampoo, soft drinks, fog, tomato soup, ink, and air. Air is a homogeneous mixture that can be separated by different experiments. Shampoo, wine and vodka are homogeneous mixtures. Soft drinks and soda are mixtures of flavorings, water, and sugar. Something really interesting is that fog is a mixture of ice crystals and water droplets in the air. Ink is also a mixture of dyes that can be separated by chromatography. Salad and orange juice are heterogeneous mixtures because they are not evenly distributed. So many things in our everyday life are mixtures, some are heterogeneous mixtures and others homogeneous mixtures.



Jacobo Rojas

While you walk, have you ever wondered what it's made of, you step on it and you touch it. Well all the things that we touch are mixtures, almost the 90% of our earth are mixtures. In these paragraphs I will let you know and learn in a deeper way about mixtures. I'm going to talk about some types of mixtures and how the temperature changes the state of matter in the type of mixtures and my research question is: how do different temperatures affect the way mixtures form and behave? On the other hand, these paragraphs are being written because in LED we are learning about all these topics and also we are learning this because it is a nice and fun topic to learn and also this topic is very important for us because we need to have good bases for our lives and also next years in the school.

A mixture is a combination of two or more substances that aren't chemically connected. In chemistry, when someone combines more than one substance without a chemical change the result is called a mixture and that is what we are . Mixtures are the result of the combination of two or more elements. The elements that you mix don't need to be chemically connected to create a mixture; it can be only a mix of whatever you want. There are a lot of mixtures that are very harmful for the earth because the substances that it has contaminated a lot to the arch and also to the human body, and some examples are: chemicals like pesticides the things that the people sprayed on the fruits and vegetables, processed food, gasoline and the last and least expected, cleaning products. The cleaning products affect the human body because it has a lot of toxic chemicals that affect the skin of us and also of animals. In general there are some unexpected mixtures that affect all of society and the world. To continue, the best description for what is a mixture, is that a mixture is a physical mix of two elements that are not chemically connected in some ways.

On the other hand, have you ever heard about the state of matter? Well the states of matter are the most relevant theme of all these paragraphs. There are 3 states of matter, the first one liquid, second one solid and to end gas. I'm going to explain the 3 states, I think that all 3 are very obvious but the most difficult one is solid one because there are not a lot of examples to write about the solid state but basically it depends if it is rough and it doesn't move so it's like a rock. The question of this paragraph is, how does the temperature change the state of matter in the mixtures? Well it does because it can change the mixture a lot. The temperature has a lot to do with it because it is what is going to define if it is a gas, liquid or solid. Each mixture has a different matter in itself and if you have a solid and you increase the temperature it's going to convert into a liquid because it's going to start melting the mixture also, the particles are going to start gaining energy and start vibrating more, and that method is called melting. There are a lot of different methods to convert liquids to solids, solids to liquid, liquid to gas, gas to liquid, solid to gas and gas to solid. To convert a liquid into a solid, you need to cool the liquid until it reaches its freezing point and that causes the liquid particles to group together and form a solid structure.

There are a lot of methods to separate mixtures. The most common ones are sieving, filtration, evaporation, simple distillation, fractional distillation, chromatography, filtering, sieving and evaporation. But each separation method is different from the other ones but they are not bands or good ones; each one has his way to serve each substance. Mixtures can be very easy to separate or very difficult but also it depends a lot on what you need to separate. The method that is more used is sieving because it is a very easy way to separate the mixtures. Each method has a different way to serve. But most of all the things that we see around the world are mixtures. But there are a lot of types of mixtures and also of separation and they are not useful or not useful all serve for something but clearly there are some that are used more and others that are not so much. Each method serves for something; it depends on what the mixture is.

In all this document we have been working on finding the most relevant information to apply more methods to improve in our reading and underlining work. The key points are that the temperature and all the factors affect the state of matter in the mixtures and also that to each mixture there is a way to separate it. Well it means that we need to be very careful with the state of matter in all the things and especially in mixtures because whenever it can fail the experiment. I recommend being very careful of all the actions that you do in the mixture. To finalize the mixtures is a very nice topic to learn about and you need to be very careful on what mixtures you are touching and doing.



Luciana Martinez

Elements are very important and powerful things. An element is something that can't be broken down more in particles or other. Because elements are made of atoms, which are from only one property so they are kinda pure. These things are organized in a table which tells their structure and atomic code, which is called the periodic table of elements. Each element makes mixtures, which can contain from two to how many elements have. The periodic table of elements has 109 of them as long as chemistry is concerned. And have a very long yet important history. The first chemists were considered to be the ancient metal workers. Because they discovered the 8 known first elements p, by working and learning from them. But much later in history, people started considering the elements where only four, which are earth, fire, water and air. Even after this, came the first alchemists which made even more elements by mixing the base ones and making new ones to discover even more, and like this came the known 109 periodic table of elements and chemistry. And this is briefly its long story

As mixtures matter, they have specific properties and methods to separate them. The first property of mixtures is that they have no fixed composition. So they can have a lot of different elements and components. Also another property that mixtures have is that everything retains its original components and are easy to separate. In addition, there's a lot of different methods of separation. For example, distillation, which consists of evaporation and then passing through a filter. Also there are chromatographies, which are to separate color. And of course evaporation. These are one of the many ways to separate mixture from its original properties.



Maya Quinche

Mixtures are divided into two main categories; Homogeneous and heterogeneous mixtures. Homogeneous Mixtures are mixtures where the particles are evenly distributed with a uniform composition. This type of mixture is also known as a solution because everything is uniform, and because of this, this type of mixture can not be separated physically. Homogeneous mixtures can also be easily identified because they only have one phase of matter with the same densities. On the other hand, heterogeneous mixtures are a type of mixture with a non-uniform composition and more than one phase. This mixture is easy to identify because it can be separated out physically, and because we can judge whether it is heterogeneous or not by just looking at it. Some examples are pizza, sand, chicken noodle soup, vegetable soup, seawater, cereal in milk, blood, gravel, ice in soda, salad dressings, mixed nuts, bowls of colored candy, and soil.

These two types of mixtures have properties in them, as well as all the other mixtures in the world, and the properties make mixtures, what they are. The properties of a mixture can vary depending on the type of mixture, and the elements on the mixture, but all mixtures have the main properties, even though they are different. The properties of a mixture include, that the parts of a mixture are not chemically bound, and different types of mixtures can either be homogeneous or heterogeneous. In addition, all the components in a mixture maintain their original identity, and there is no change in a mixture after forming. On the other hand, mixtures can exist on every state of matter and the proportions of the substances on a mixture can vary. And the last main property is that the chemical substances on a mixture always remain intact, and the separation of these substances can easily be done through a mechanical-blending process. And finally, some examples of different mixtures include: Smog (smoke and fog), brass (zinc, and copper), and gasoline (Hydrocarbons, petroleum, and fuel additives). All of these properties affect mixtures either positively or negatively, in different ways.



One of the ways that properties affect mixtures is through the separation and combination of different mixtures. There are different techniques to separate mixtures but there are 7 main methods, these are: Magnetic separation, decantation, filtration, distillation, evaporation and crystallization and chromatography. Magnetic separation consists of separating two parts (substances) of a heterogeneous mixture. This process can only be used if one of the components of a mixture has magnetic properties and the others don't. For example if there is a mixture of sand and iron, it can be separated through magnetic separation. The second method is decantation which is only used when there are two or more liquids with different densities that don't mix together. For this process you use a decantation funnel. This consists of pouring the mixture into the funnel and letting it settle until the liquids have completely separated and then, opening the tap of the funnel so that the first liquid flows out of the funnel into a beaker, and the other stays in the funnel, so they separate. One example of this is oil, and water.

On the other hand there is filtration, which is used when there is a solid and liquid component that have not mixed yet. To separate this heterogeneous mixture you pass it through a filter into a container, so that the solid particles are left in the filter and the liquid particles into the container. Another method is distillation which is used to separate liquids with different boiling points. To do this you have to put the mixture into a round bottom distillation flask, and when it reaches the lower boiling point, the first liquid will evaporate and the other will stay in the distillation flask. One example is water and alcohol. Afterwards, evaporation and crystallization are used to separate a solid from a liquid which is dissolved. And lastly, chromatography is used to separate two components depending on how soluble they are. These methods are used very frequently in science, because most of the time, mixtures are not in their purest form, and because of this we use the separation methods and techniques. On the other hand from the methods, we also use techniques for separation, which include: Handpicking, Threshing, Winnowing, Sieving, Evaporation, Distillation, Filtration or Sedimentation, Separating Funnel, and Magnetic Separation.

In conclusion, there are a lot of different types of mixtures like homogeneous and heterogeneous mixtures, which have different characteristics to identify them. These mixtures and others have different properties that make the mixtures what they are and characterize them. And finally, these mixtures can be combined or separated through different ways and processes. Learning about these topics is important because it helps to create new understandings of mixtures, and new discoveries that in the future will help chemistry advance. That is why learning about mixtures is important not just for science but for daily life.



Luciana Marroquín

Let's start with a basic and simple concept that we need to have in mind to understand the article, what is a mixture? Well, a mixture is the combination of two or more pure substances and we can find them every day, such as chocolate, lemonade, processed food, etc. Here in this article you'll find many interesting, new and different topics that maybe you have never heard of before. This magazine began with an important question: How do different temperatures affect the way mixtures form and behave? This question is the guide to construct this article and to have the topics to research. The purpose of this project and magazine is to develop critical thinking, have more investigation skills, teamwork and believe in ourselves. Personally it helped me a lot to get out of my comfort zone.

As I said previously, mixtures are the combination of two or more pure substances and we can find them every day. There are two main types of mixtures: homogeneous and heterogeneous mixtures. Homogeneous mixtures are the ones whose composition is uniform, some examples of homogeneous mixtures are: lotions, soap, coffee, cookies, etc. The separation methods of these mixtures are various such as "distillation, chromatography, filtration, decantation, centrifugation, absorption and sieving". But the most common are.

- Distillation: is to create a vapor, condensed it and separate a liquid of the other.
- Filtration: "is a process used to separate solid particles from a liquid or gas by passing the mixture through a porous material, called a filter, that allows the fluid to pass through while retaining the solid particles."
- Decantation: is "the process of separation of liquid from solid and other immiscible liquids, by removing the liquid layer at the top from the layer of solid or liquid below".
- Magnetic separation: is the "process that uses magnets to separate magnetic materials from non-magnetic ones in a mixture, leveraging the varying magnetic properties of different substances".

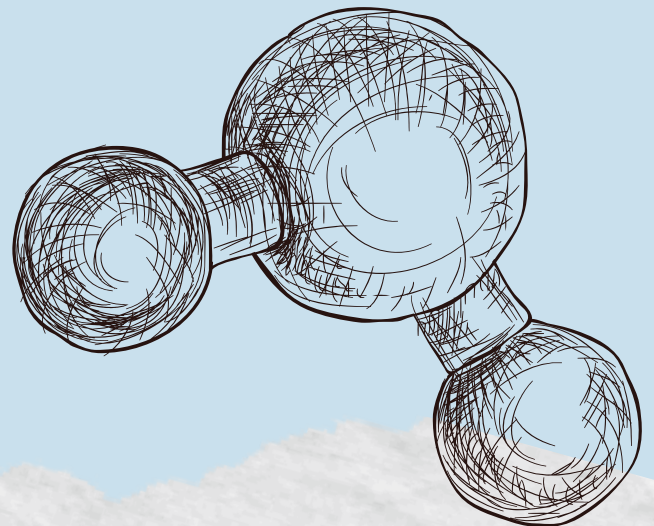
These are the methods that are used to separate homogeneous mixtures. Now the heterogeneous mixtures, these mixtures are the ones that their components aren't well distributed and that the mix isn't uniform, the separation methods are basically the same "filtration, decantation, sieving, magnetic separation". This is an interesting topic to search about.

Now the question that guides this article: How do different temperatures affect the way mixtures form and behave? Well, the mixtures can react and be affected, depending on the substances that they are made of. Heat can affect the mixtures in different ways: it generates energy, can separate the mixtures, to accelerate chemical reactions, change of state, accelerate chemical processes and reactions, etc. Temperature has a big impact on how the mixtures interact. When the temperature increases you can combine substances, or even change the state of mass, for example when you are making chocolate or coffee, you are combining two substances that become a mixture using heat. But, cold can also affect mixtures, for example in a scientific experiment or in chemical reaction it helps to preserve more particles for in a future make more discoveries. These help a lot in science and discoveries.

In conclusion I would like to say that chemistry is a really big and important topic of the to talk about, I hope that you could search more about it.



Biografies



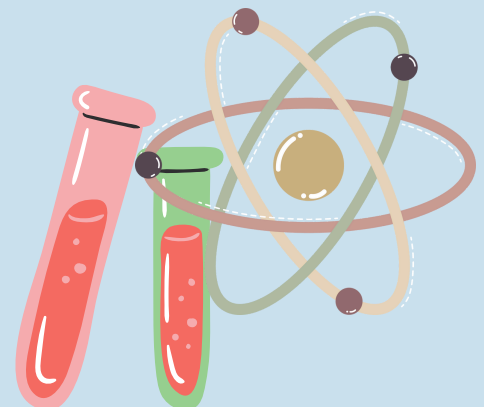
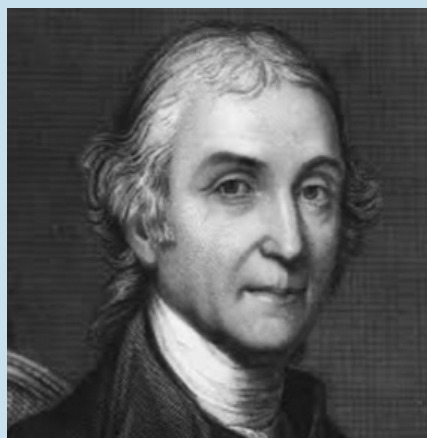
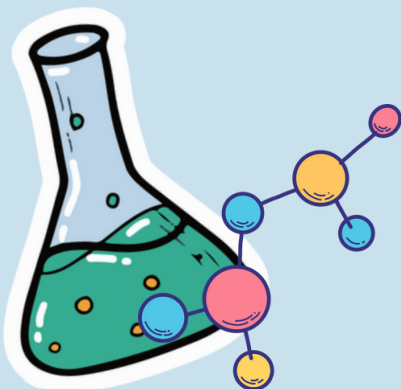
Creative Writing

-JOSEPH PRIESTLY

Sofia Aljure Fajardo



"Science advances when we question and fearlessly seek the truth" I am considered one of the most important scientists of my generation, and had a significant impact on the fields of chemistry and physics, my name is Joseph Priestley. I became a recognized scientist basically because of my discoveries and my contributions to chemistry, specially the discovery of oxygen. I remember that morning in 1774 when I discovered the oxygen, I felt a combination of emotions like excitement and curiosity, I couldn't believe it. I talked about that discovery in my writings and lectures, presenting it in his work titled "Experiments and Observations on Different Kinds of Air". When I first discovered it I referred to it as "dephlogisticated air", that was a significant step to prove that breathing needs oxygen not "magic stuff" that in scientific terms is called phlogiston. To give the final "product" which is the discovery of oxygen I had to face a lot of ups and downs, so I made different things to accomplish it. For example, I heated a substance called mercury oxide, (that is a chemical made from mercury and oxygen) in a special container that is designed to safely hold the mercury oxide while I heated it and to collect the gas released during the experiment. I also captured the gas in a jar and then I observed that it was different from the regular air, he found out that it made a candle burn brighter and that small animals, for example a mouse, could live in it than in regular air, because of this it made me think that the gas was not normal, it was special. I also made the invention of carbonated water, I am credited with the invention of carbonated water. I discovered it in 1767, by a method of infusing water with carbon dioxide gas, creating what is now called soda water. This invention started to become popular in the 19th century and paved the way for the development of the soft drink industry. Discovering the oxygen was a grueling and painstaking process but all the hard work paid off.



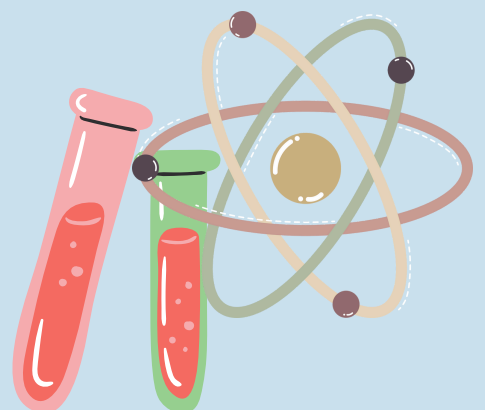
Creative Writing

IBN SINA

Luciana Marroquin
Vergara

Hi I'm Ibn Sina and welcome to my lab. Here I did millions of research and experiments that helped me to conclude the early principles of chemistry (also I did other important discoveries that I have made). This discovery became one of the "most important" in chemical history. I studied, researched, heated, mixed, separated different materials and substances to see what the reactions were to those materials. My mind was going to explode from the bunch of ideas that I got. I also wrote all of these results and did more and more experiments that helped me to develop more of my ideas, have better and concrete information to help modern chemists. I'm also the one that helped a bit to group the metals such as gold, silver and copper, and the nonmetals like salt and sulfur in the periodic table, well, in that time the periodic table doesn't exist yet, but what I did were a part of the lot of discoveries that other scientists and chemists made.

Something that I think that someone needs to know about me is that I consider myself a perseverance person, that I can be able to research and research to have the solution to my questions. I know that all of this helped the modern chemists to grow and make them happy.

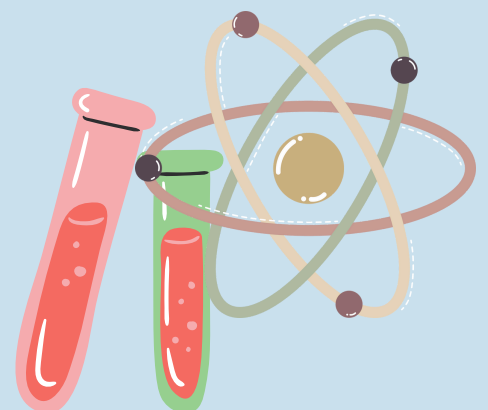
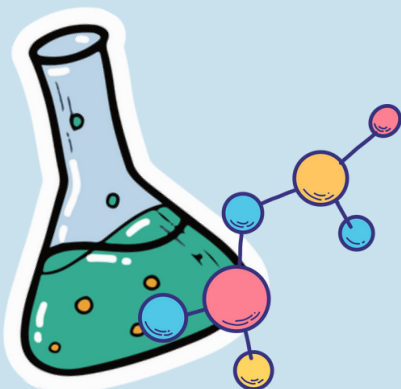
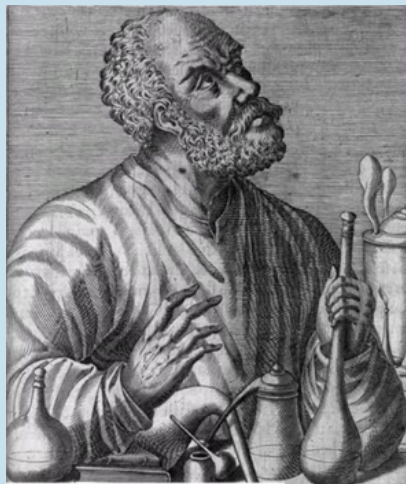


Creative Writing

JABIR IBN HANNYAN

Luciana Martinez Torres

It seems like yesterday, when I was sitting in my laboratory in Kufa, Iraq in 721-815 CE. Where I decided to test different types of separation and tools for different mixtures and elements. While I saw and smelled the many chemicals I was working with. After many experiments I made a shocking discovery that would be crucial for modern chemistry. The alembic, which is used to heat and separate liquids, is almost like a very fancy kettle. Then, I experimented some more and got many ups and downs. But I got filters like the ones you use for coffee. And then some special containers for elements and mixtures, which didn't melt when heating them or putting very hot mixtures in. When I got these groundbreaking discoveries, I felt very ecstatic. Because I ignored the beliefs which alchemy was based on and started using facts and logical explanations. Instead of mystical and religious theories about science, I was started being called by historians the father of chemistry. Because of my revolutionary thoughts, the enormous jump from alchemy to chemistry occurred. But I didn't keep my discoveries to myself, I shared them with my scholars in the great house of wisdom in Baghdad. And they wrote them down and saved them for future generations, and also spread them through the Greek and Egyptian. I was a very important person for modern chemistry and did great discoveries for it.



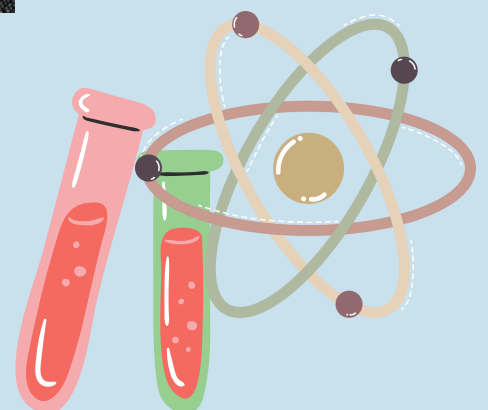
Creative Writing

JOHANN JOACHIM BECHER

Valeria Pachon Jaimes

I have constantly been a person with many talents, and although I had few successes I always try many things, because science is a vast ocean, I am a fearless explorer, always diving deeper in search of hidden truths.

One of the things that I discovered was the theory of Phlogiston, basically I thought that combustible substances had a special element called "terra pinguis" and although it was incorrect, it helped other chemists to ask more questions about it. Incorrect answers are my guide, showing me that growth comes not from perfection, but from learning through each mistake. I have other experiments and discoveries. For example, I experimented with Industrial Chemistry, because I am so passionate about chemistry. I really like to prove new things like the theory of matter, because Chemistry is like a book. I always want to continue reading because each page was more interesting than the other one.



Creative Writing

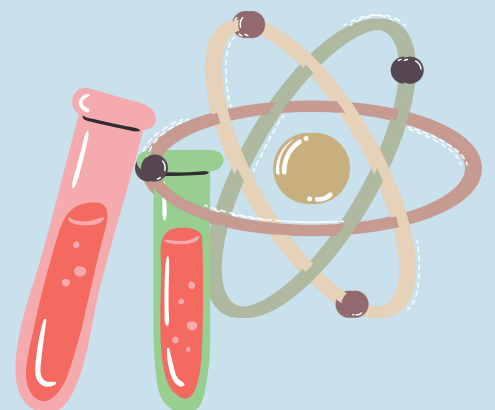
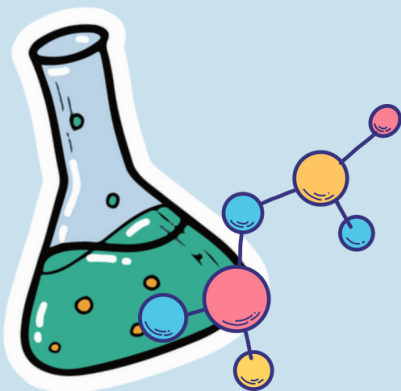
HUMPHRY DAVY

Pedro Velez Cantillo

Paragraph from Johann Joachim Becher'

I have constantly been a person with many talents, and although I had few successes I always try many things, because science is a vast ocean, I am a fearless explorer, always diving deeper in search of hidden truths.

One of the things that I discovered was the theory of Phlogiston, basically I thought that combustible substances had a special element called "terra pinguis" and although it was incorrect, it helped other chemists to ask more questions about it. Incorrect answers are my guide, showing me that growth comes not from perfection, but from learning through each mistake. I have other experiments and discoveries. For example, I experimented with Industrial Chemistry, because I am so passionate about chemistry. I really like to prove new things like the theory of matter, because Chemistry is like a book. I always want to continue reading because each page was more interesting than the other one.



Fun



WORD SEARCH

F	X	N	T	S	S	A	J	T	Y	X	Q	T	B
F	S	U	A	C	F	F	N	V	J	E	D	M	I
Y	Z	H	E	L	E	M	E	N	T	O	V	P	N
K	A	W	M	S	J	K	U	U	A	W	G	W	W
F	Y	T	V	H	V	E	T	R	C	Z	W	W	P
Q	R	F	O	U	U	L	R	N	I	E	E	J	D
N	Y	A	I	M	G	E	O	K	C	Z	T	J	W
V	P	C	V	U	U	C	N	P	F	L	J	E	G
N	M	W	H	Z	F	T	S	Y	R	L	B	A	T
F	I	L	O	T	G	R	F	M	A	O	U	N	Y
R	L	I	W	H	P	O	L	E	L	B	T	P	P
U	S	X	A	G	P	N	Y	G	G	D	L	O	X
P	M	U	K	K	J	R	U	W	Y	R	B	I	N
M	Z	Y	V	Z	C	O	A	G	Z	D	S	C	G

Atom	Electron
Element	Neutron
Proton	

WORD SEARCH

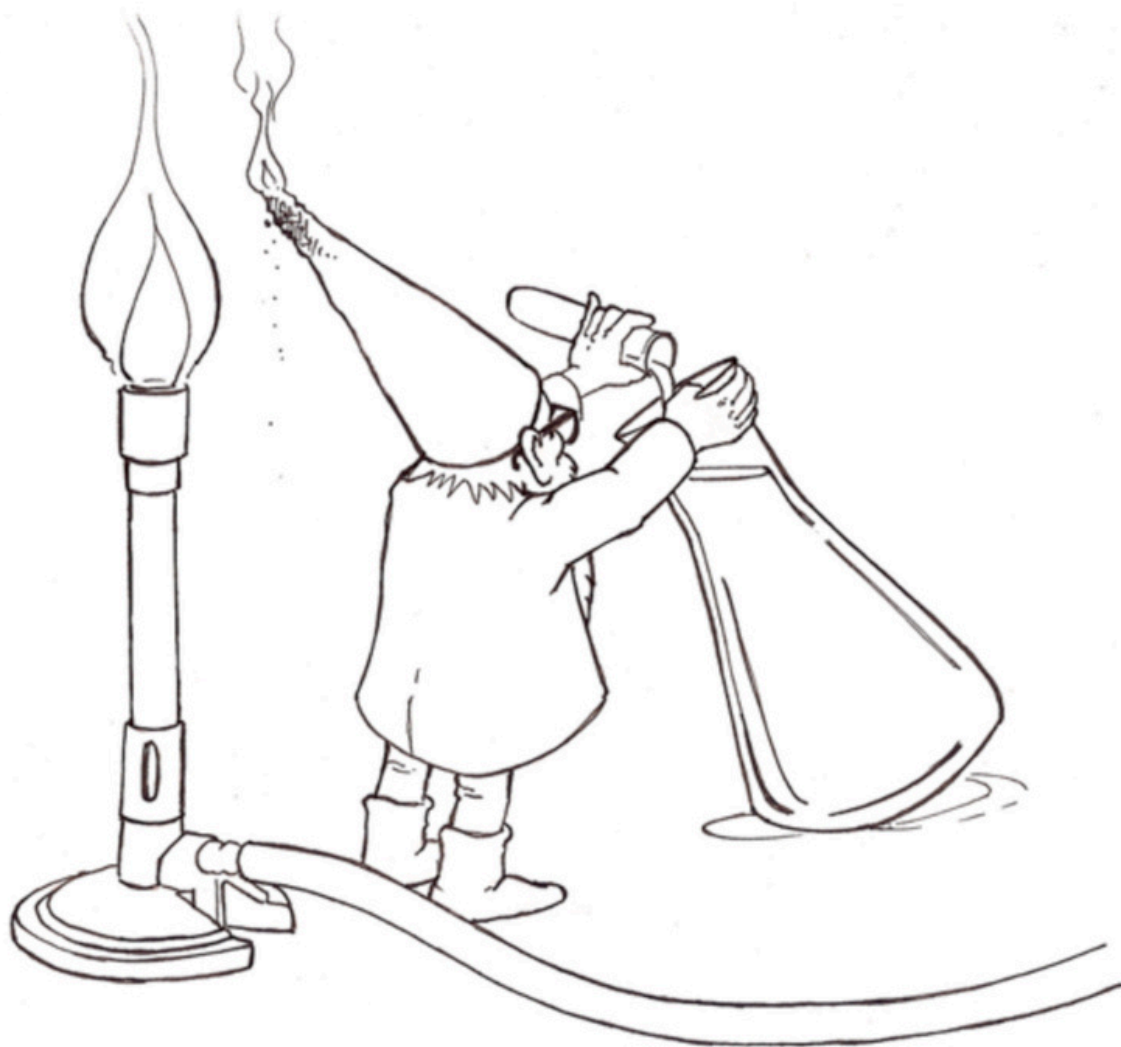
D	X	Y	V	D	G	Z	A	K	V	L	F	W	Q
P	E	L	M	M	V	Z	S	U	Q	V	L	N	P
H	G	C	H	K	L	G	W	C	T	T	O	I	A
O	M	A	G	N	E	S	I	U	M	P	U	C	C
S	R	S	T	T	N	G	A	A	Q	N	R	K	T
P	P	K	K	Y	X	O	N	Z	B	L	I	E	I
H	M	B	O	C	K	V	M	E	R	R	N	L	N
O	H	Y	D	R	O	G	E	N	O	P	E	N	I
R	A	I	J	A	P	H	J	B	J	N	Z	M	U
U	E	I	P	L	A	T	I	N	U	M	H	D	M
S	Y	C	O	B	A	L	T	L	P	S	A	F	A
V	L	U	X	X	T	C	T	X	L	U	B	Z	U
Y	R	A	D	O	N	I	A	T	I	G	V	M	W
Y	C	L	I	I	U	W	N	I	Z	T	S	K	H

Actinium	Cobalt
Flourine	Hydrogen
Magnesium	Neon
Nickel	Phosphorus
Platinum	Radon
Tin	

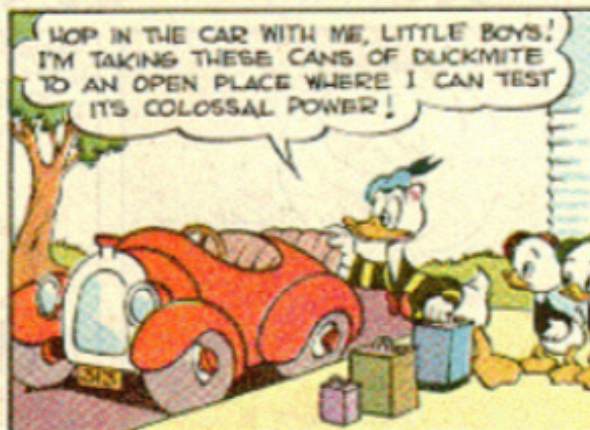
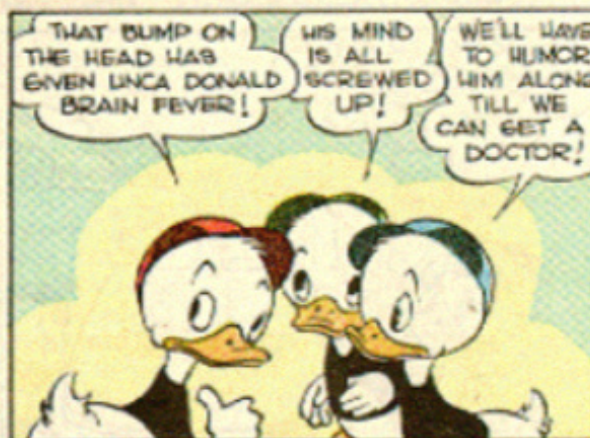
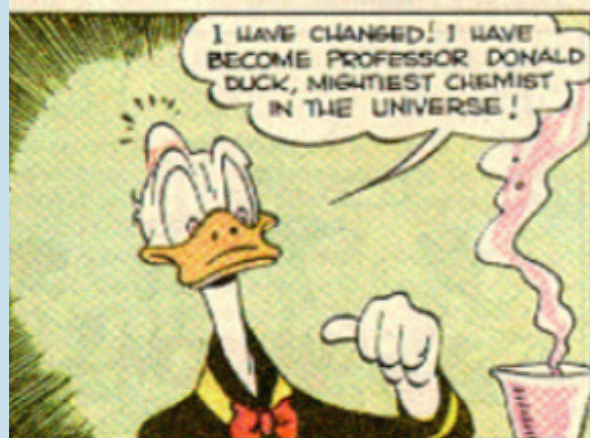
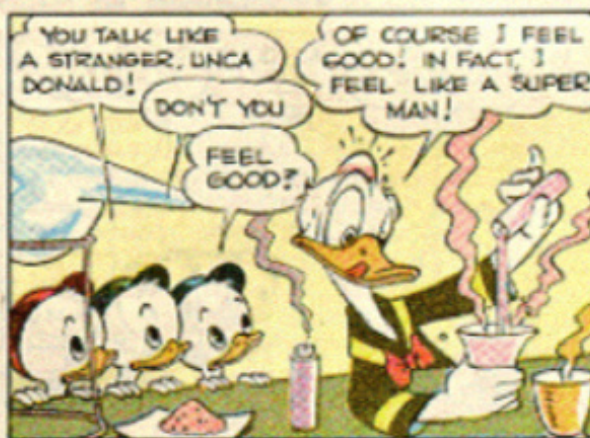
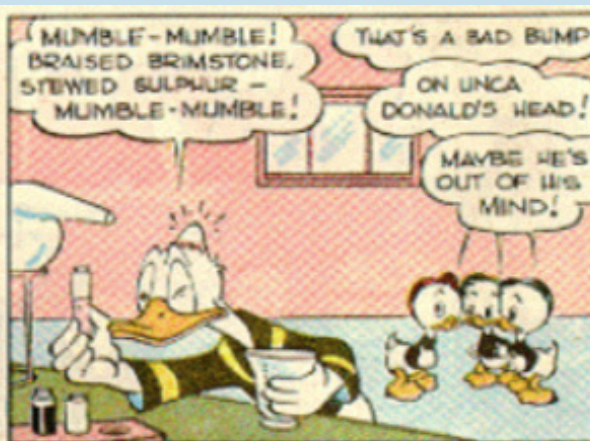
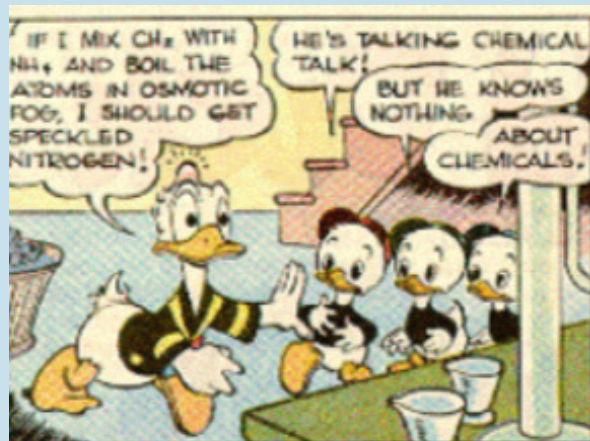
SUDOKU

4				6	8			2
				5			6	4
8		6	7		2	9	1	3
6	7		2	8		1		
			5	9	6	7		
	8					2		
5								1
9					1			
1	4		8	2				7

COMICS

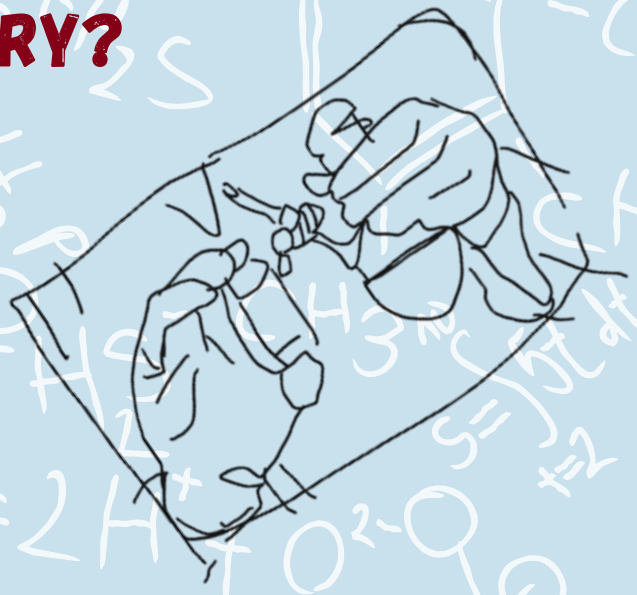


For gnomes who love chemistry, avoiding the Bunsen burner remains a major challenge.





**HAVE YOU EVER
WONDERED ABOUT
CHEMISTRY?**



3 5 4 6 8 9 5 0 1 8 7 8 4