

CREATOR

VOLUME 12

NUMBER 2

CHRIST'S SONG

REFRAIN

*"I will declare Your name to My brothers;
in the presence of the congregation
I will sing Your praises" (Hebrews 2:12).*

Professor Seismo: "Welcome back to the Seismo¹ home and an exciting exploration of the *elements* our Lord Jesus has made! Say, why don't we check what happened to our test tubes in the experiment we set up yesterday?"²

Editor's Note: The Professor walks over to the kitchen counter.

Professor Seismo: "If you look carefully, you will notice that both test tubes have a small amount of gas in them. But where do you think these gases came from? Also, notice how the test tube on the left has only half-as-much gas as the test tube on the right (see picture)."

Editor's Note: Professor Seismo disconnects the battery and carefully puts his thumb over the mouth of the test tube containing half-as-much gas. He then pulls it out of the water and turns it right side up, while keeping his thumb over the mouth of the tube.

Professor Seismo: "Let's see what happens when I stick this lit match into the tube."

Editor's Note: Suddenly, the match flares up into a brilliant flame.

Professor Seismo: "There was *oxygen gas* in this test tube. It's well known that fire burns more brightly in pure oxygen."

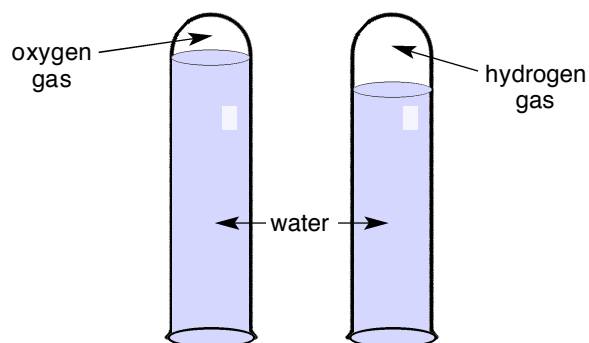
Editor's Note: Professor Seismo lifts the second test tube out of the pan—his thumb over its opening—while keeping the test tube upside down.

Professor Seismo: "This other test tube contains *hydrogen gas*. What do you think will happen if I bring a flame near it?"

Editor's Note: Professor Seismo lights a second match, quickly turns the tube right side up, and places it into the mouth of the test tube. We hear a soft "pop" and the match is blown out!

Professor Seismo: "Hydrogen gas is explosive—that's what caused the 'popping' sound and that's why the match was blown out.

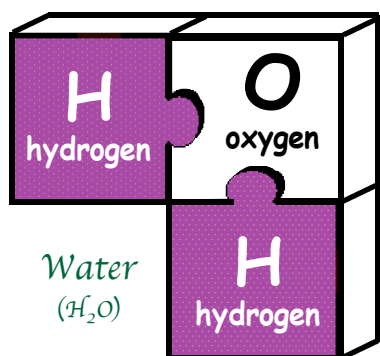
"What we've shown by this experiment is that our Lord Jesus constructed water using hydrogen and oxygen. As we passed electricity through the pan, water molecules broke down into oxygen gas and hydrogen gas, which collected in our respective test tubes. There was *twice as much* hydrogen, compared with oxygen, because



¹ Professor Seismo and his wife, Heidi, are fictitious characters.

² See **CREATOR** Volume 12 Number 1.

each molecule of water possesses *two* atoms of hydrogen and only *one* atom of oxygen.



“The Lord Jesus made hydrogen (**H**) the most common element in the universe. It is the first element in our Periodic Table. Ninety percent of creation is composed of hydrogen atoms. Another seven percent is helium (**He**).³

“Of the elements listed in the Periodic Table I gave you last night,⁴ 21 are *not metallic*, but all the rest are *metals*. We can distinguish one metal element from another metal element by putting each, one at a time, into a flame and observing the color it produces. This is known as the *flame test*. Using the flame test, we can also prove that many of the chemicals around the house possess metallic elements. *We need to be careful, however, because household chemicals can be dangerous and you shouldn't try this at home!*”

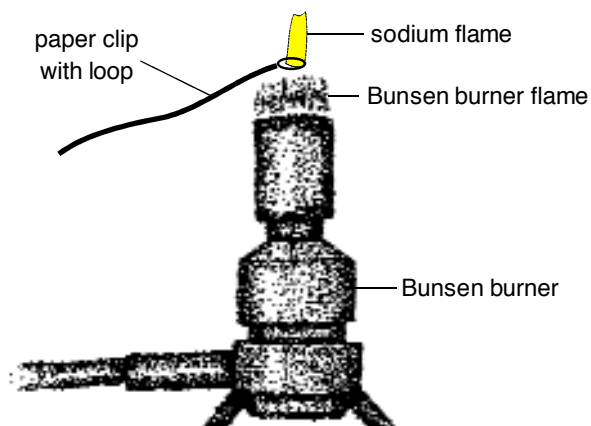
Editor's Note: Professor Seismo straightens out a paper clip, while making a tiny loop in the end of it. He then lights a portable Bunsen burner sitting on the kitchen counter. The Professor has prepared, ahead of time, a number of solutions of household ingredients and has placed them into paper cups.

³ Helium was discovered on the Sun before it was found on Earth! Balloons filled with helium float because helium (atomic number 2) is much lighter than air.

⁴ See kids' kreation #51.

mentioned last night, if you look at your Periodic Table you will notice that sodium is located in the first group on the left, known as the *Alkali Metals*. Let's see what happens when I place a small amount of salt water into our flame.”

Editor's Note: Professor Seismo dips the loop of his paper clip into the sodium chloride solution and then into the flame of his Bunsen burner. A second flame (yellow) appears at the end of the loop and just above the first flame (see drawing below). His eyes gleam with joy. Professor Seismo: “Did you see the *yellow* flame?! Yellow is the color *sodium atoms* give off when they're excited by heat. This is the reason most cities glow yellow at night. Towns frequently illuminate their streets and roads using *sodium lamps*, which give off a characteristic yellow light. Most astronomers believe this is also why the Sun is yellow—our Heavenly Father has placed a large amount of sodium in the Sun's atmosphere, causing it to shine with a golden color.



“I have another cup of salt water here, but this is different from ordinary table salt. I got this special salt from Mrs. Seismo. She uses a salt substitute,⁵ which contains *potassium (K)* instead of sodium. Let's see what color potassium atoms give off when heated.”

Editor's Note: We immediately see a *purple* flame as Professor Seismo puts a tiny amount of liquid into the fire of the Bunsen burner.

⁵ Salt substitute is used by people who have high blood pressure.

Professor Seismo: “This is the typical color potassium produces when excited. Say, what color do you get when you’re excited?”

Editor’s Note: Professor Seismo gives us a wink. Suddenly, Heidi enters the kitchen.

Heidi Seismo: “Hans, have you seen my calcium tablets?”

Editor’s Note: The Professor’s wife looks around her kitchen in utter shock. There is white powder everywhere!

Heidi Seismo: “Hans ... wha ... what happened?!”

Editor’s Note: Well, Professor Seismo *must be excited*—his face has turned a bright red! He forces a sheepish grin.

Professor Seismo: “Oh hi, Heidi. Well, I wanted to, uh, obtain some calcium to try in our flame test. I put several of your calcium tablets in the blender, uh, to grind up, uh, but, well, the lid to the blender accidentally blew off and, well ...”

Heidi Seismo: “Hans, I forgive you, but please try to be more careful! One of these days you’re going to blow up the house!”

Professor Seismo: “You’re right, Heidi, you’re right. I’ll, uh, be more careful!”

Editor’s Note: Heidi smiles at us and then leaves the kitchen with what’s left of her bottle of calcium supplement.

Professor Seismo: “Uh, well, I guess we’d better test this calcium solution. You know—waste not, want not—hee, hee.”

Editor’s Note: Professor Seismo rinses the loop of his paper clip with distilled water and then dips it into a cup containing a solution of Heidi’s *calcium* tablets. There’s a brief *reddish-orange* glow in the flame as he inserts the loop.

Professor Seismo: “Another success! Calcium typically produces a deep pumpkin color.

“Look at your Periodic Table. Can you find calcium (**Ca**) located in the second group, known as the *Alkaline Earths*? Like the Alkali Metals, the Alkaline Earth elements are also metallic.

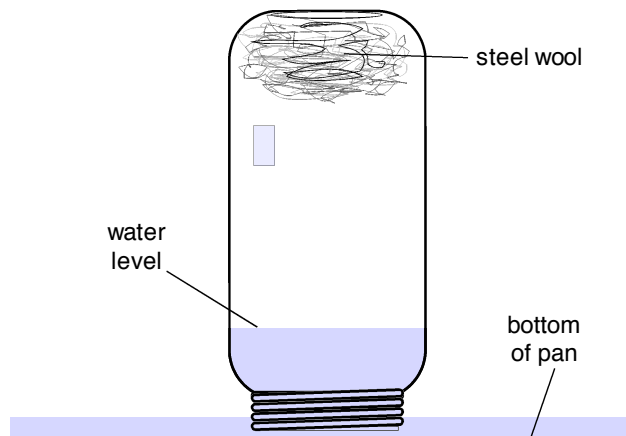
“We all need calcium in our diet. For one thing, the Lord Jesus uses calcium as *glue* to bind together the 70 trillion cells of our body. This way, we don’t fall apart! Without calcium, our muscles and nerves wouldn’t function properly. It’s also essential for healthy bones.

“Magnesium (**Mg**) is another one of the Alkaline Earths. It’s named after the ancient town of *Magnesia* in Greece, which was located near the city of Thessalonica.

“Almost all living things need magnesium (pronounced mag - NEEZ - ee - um), including us. *Mothers beware*: Cooked vegetables have only half the magnesium of raw vegetables. (Children, however, will be glad to know that chocolate contains a lot of magnesium!)

“Seawater is salty because it possesses a large amount of sodium chloride (NaCl) or common table salt. It’s also slightly *bitter* because the Holy Spirit put a ‘pinch’ of magnesium⁶ in the ocean when He formed the Earth.

“Say, why don’t we switch gears and check out the other experiment we set up last night—you know, the one with steel wool stuffed into an upside-down olive jar?



“Oh, look, the water level in the jar has risen! But, by how much? Let’s see ... the distance from the top of the jar to the original water level was five inches. But now—WOW—the level in the

⁶ Actually, the amount of magnesium in the oceans of the world is greater than six million tons per cubic mile of seawater. Some pinch!

jar has risen one inch! That's 20 percent less air in the olive jar than there was yesterday evening. What do you think happened to the air?

"The steel wool stuck in the top of the jar is composed mostly of *iron (Fe)*. This element readily reacts with oxygen, forming rust (iron oxide). Whatever oxygen was in the jar yesterday has combined with the iron of the steel wool. Oxygen takes up 20 percent of the space in normal air, so with the oxygen gone, we see that the water has moved up to fill the space."

Editor's Note: At first, Professor Seismo does not notice, but some of his notes on elements have gotten too close to the Bunsen burner and have caught fire! He smells the smoke, turns, and quickly puts out the flames by drowning them with the salt water from one of his cups. He continues to talk with us like nothing happened! Professor Seismo: "As we've seen, some elements have similar properties. Our Lord Jesus has grouped elements together like families. A family often shares common traits: eye color, athletic prowess, ability to sing (or not to sing!). As I mentioned last night, the elements in a vertical group of the Periodic Table share physical and chemical properties.

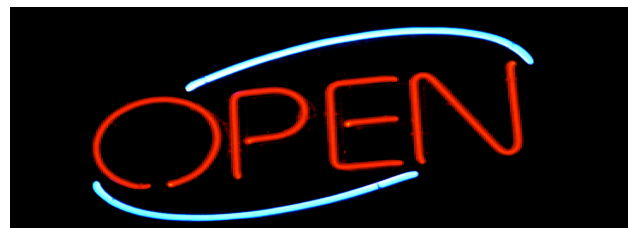
"God made most elements, like people, with a 'desire' to be near other elements. Most elements tend to join with other elements to form compounds. We know, for instance, that one atom of oxygen 'likes' to be with two atoms of hydrogen to make a molecule of water.

"The group to the far right in the Periodic Table is composed of non-metallic elements known as the *Noble Gases*. The most startling thing about of the Noble Gases is that *none* of them react with the other elements (normally).

"Helium (**He**), neon (**Ne**), argon (**Ar**), krypton (**Kr**), xenon (**Xe**) and radon (**Rn**) can't react with other elements and thus don't form chemical compounds. This 'family' is quite

happy just the way they are, all alone.

"Many years ago, people discovered that if they passed electricity through a tube filled with one of the Noble Gases, the gas in the tube would glow. This led to the invention of *neon lights*. If electricity is passed through neon gas, it glows *reddish-orange*.



"But not all 'neon' lights are red, because not all contain neon. If a restaurant sign appears *blue* at night, it might contain argon or xenon. When electrified, helium gas gives off a *golden* light, and krypton—a *purple* light.

"Did you know that an ordinary (incandescent) light bulb is filled with *argon* gas instead of air? If a light bulb had air in it, the oxygen contained in the air would react with the super-hot tungsten filament, and the bulb would burst into flames! Argon doesn't react with anything, making light bulbs quite safe."

Editor's Note: The Professor reaches into one of the kitchen cabinets and pulls out a drinking glass. He then pours one-fourth of a cup of hydrogen peroxide (3% H₂O₂) into the glass and adds two tablespoons of iodized salt.

Professor Seismo: "In most countries, potassium iodide (KI) is added to table salt. Tiny amounts of *iodine* are needed in our diet to insure that our *thyroid gland* (located in our neck) functions properly.⁷ This final experiment will prove that salt usually contains iodine (**I**). Hydrogen peroxide causes potassium iodide, which has been added to the salt by the manufacturer, to form iodine molecules (I₂). Iodine changes the color of water to amber."

⁷ Not getting enough iodine can lead to enlargement of the thyroid gland, a disease known as *goiter*.

Editor’s Note: Sure enough, after a minute or so, the salt water in the glass has turned a light shade of brown.

Professor Seismo: “Iodine (**I**) is another element that our loving Lord Jesus has blessed the world with and shows just how dependent we are on Him! It is one of another group of non-metallic elements known as the *Halogens*. If you remember, the Halogens is the group to the left of the Noble Gases in our Periodic Table.

“Halogens include fluorine (**F**), chlorine (**Cl**), bromine (**Br**), iodine (**I**) and astatine (**At**). (Pronounced FLOR - een, KLOR - een, BRO - mean, EYE - oh - dine, and AS - tah - teen.)

Fluorine (**F**) is the most reactive of all the elements—it will form compounds with just about anything! It’s added to tap water and toothpaste as *fluoride* because fluorine has been proven to strengthen bones and teeth.

“A large quantity of *chlorine* (**Cl**) is dissolved in sea water as ordinary salt (sodium chloride). It’s also found in almost all living things. Our stomachs release a fair amount of chlorine as hydrochloric acid (HCl) every day. This powerful acid helps dissolve food and kill the harmful germs we swallow.⁸

“Almost all elements are either solids or gases at room temperature. But just for fun, I think, Jesus made two elements liquid at room temperature. The metal *mercury* (**Hg**) is one. The other is *bromine* (**Br**), a Halogen non-metal.”

Editor’s Note: Professor Seismo pours the salt water down the sink and rinses the glass.

Professor Seismo: “We’re almost finished with our quick exploration of the elements included in *Christ’s Song of Creation*. But before you go, let me mention briefly some of the other metal elements we haven’t yet discussed. These are not found in your abbreviated Periodic Table⁹ because there’s simply not enough room to list them all (see complete Periodic Table).

⁸ Read the Sept./Oct. 1995 issue of *CREATOR*.

⁹ The complete Periodic Table of naturally-occurring atoms contains 92 elements. Our partial Periodic Table lists only 42 elements.

26 Fe iron	27 Co cobalt	28 Ni nickel	29 Cu copper	30 Zn zinc
44 Ru ruthenium	45 Rh rhodium	46 Pd palladium	47 Ag silver	48 Cd cadmium
76 Os osmium	77 Ir iridium	78 Pt platinum	79 Au gold	80 Hg mercury

**Transitional Metals
(partial list)**

“After aluminum (**Al**), *iron* (**Fe**) is the most common metal found on Earth. Ninety percent of all metal used in buildings, homes and bridges is iron (steel is mostly iron). Iron is fairly heavy—eight times heavier than water!

“*Zinc* (**Zn**) is another extremely important element Jesus placed on Earth. It is a bluish-white metal that is essential to all humans, animals and plants, and thus, is critical to our diet. Wheat, sweet corn, lettuce, cheese and red meat are all rich in zinc.

“The metal *copper* (**Cu**) is also important to life. Copper is nine times heavier than water and melts at a temperature of 2,000°F (1,093°C). It is commonly used in electronic equipment; most electrical wires are made from copper.

“Two rare metallic elements are *silver* (**Ag**) and *gold* (**Au**), though they are not the rarest. Gold is one of the heaviest and most stable of metals. It is 19 times heavier than water and, unlike copper and silver, does not corrode. On the other hand, silver tarnishes when exposed to air. Air contains small amounts of sulfur (**S**), which turns Heidi’s silverware black over time.¹⁰

”All the elements we’ve studied, whether common or not, are precious notes in a symphony like none other. They reveal the mystery, the wonder, and especially the *harmony* of God’s brilliant and creative mind! Our Lord Jesus sustains the universe and provides it with *rich order* that only He can supply.”

¹⁰ The black that appears over time on silver is due to the formation of silver sulfide.

A NEW SONG

Christ made all things, including us, to glorify Himself (Colossians 1:16-17). Yet, everything in nature seems to be falling apart! Mountains crumble and people get sick. So, why doesn't God heal the universe from death and decay?

He is patient with you, not wanting anyone to perish, but everyone to come to repentance. But the Day of the Lord will come like a thief. The heavens will disappear with a roar; the elements will be destroyed by fire, and the earth and everything in it will be laid bare. Since everything will be destroyed in this way, what kind of people ought you to be (2 Peter 3:9b-11a)?

Nature is coming unglued because of our sin. Someday soon Jesus will re-create the universe but not before He saves His people. He is *always faithful* to what He says He will do (Luke 19:10, John 3:17, 2 Timothy 2:13).

There is coming a day—the Day of the Lord—when the Lord Jesus Christ will destroy the present universe and all who live in it. He will then *sing a new* Song of Creation. This is a startling thought, if you think about it! On Earth, it takes a nuclear explosion to change one element into another. During an atomic blast, plutonium (**Pu**) is *transformed (transmuted)* into the element strontium (**Sr**). In space, super-massive stars seethe with temperatures approaching one billion degrees! In the heart of these goliaths, oxygen (**O**) atoms are *forced to become* silicon (**Si**), phosphorus (**P**) and sulfur (**S**).

But nowhere in the universe do we see *the power to destroy* the elements en masse! Only Christ Jesus, in all His glory, has such *staggering might!* As Creator, Jesus fashioned each of the 92 elements, and He can unmake them. This, again, begs the question: “*What kind of people ought [we then] be?*”

We should be people who rightly fear God! God is our Savior, but He is no push-over. He is exceedingly loving, but He makes no room for

sin in eternity. The stain of even a single sin will never enter Heaven.

This is *bad news* for us. The Bible clearly teaches that all people, everywhere, have sinned against God (Romans 3:23). As a result, we will be destroyed by holy fire, along with the elements.

But there is *good news*: Our Creator came to Earth and gave His life that we might have eternal life (1 Peter 1:18-19). He paid the penalty for the sins of those who have faith in Him. Please seriously consider surrendering your life to Jesus, your Creator, that *your* sins might also be forgiven.

“Oh, Lord Jesus, You are everywhere. There is no limit to You! All that we see is a mere shadow of Your being. You are far greater than anything in the universe. Please give me a heart to know You. Please forgive me for all my sins—my rebellion against You. I believe You died on a cross to pay for my sins, and You came back from death to give me eternal life. Be my Lord and Savior today. Amen!”

...You ought to live holy and godly lives as you look forward to the Day of God and speed its coming. That day will bring about the destruction of the heavens by fire, and the elements will melt in the heat. But in keeping with His promise we are looking forward to a new heaven and a new earth, the home of righteousness ... make every effort to be found spotless, blameless and at peace with Him.

2 Peter 3:11b-14



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