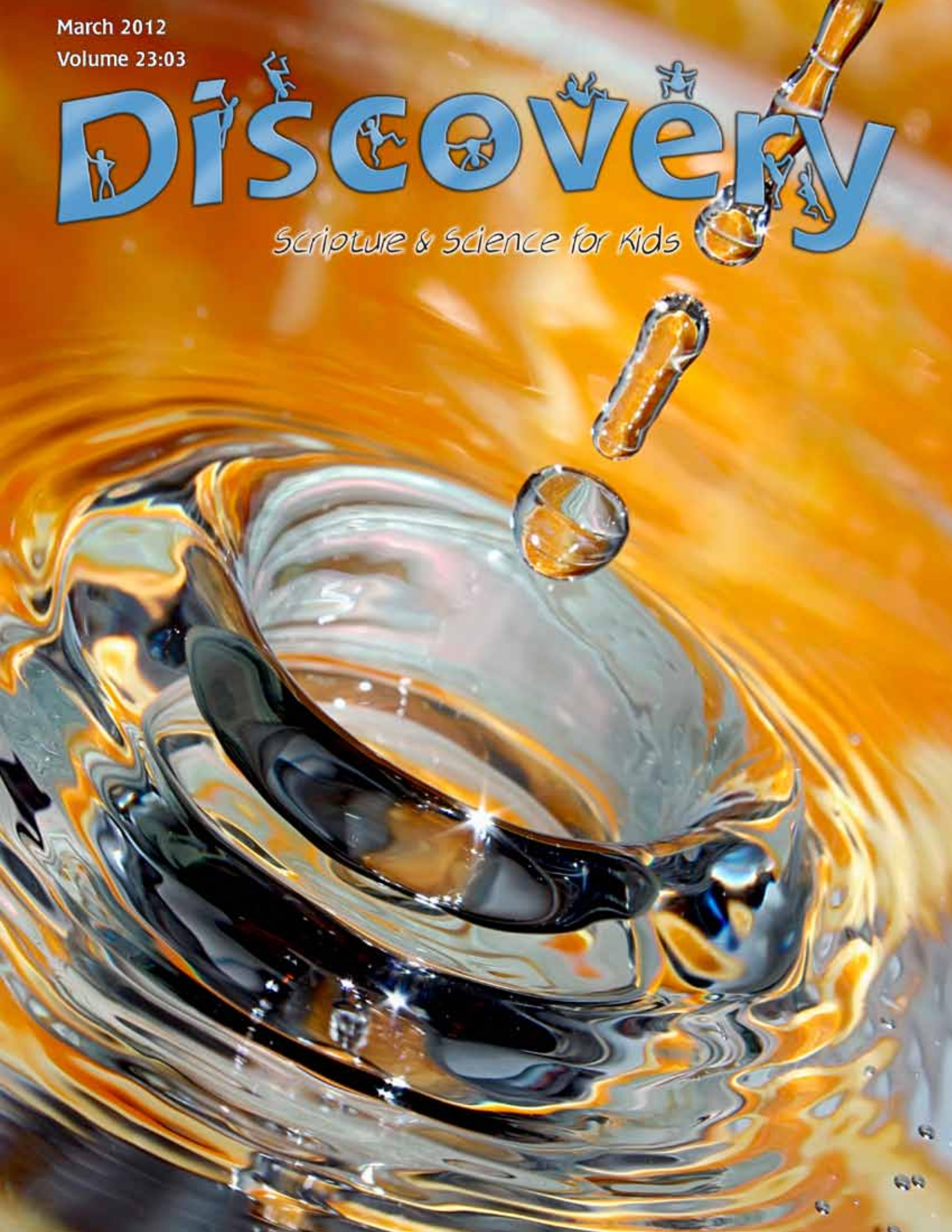


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Discovery

Scripture & Science for Kids



"WATER" YOU MISSING ABOUT WATER?

KYLE BUTT

We see it all around us every day. We take a bath or a shower in it. We drink it out of fountains at church or at school. We wash our dishes in it. We bathe our pets in it. We fill up balloons with it and throw them at each other in the summer time. We swim in it. We use it to wash cars, clean windows, keep plants and gardens alive, and for millions of other things. Of course, you know we're talking about water. But what you may not know is that water is one of the most precious, plentiful, perfect substances that God ever designed. Water is the most valuable substance on Earth. Without it, life as we know it could not exist. Let's look at just how swell water really is.

Water, Water, Everywhere

One of the first things that we notice about water is that there is lots of it and it is found all over the Earth. In fact, about 75% of our planet is covered with water in oceans, lakes, streams, and ice. Not only that, but the human body is made up of about 50-70% water, and human blood is almost 80% water. Other things, like plants, animals, fruits, and vegetables, also contain high percentages of water. For instance, an apple is about 84% water. A watermelon has a fitting name, since it is about 92% water! It is a good thing God designed our world with so much water. Every single living organism contains water. Without water, life is impossible.

Frozen Water Floats

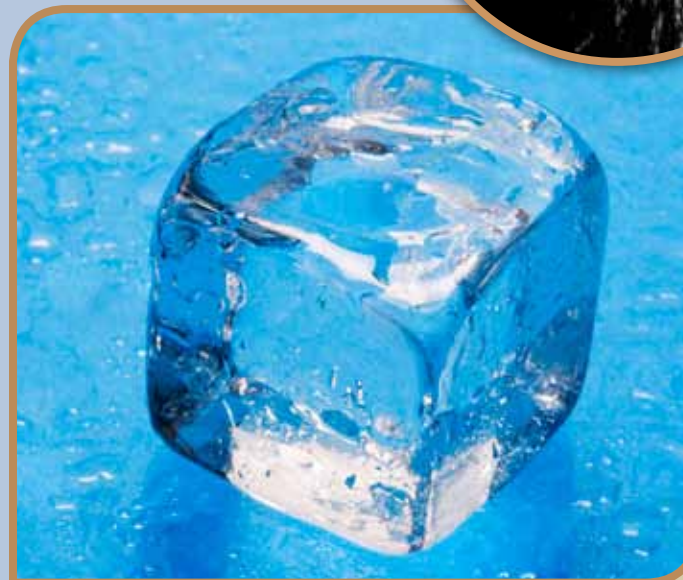
You might be surprised to learn that ice is very special. You see ice in many different places. In Alaska, there are glaciers of ice so big that you could drive trucks on them (although I wouldn't advise it). We use ice on a daily basis to keep our drinks cool. In places where it is cold in the winter, ponds freeze over and develop a thin sheet of ice at their surface. But did you know that the way in

which water turns to ice is very unusual? Most liquids get denser as they freeze. That means that their molecules squeeze in tighter together and start to weigh more than the substance in liquid form. But not water. As it freezes, it begins to expand and get less dense than water in liquid form. You can understand this when you think about putting water in a jug or bottle to freeze. If you fill the jug completely full of water, when it freezes, the water expands and bursts the jug. In a similar way, water in pipes sometimes freezes, expands, and bursts the pipes. So why is it so important that water expands when it freezes? If it did not, frozen water (ice) would sink. That would mean the fish and other animals that live in water would be forced to the surface and would die. The fact that ice floats and does not sink allows animals that live in ponds, streams, oceans, and lakes to live through the winter. Aren't we glad God designed ice in a special way to float!

Water Climbs the Walls



Have you ever seen water "stick" together? I'm sure you have, but you might not have known what was happening. Have you wondered why water bunches up in little clusters called "drops"? Why doesn't water just spread out evenly on a surface instead of forming drops? It is because of the way water is designed. Water is composed of two hydrogen atoms that attach to one oxygen atom. When these atoms get together, they cause the water molecule to have a slightly "magnetic" ability. Water "sticks" to itself and to other substances due to this attractive force. If you want to see this in action, turn on the faucet in your bathroom or sink. Put your finger just barely into



the flow of water. Notice that not only is the water that your finger is touching altered, but the entire stream of water changes its course—even the water that is not touching your finger.

This attractive force causes water to have surface tension. If you fill a glass up very slowly with water, you will see that water can be poured into the glass even past the top of the container. The water forms a slight "bubble" on top that is called a meniscus. You can float a needle on the surface of water by gently placing a small piece of tissue paper on the surface with a needle on top of it. The tissue paper will eventually sink, but the needle will rest on the top of the water without sinking. The surface tension holds the needle up. If you throw the needle in, the force will be greater than the surface tension and the needle will sink. This "magnetic" characteristic allows plants to pull up water molecules. When that happens, other molecules are connected to the ones that the plants pull up. This action allows plants to get the water they need to stay alive. When water defies gravity like this, it is called capillary action. You can see this take place by putting a drop of water on a hard surface and holding a piece of tissue on the drop. The water "climbs" the tissue despite the pull of gravity.

God's amazing creative abilities are clearly seen in the unique properties of water. Who would have thought that a substance that seems so simple could show God's power? Let's always praise God for the good and perfect gifts He has given us, especially for water.

WATER AND THE EARLY EARTH

ERIC LYONS

The General Theory of Evolution and the Bible disagree in many ways. Evolution claims that the Sun was around millions of years before the Earth, while the Bible indicates that the Earth was created three days before the Sun (Genesis 1:1-2, 14-19). Evolution says that the Earth is billions of years older than humans, but the Bible teaches that the Earth is only five **days** older than mankind. Another difference revolves around God's creation of water.

According to evolution, the Earth (along with everything else in our solar system) was born out of a massive cloud of dust billions of miles wide. When the Earth finally formed out of this giant dust ball, it had no water on the surface. Then, slowly, over millions of years, as steam from volcanoes condensed into water, oceans allegedly began to form.

The Word of God tells a very different story. Genesis 1:1 says, "In the beginning God created the heavens and **the earth**." What was this Earth like when God first created it? Was it, as evolutionists teach, "all land and no water"? In fact, the very opposite is true: **God covered the Earth with the amazing substance we call water**. On day one of Creation, the Earth was a formless, watery planet that God's Spirit hovered over. On day two of Creation, God separated the waters (not land!) by creating a firmament (also called an expanse or a specific "heaven"), which is most likely our atmosphere. God made water appear above and below this expanse (Genesis 1:6-8). It was not until day three of Creation, after God had already mentioned water seven times in Genesis 1, that He made land to appear out of the water under the expanse (1:9).

Regardless of what some people might say, God's divinely inspired account of Creation and man's uninspired theory of evolution disagree in many ways. One of those differences involves the early Earth and the origin of water. As usual, evolution has it wrong: Water did not slowly seep out of the Earth over millions of years; **God miraculously made water on day one of Creation**.



Saved By Water?

Dave Miller

It is fascinating how, throughout history, God has used H₂O—physical water—for spiritual purposes. He used the water of the Flood to cleanse the Earth of spiritual corruption (Genesis 6:11-13). As the Israelites were fleeing from Egypt and Pharaoh, He used the water of the

Red Sea as their escape route. But He also used that occasion to baptize the children of Israel into the relationship that He would have with them through Moses (1 Corinthians 10:2). They were immersed in water—walls of water on their left and right, and water in the cloud that hovered above them. God used the waters of the Jordan River to cleanse the leprosy of Naaman, the Syrian military commander (2 Kings 5:14). The event caused him to declare: "Indeed, now I know that there is no God in all the earth, except in Israel" (vs. 15).

Jesus used water to restore sight to the blind man. He spat on the ground and made clay with the saliva. He then anointed the eyes of the blind man with the muddy mixture, and told him to go to the pool of Siloam and to wash the clay off his eyes. Having done so, the man could see for the first time in his life. When the Jewish leaders refused to believe this miraculous use of water—and the identity of the One who used it to heal the blind man—he answered them: "Why, this is a marvelous thing, that you do not know where He is from; yet He has opened my eyes! Since the world began it has been unheard of that anyone opened the eyes of one who was born blind. If this Man were not from God, He could do nothing" (John 9:30, 32-33).

The crowning masterpiece of Jesus' use of water for spiritual purposes is seen in His conversation with Nicodemus. To enter into the kingdom of God, Jesus said one must be "born of water and the Spirit" (John 3:5). He meant that a person must be immersed in water in accordance with the Spirit's instructions given in the Gospel. As Paul explained, to contact Christ's death and blood, a person must be "buried with Him through baptism" (Romans 6:4). No wonder Peter announced to those who suddenly realized that Gentiles had the right to become Christians: "Can anyone forbid **water**, that these should not be baptized...?" (Acts 10:47). And no wonder Peter declared that baptism "now saves us" (1 Peter 3:21). He meant that Christ's death, burial, and resurrection do not save a person until he or she is baptized.

Praise God for His amazing use of water!



JORDAN RIVER

ACTIVITY PAGES



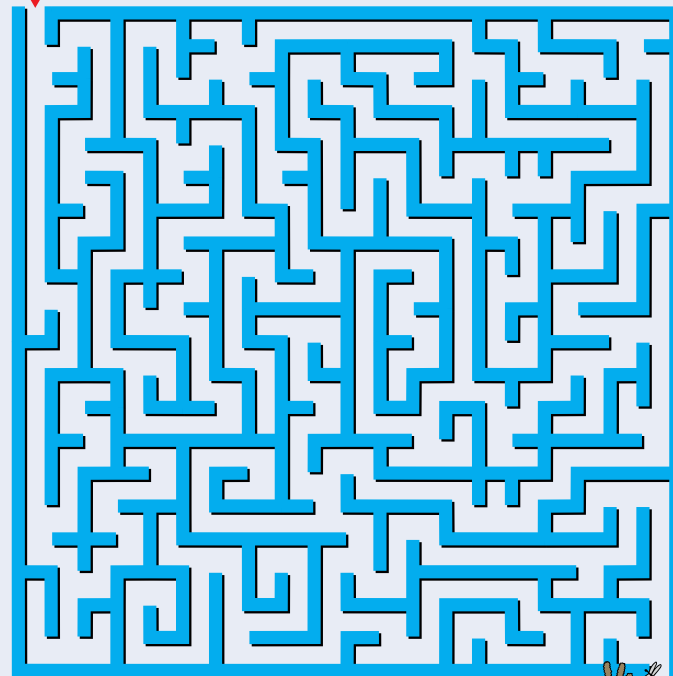
TRUE OR FALSE

- Water can store a lot of heat or lose a lot of heat without its temperature being drastically changed.
- Water is poorly designed.
- Every single living organism contains water.
- When water freezes it sinks.
- The theory of evolution and the Bible agree on the origin of water on Earth.
- Water expands when it freezes.
- God made water with two oxygen atoms and one hydrogen atom.
- God made land before water.
- Water keeps temperatures from getting too extreme on Earth.
- Earth would be a lot better planet on which to live if it had less water.



HELP FISHERMAN FRED FIND HIS WAY TO HIS FAVORITE WATERHOLE.

START



Dear Digger Doug,
My sister is constantly hitting me and tonight we were in the living room and she would never go away or stop hitting me. What should I do? I know I have to pray about it.

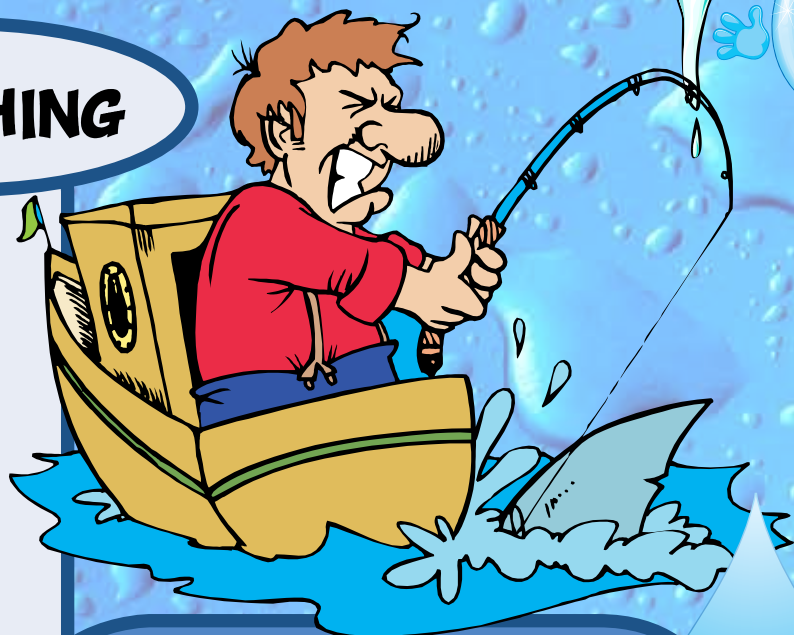
—Jeanne May, Hemphill, TX

Dear Jeanne May,

Your question is very important because it helps us see something about the Bible. The Bible has answers to science questions, such as, "How did the Earth get here?" and "What was created first?" But it also has answers to questions like yours, about how we should treat others and live our lives. You are right that you should pray about the situation. First Peter 5:7 says that we can cast all our cares on God, because He cares for us. After praying about it, you should try to apply the Golden Rule. Jesus said that we should do to others what we want others to do to us (Matthew 7:12). Try to think through how you would want to be treated. Maybe talk to your sister in a kind way about how much you dislike her hitting you. Perhaps you could ask her why she does it, and what you might do to help her stop. Try to think about a time when you have done something that you knew another person did not like. And then think about how you would have liked to have been treated. Finally, do not take revenge. The Bible says that we are supposed to "repay no one evil for evil." Instead, we should "turn the other cheek" when we are wronged (Matthew 5:39) and "pay them back with a blessing" (1 Peter 3:9). The next time your sister hits you, think of something nice to do for her and pay her back with a blessing. You will be surprised at how good you will feel when you try to work out your problems in this way. Thank you for the great question.

MATCHING

- ___ Day of Creation on which God made water
- ___ Percentage of Earth covered in water
- ___ Cleansed of leprosy
- ___ The chemical formula for water
- ___ Immersion in water
- ___ Frozen water
- ___ Day of Creation on which God made the firmament
- ___ Percentage of the human body that is made up of water
- ___ Was told that one must be "born of water and the Spirit"
- ___ The Designer of water



- | | |
|---------------------|--------------|
| A. H ₂ O | F. Nicodemus |
| B. Two | G. God |
| C. 50-70 | H. One |
| D. 75 | I. Naaman |
| E. Ice | J. Baptism |

FILL IN THE BIBLE VERSES (NKJV)

- "Jesus answered, 'Most assuredly, I say to you, unless one is born of _____ and the Spirit, he cannot enter the kingdom of _____'" (John 3:5).
- "[T]he Divine longsuffering waited in the days of _____, while the ark was being prepared, in which a few, that is, eight souls, were saved through water. There is also an antitype which now _____ us—_____ (not the removal of the filth of the flesh, but the answer of a good conscience toward God), through the _____ of Jesus Christ" (1 Peter 3:20-21).
- "Can anyone forbid _____, that these should not be _____?" (Acts 10:47).



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ADDRESS SERVICE REQUESTED

THE EARTH'S AMAZING AIR CONDITIONING SYSTEM

Jeff Miller

When seen from space, Earth has a blue appearance. This has led many to call it the "Blue Planet." The reason for this is that about 75% of the entire area of the Earth is covered by water.

That figure is important because it helps to show that the Earth was **designed** by God, and is not the result of mindless evolution.

You may have seen in the movies or read in books how the temperature in the desert can be pretty severe. It can be extremely hot during the day, and then quickly turn extremely cold during the night. If the whole Earth had such drastic temperature changes, it would not be a very good place for humans to live. However, most of the Earth does not have this problem, due in large part to the fact that the Earth has so much water on it. This makes it a perfect environment for life to exist—proof that it was designed for a purpose by God.

Water has an amazing property which makes it handy to have around for keeping temperatures from getting too

extreme. In scientific terms, it has what is called a high "specific heat capacity." That means that water can hold a lot of heat—way more than almost any other natural substance on Earth. Water can store

a lot of heat or lose a lot of heat without its temperature being drastically changed. So, it acts like an air conditioning unit for the Earth, keeping its temperature relatively constant. It does the same thing for our bodies, which are made up of about 50-70% water. If we live close to a large body of water (and much of the world does), then it takes a lot more heat or cold (a lack of heat) to significantly change the temperature than if we lived away from areas that have a lot of water—like in deserts

Some would have you to believe that there is no God—that everything we see in the Universe came about on its own by accident. But when we look at the amazing air conditioning system with which the Earth and our bodies are equipped, it is clear that such a thing could not have come about on its own. God designed our planet and our bodies perfectly to keep us alive for as long as we need them in order to do His will.



ANSWERS

FILL IN THE BIBLE VERSES: 1. water, God; 2. Noah, saves, baptisms, resurrection; 3. water, baptized.
 MATCHING: 1. H (One); 2. D (75); 3. I (Naaman); 4. A (H₂O); 5. J (Baptism); 6. E (Ice); 7. B (Two); 8. C (50-70); 9. F (Nicodemus); 10. G (God).
 TRUE OR FALSE: 1. T; 2. F; 3. T; 4. F; 5. F; 6. T; 7. F; 8. F; 9. T; 10. F.
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