



CREATOR

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THE FACE OF SNOW

*Every good gift and every perfect gift is from above,
coming down from the Father of lights.*

James 1:17

Does anyone know why children and dogs love snow? God does! It seems that an approaching snowstorm often produces two very different reactions in most folks: angst or delight. A certain amount of apprehension to snow in adults is normal because they're the ones who shovel it, drive in it, and too



often get stuck in it. Wouldn't it be nice, though, if adults could also enjoy this winsomeness of the Lord with abandoned childlike joy?

Snow is a vast collection of ice crystals that take form around specks of dust

suspended in the atmosphere. These crystals possess extremely delicate and intricate shapes—frozen sculptures of almost endless variety. The more time these flakes are allowed to spend in the moist womb of snow clouds, the more intricate their designs become. It's amazing to think that trillions of such fragile flakes are born and grown in the body of swirling storms.

The *humidity and temperature* of snow clouds help regulate the type of ice crystals created, but these factors alone cannot possibly explain their stunning artistry. The truth is there's little in the simple structure of water or the environment of a cloud to account for the almost infinite number of extremely ornate snowflake designs.

Stellar crystal



The Bible guides us in understanding this snowy mystery: “For since the creation of the world His invisible attributes, His eternal power and divine nature, have been clearly seen, being understood through what has been made” (Romans 1:20). Each flake, therefore, is a divine impression in ice that proclaims something of the magnitude of Christ’s breathtaking and winsome beauty.

CHRIST’S CONSTRUCTION

The builder of all things is God.
Hebrews 3:4

The construction of a snowflake begins with an unlikely object—a speck of dirt. Using a specific type of electricity,¹ our Lord Jesus attracts super-chilled water in a cloud to the surface of this dust particle. Little by little our Creator moves water vapor from cloud droplets and freezes it to the face of the infant snow crystal.²

The first recognizable shape Christ makes is a hexagon (object with six sides).

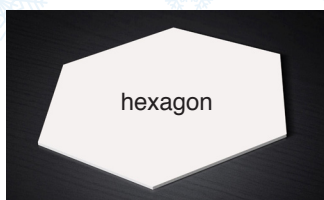


Figure 1

The reason that typical snowflakes are six-sided comes from the arrangement of water molecules in ice.

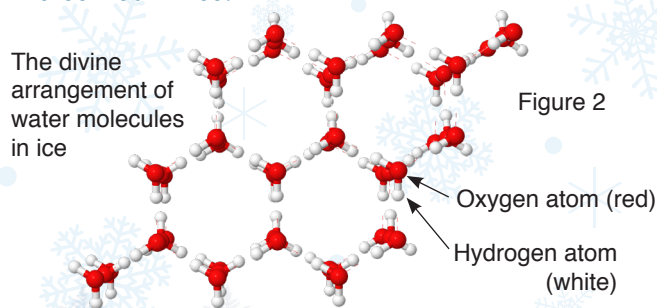


Figure 2

¹ Static electricity

² “Crystal” comes from the Greek word, *krystallos*, meaning “clear ice.”

God builds water molecules using one atom of oxygen (O) and two atoms of hydrogen (H); we write its formula as H_2O . Each molecule carries a slight positive and negative charge that attracts other water molecules, allowing them to naturally form thin sheets of ice composed of tiny hexagons. Snow crystals grow out of this simple construction and thus have six-sided shapes.³

Our Lord Jesus then creates a latticework of six delicate icy branches radiating outward from the points on the hexagon (see front page photo). He applies a variety of temperatures, humidities, and air currents to help design different snow crystals. Over the next 15 to 40 minutes, His masterpieces take shape and gain enough mass to be pulled downward by Earth’s gravity. In the end, God may use the water vapor from a million or more cloud droplets to construct just one snowflake. Without Christ’s artistry, however, all snow crystals would be nothing more than hexagonal prisms (Figure 1).

The term *snowflake* can either refer to a single snow crystal or a clump of snow crystals. Individual ice crystals are tiny, less than a quarter of an inch in diameter (6 mm). Snowflakes can be composed of a hundred or more snow crystals and can be quite big. The largest snowflake on record fell at a ranch near Fort Keogh, Montana in 1887 and was 15 inches (38.1 cm) wide.

The Reformer John Calvin saw all Creation as the *Theatre of God’s Glory*. Indeed, every snowfall is an exquisite performance by the greatest of artists! Yet so few of these crystalline masterpieces attract the attention of adults. Children, on the

³ Snow crystals can also be 3- and 12-sided, but never 4-, 5-, or 7-sided.

other hand, are naturally unburdened by the worries of life and more likely to notice this divinely-created loveliness.

We could say that the beauty of Christ is what provides the “template” upon which snow forms—snow crystals are fashioned upon Christ’s glory. Only the presence of an infinitely glorious God can explain the mind-boggling number of stunning flakes. As Creator, He is the One who fills “the whole universe” (Ephesians 4:10) and sustains all things by His powerful word. The “inspiration” for Creation’s design is His divine being; Christ has ordained nature to mirror His own excellencies and the majesty of His Heavenly Father (nature reveals His nature). This display of God’s glory proclaims to all people, “Cease striving and know that” He is God (Psalm 46:10). Let us then hear this message, and joyfully praise our Maker!

DIVINE ETCHINGS

You created all things, and because of Your will they existed. Revelation 4:11

It is impossible for us to imagine the infinite character of our invisible Lord. Everything in Creation is finite—it has limits. Only God is unbounded. But if anything in nature reflects His unending beauty surely it is the snowflake.

Most adults are too busy to deeply ponder the message of snow. Thanks be to God, children often “hear it.” Countless varieties of snow crystals have been studied through the years. And if we’re willing, with Christ’s help, we can all cover ourselves with childlike humility and peer into this wintry world of divine artistry!

As we’ve noted, snow is a collection of tiny ice crystals. Normally we think of snowflakes as six-sided delicate stars with intricate designs, popularized by the decorations

of homes and stores, and by sweaters in winter. But snowflakes come in many other shapes and sizes as well. The *Magono and Lee Classification* of snow crystals lists 80 different categories! And the variations on each of these snowflake designs appear endless. Even the names scientists use to describe ice crystals give us a sense of our Creator’s unlimited winsomeness: Needles, columns, capped columns, bullets, cups, pyramids, ferns, dendrites, branches, germs, skeletons, plates, sheaths, scrolls, planes, and stars.

A simpler way of describing snow is with the *International Snow Classification* and its seven categories. Like people, the crystal forms in each category represent a tremendous number of variations on a basic theme. Let’s take a look at these seven categories and see what we can discover about each.

PLATE CRYSTALS AND STELLAR CRYSTALS

Plate and stellar crystals can form in relatively “warm” clouds of 28° F (–2° C). But they are found in greater numbers at colder temperatures—0° to 9° F (–18° to –13° C). In fact, the chillier it is, the more



complex and beautiful these snowflakes are. Stellar dendrites (another name for stellar crystals) come in a variety of sizes but rarely grow larger than 0.2 inches (5 mm) across. A typical stellar crystal is much smaller—about the size of this letter “O.”



The reason for the unending and intricate designs of stellar crystals cannot be grasped by science. The mysteries of their creation are hidden in the infinite mind and character of our God. It is not the molecular structure of water that gives birth to this beauty. No! The “template” used to create these spectacular masterpieces is nothing less than the invisible character of our Creator! Any explanation short of this does not suffice and cannot fit reality.

COLUMN CRYSTALS

Column crystals are hollow six-sided tubes of ice, formed in relatively dry but frigid clouds as cold as -40°F (-40°C). If you



observe a halo around the moon at night, it is most likely caused by light reflecting off column crystals suspended in the atmosphere.

NEEDLES

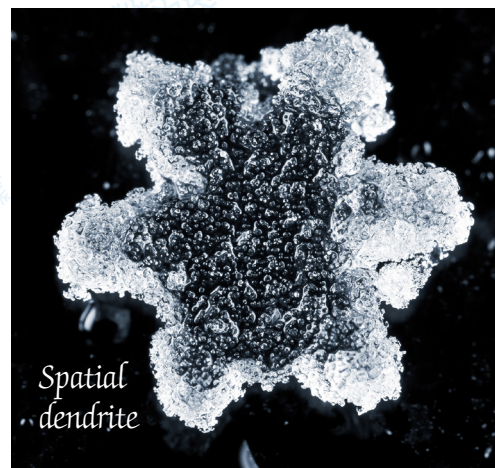
Like column crystals, needles are six-sided columns of ice. Yet they are solid, not hollow, and possess very sharp points on the ends. Needle crystals are frequently found in snowstorms and are notorious for causing a



stinging sensation when blown against our face and hands. Avalanches commonly occur when mountain snow is composed of needles.

SPATIAL DENDRITES

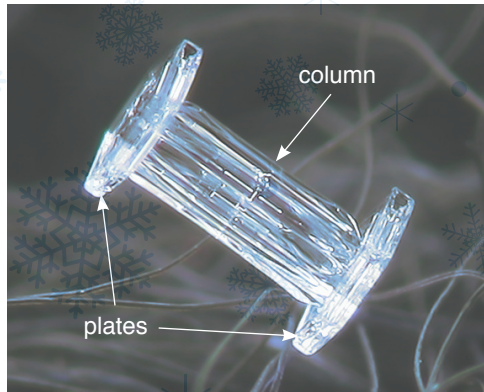
These snowflakes start out as stellar crystals but develop a three-dimensional



shape as they pass through moist air, which adds additional ice to their surface. Spatial dendrites often paint the landscape with picturesque snow hanging from tree branches.

CAPPED COLUMN SNOWFLAKES

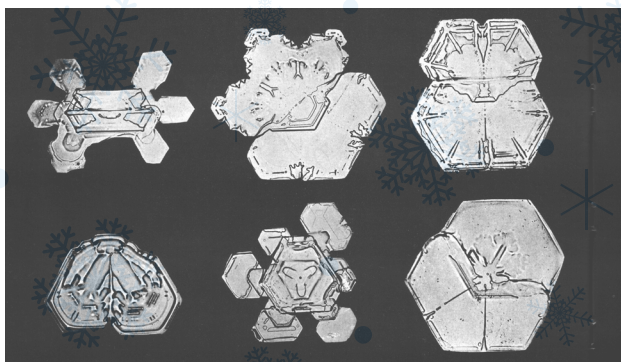
Christ creates capped column snow crystals by fusing plate crystals to both ends of a column crystal. These snowflakes truly represent a marvel of engineering! Our Lord first creates column crystals in cold, dry air. He then adds plates onto the ends of the



columns as snow passes through warmer, moister air. Both column crystals and capped columns form a light, dry snow that is a delight to parents because it is easy to shovel, but disappointing to children because, alas, it won't pack.

IRREGULAR CRYSTALS

Irregular crystals form the same way as stellar and plate crystals but are irregular in shape. This type of snow also includes small but beautiful pieces of broken flakes. And very commonly the snow is quite fluffy.



Temperature	Humidity	Snow Crystal Type
32° F to 26° F (0° C to -3.5° C)	low	plates & stars
26° F to 14° F (-3.5° C to -10° C)	moderate	prisms & needles
14° F to -8° F (-10° C to -22° C)	high	plates & stars
-8° F to -40° F (-22° C to -40° C)	low	columns & prisms

THE SHORT HISTORY OF SNOWY DISCOVERY

For nothing is hidden, except to be revealed.

Mark 4:22

The first to describe the mystery of snow was God Himself: "Hast thou entered into the treasures of the snow?" (Job 38:22a KJV). Christ declares that all snow forms at His command (Psalm 148:8). He goes on to liken His holiness to snow (Matthew 28:3; Revelation 1:14), His Word to snow (Isaiah 55:10-11), His righteousness to snow (Isaiah 1:18), and His forgiveness to snow (Psalm 51:7). And Hell is described as consuming the sinner as heat consumes snow cover (Job 24:19).

Despite this scriptural emphasis on snow, more than two thousand years passed before mankind seriously examined the intricacies of these ice crystals up close. In 1611, the brilliant astronomer Johannes Kepler turned his gaze from the stars of heaven to what appeared to him as "stars" falling from heaven onto the sleeve of his winter coat. He is the first person to describe the flat, six-sided shape of a snowflake.⁴ Ever the scientist, but mindful of his Creator, he seriously pondered the mysterious agency of its creation. "How

⁴ *A New Year's Gift, or On the six-cornered Snowflake, 1611*

much could science explain? Was there a cause working inside or outside (or both) to fashion such beautiful designs?" He concluded there must be an intimate Agent that stamps onto the snow crystal the beauty of its "own nature!" He was right.

In 1637, the French philosopher, scientist, and mathematician, René Descartes (day - kart), described capped columns and twelve-sided snowflakes. And following the invention of the microscope in the mid-1600s, Robert Hooke of England wrote of the "geometric perfection of snowflake forms" (*Micrographia* 1665). Who other than our Creator could conceive of such perfection?



A drawing from Robert Hooke's *Micrographia* 1665

One hundred and fifty-five years later, British explorer and pastor William Scoresby discovered that there was a greater percentage of stunning and intricate snow crystals in the Arctic than in Britain. He became the first to recognize the relationship between temperature and the type of snow that fell.

Our Lord Jesus providentially ordained the wife of a Congregational minister in Portland, Maine be the first person to publish a book boasting of God's snowflake designs.⁵ In 1864, Frances Chickering presented to the world an array of snow crystals in *Cloud Crystals: A Snow-Flake Album*. She carefully examined snow as it fell on her windowsill, and then quickly cut out paper replicas of the flakes.

⁵ "Let him who boasts boast of this, that he understands and knows Me."
Jeremiah 9:24a



A page from Frances Chickering's *Cloud Crystals*

Twenty-one years later, God raised up the most famous of all snowflake scientists, a Christian farmer from Jericho, Vermont, Wilson Bentley. "Snowflake" Bentley, as he came to be called, fell in love with winter and its artistry at a very young age. Wanting to encourage Wilson's inquisitive mind, Mrs. Bentley purchased a microscope for her son when he was fifteen. The young Bentley soon learned how to attach a camera to his microscope. And at the age of 19—only a teenager—he became the first person ever to photograph an individual snow crystal (1885).

Over the next 46 years, Mr. Bentley photographed more than 5,000 snowflakes, all unique in their own way. He is the one who popularized the saying that "no two snowflakes are alike." He couldn't, of course, fully appreciate the implications of that statement. An average snowstorm produces a million-billion different snow crystals! Since each snowflake truly is unique, we are compelled to voice a similar question Christ's disciples asked when Jesus calmed the great storm (Mark 4:41). "Who then is this" who can create an infinite variety of snowflakes—with no two the same?

We cannot know for certain, but maybe Wilson Bentley's tireless efforts were influenced by the popular hymn of his day, "O Worship the King." The third stanza



exclaims, “The earth with its store of wonders untold.”⁶ He desired to herald God’s icy wonders to the world. And his exploration of snow under a microscope led him to see every flake as a “miracle of God’s beauty.”⁷

Mr. Bentley died as he lived, ever longing to record the gossamer loveliness of snow—even in the harshest weather—for his Creator’s glory (1 Corinthians 10:31). In early December 1931, eager to get back to his photography after giving a snowflake lecture,

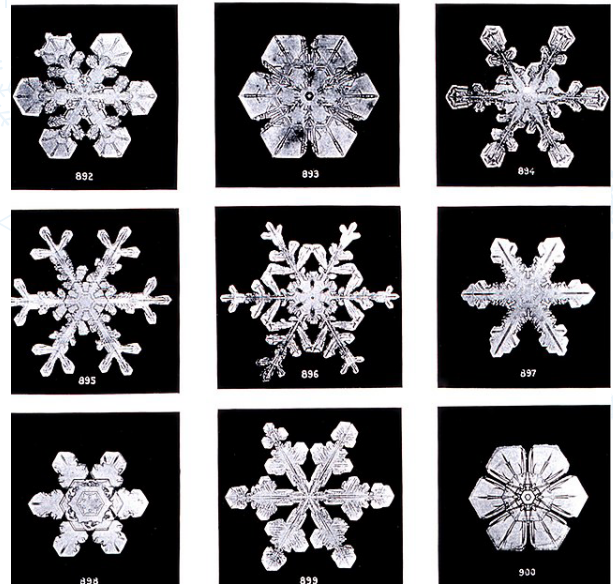


Mr. Bentley photographing snowflakes in Vermont

he chose to walk six miles (ten km) through a blizzard rather than accept a gracious offer to stay in the warmth and comfort of a friend’s

⁶ *O Worship the King*—words by Robert Grant; music attributed to Johann M. Haydn

⁷ We believe Mr. Bentley is correct in calling snowflakes “a miracle” because they cannot be explained by the laws of physics or chemistry alone!



Actual snow photographs taken by Wilson Bentley

house. Within days, he caught pneumonia and became seriously ill. Yet he remained cheerful to the end, often reading his Bible while confined to bed. “Snowflake” Bentley died on December 23, 1931, with Christ in his heart, “the Hope of Glory” (Colossians 1:27). Like Moses, the epitaph of Wilson Bentley’s life is . . .

*He endured, as seeing Him who is invisible.
Hebrews 11:27 KJV*

Many folks are cautious, even afraid of science. This is natural because many scientists draw conclusions from their research that conflict with the reality of God’s Word and Christ’s creative purposes. Others risk all to get just a glimpse of their Creator’s matchless beauty. Our Lord is sovereign over all scientific discoveries and *true science is a selfless servant of His glory!*

ON A SAD NOTE . . .

They have eyes, but they do not see.
Psalm 135:16

Sadly, many weather scientists do not see snow as God's handwork. They openly admit that ice crystal formation is a great mystery. But the language they use often betrays a fundamental confusion in their minds. On the one hand, they speak of crystal ice being *inspired*, and snowflakes displaying a *creative genius* in their *neverending varieties*. And on the other, they proclaim that snow is a *random* act of *spontaneous generation* driven by the forces of *instability*. Molecules in liquid water do move about vigorously at any given moment in what may seem like chaos. The warmer the water, the greater the molecular agitation. But in ice, H₂O molecules are anything but chaotic; they are extremely stable and quite orderly.

*The heavens declare the glory of God;
the skies proclaim the work of His hands.
Day after day they pour forth speech;
night after night they display knowledge.
There is no speech or language where their
voice is not heard. Their voice goes out
into all the earth, their words to the ends
of the world. Psalm 19:1-4a⁸*

Many scientists today would disagree with the reasoning of Johannes Kepler. But Kepler correctly recognized that the intricacy of snowflakes could not possibly come from the internal properties (physics and chemistry) of ice alone. He saw nothing in the

way water behaves when it freezes that could account for such pristine beauty. He reasoned that there must be a cause or Agent acting from outside of snow. Kepler further reasoned that this Agent "stamped" onto ice "its own nature," proceeding from its own "beauty" and "knowledge." In his heart, Johannes Kepler knew this Agent to be the God of the Bible!

Without Christ, we probably would believe the same things as secular scientists. I am humbly reminded of a song from *The Music Man*, "Till There Was You:"⁹

*There were birds in the sky
But I never saw them winging
No, I never saw them at all
Till there was You.*

(capitalization added). To truly appreciate the nature of snow crystal artistry, we must grasp Heaven itself, which is impossible without Christ (Isaiah 55:8-11).

THE POWER OF GOD

*He says to the snow, "Fall on the earth," . . . So
that all men He has made may know His work,
He stops every man from his labor. Job 37:6-7⁸*



Massive snowstorm approaching Buffalo, New York

Snow reveals God's otherworldly beauty, tenderness, kindness, and peace. It also teaches us to fear Him (Psalm 34:11), for He can multiply these fragile flakes and bury an

⁸ HOLY BIBLE: NEW INTERNATIONAL VERSION, Copyright © 1973, 1978, 1984 by International Bible Society. Used by permission of Zondervan Publishing House.

⁹ Written by Meredith Willson

12-Inch Snow Cripples City Traffic; 39-Year Record Fall in 24-Hour Period



—By a Post-Dispatch Staff Photographer.
Downtown-bound workers, stranded in the transportation tie-up caused by today's heavy snowfall, wait patiently at Lindell boulevard and Vandeventer avenue beside a block-long line of stalled automobiles. The view is looking east. The line of cars extended to Grand boulevard. (Additional pictures in *Everyday Magazine*.)

entire city.¹⁰ Heavy snowfall is Christ's gentle but determined way of forcing mankind to stop and take notice of His handiwork. Our Lord can easily bring great cities like Tokyo, Chicago, and New York to a halt using tiny crystals. No one snowflake will do much harm, but a whole bunch of them can stop trains, buses, and cars, shut down airports, lead to the cancelation of important civic events, and cause city commerce to grind to a standstill. The world becomes transformed into hushed silence before the Lord. A snowstorm also reveals God's kindness as He beautifies Earth in the midst of winter's bleakness.

MIGHTY TO SAVE

*The LORD your God is among you;
He is mighty to save. Zephaniah 3:17*¹¹

It is impossible to imagine the vast difference between us and God's otherworldly holiness (Isaiah 55:8). If anything in nature comes close to illustrating this, surely it is snow. Consider what happens when we try to catch a snowflake in our bare hands or—if we are childlike—on our tongues. It

quickly melts because its alien splendor is incompatible with the warmth of our body.

The Lord's holy righteousness is also incompatible with our sin. He can no more look upon sin than we can voluntarily hold our breath until we pass out.

*Thou art of purer eyes than to behold evil.
Habakkuk 1:13 KJV*

Tragically, our fallen state is hostile to the loveliness of our Lord. Take heart! Jesus accomplished the impossible by covering the filth of our sins with the righteousness of God, causing us to “be as white as snow” (Isaiah 1:18). But how many sins can Christ's righteousness cover? The Scriptures proclaim that “all” (Colossians 2:13) the sins of Believers are forgiven. How is this possible?

The Person of Christ—who is *truly God and truly man*—is both fitting and able to deal with all of our sins. And His shed blood and sacrificial death have infinite value due to His divine nature.

It might be helpful, again, to allow the Lord's Creation to provide us with a rough idea of what this might look like. We cannot say just how many sins against our Holy God are committed at any given moment by His children. But earth's atmosphere is utterly filled with invisible dust and dirt particles. Likewise, the sinner is filled with countless hidden sins that appear as filth before God. It has been calculated that *every second* a million billion snow crystals are being continuously created somewhere on Earth,¹² each covering over a speck of dirt. Is there anyone in the world with too many sins or too corrupt for Christ to forgive? No! Christ's glory is infinitely greater than all of our spiritual deformities put together.

*Purify me with hyssop, and I shall be clean;
Wash me, and I shall be whiter than snow. Psalm 51:7*

¹⁰ God can also produce fearful lightning during snowstorms.
¹¹ Copyright © 2021 Berean Standard Bible. All rights reserved.

¹² If true, that means that the number of snowflakes that have fallen on Earth in the past 6,000 years equals one thousand times the number of stars in the universe!

HEAVEN SENT

*"For as the rain and the snow
come down from heaven. . . Isaiah 55:10*

So often in life, our joys fade away quickly because they are overshadowed by the trials we daily encounter. Be encouraged! Jesus can use these difficulties to transform you by His Spirit and make you like Himself, and with great joy. This is the beauty of His Gospel!

Jesus died on the Cross to wash away our wickedness and cover our sins by His holy and awesome righteousness (Psalm 51:7). Please earnestly consider what we are saying here. Repent of your sins and believe in God's Son, Jesus Christ, and you will be saved from God's wrath. Your life will then reflect—like the blinding purity of freshly fallen snow at midday—the stunning beauty of His face (Colossians 3:4).

*Though your sins are as scarlet,
they will be as white as snow. Isaiah 1:18*

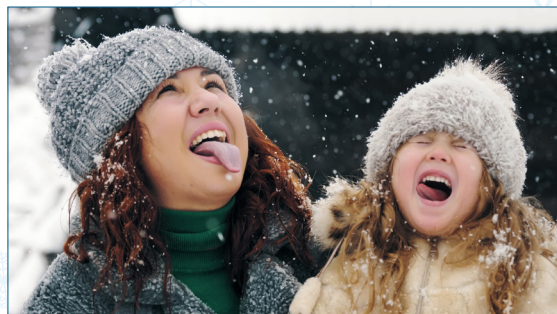
Wilson Bentley once remarked that "Right from the beginning it was the snowflakes that fascinated me most. . . The farm folks up in this country dread winter, but I was supremely happy." His attitude parallels all who cry out "Maranatha. Come, Lord Jesus!" Those who have paid little attention to Christ in this world will dread the terrifying storm of His second coming. Those of us who love Him will be overjoyed!¹³

Someday soon we all will be exposed to God's overwhelming glory (Hebrews 12:28-29). Are you prepared? Before the Almighty, we are dust (Ecclesiastes 3:20). And the only way we may join the beautiful "snow-covered peak" of Christ's dazzling majesty in Heaven is to take on the purity of His nature.

*Put on the new self, which is being renewed in
knowledge in the image of its Creator. Colossians 3:10⁸*

¹³ "God knows how to make the same day a terror to His foes, and a joy to His people." Isaac Ambrose, *Looking Unto Jesus*, p.705.

*"Truly I say to you, unless you are converted
and become like children, you will not enter
the kingdom of heaven." Matthew 18:3*



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