

1. Milky Way Galaxy

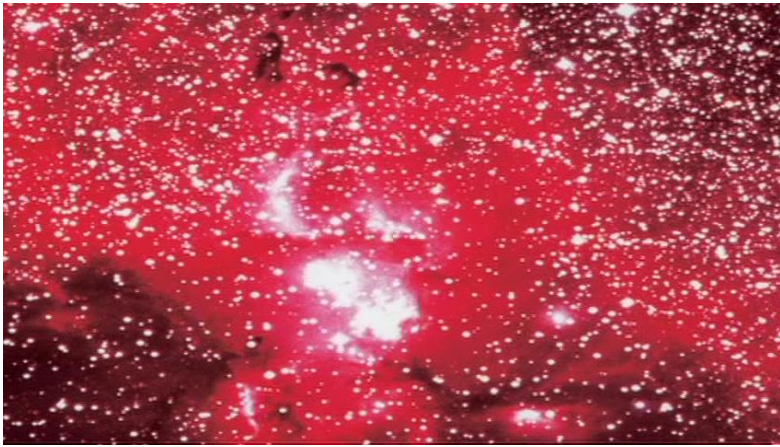


- a. **Psalms 19:1-6 (AMP)** To the Chief Musician. A Psalm of David. THE HEAVENS declare the glory of God; and the firmament shows *and* proclaims His handiwork. Day after day pours forth speech, and night after night shows forth knowledge. There is no speech nor spoken word [from the stars]; their voice is not heard. Yet their voice [in evidence] goes out through all the earth, their sayings to the end of the world. Of the heavens has God made a tent for the sun, Which is as a bridegroom coming out of his chamber; and it rejoices as a strong man to run his course. Its going forth is from the end of the heavens, and its circuit to the ends of it; and nothing [yes, no one] is hidden from the heat of it.
- b. **Genesis 1:1-3 (AMP)** IN THE beginning God (prepared, formed, fashioned, and) created the heavens and the earth. The earth was without form and an empty waste, and darkness was upon the face of the very great deep. The Spirit of God was moving (hovering, brooding) over the face of the waters. And God said, Let there be light; and there was light.
- c. **Psalms 33:6-9 (AMP)** By the word of the Lord were the heavens made, and all their host by the breath of His mouth. He gathers the waters of the sea as in a bottle; He puts the deeps in storage places. Let all the earth fear the Lord [revere and worship Him]; let all the inhabitants of the world stand in awe of Him. For He spoke, and it was done; He commanded, and it stood fast.

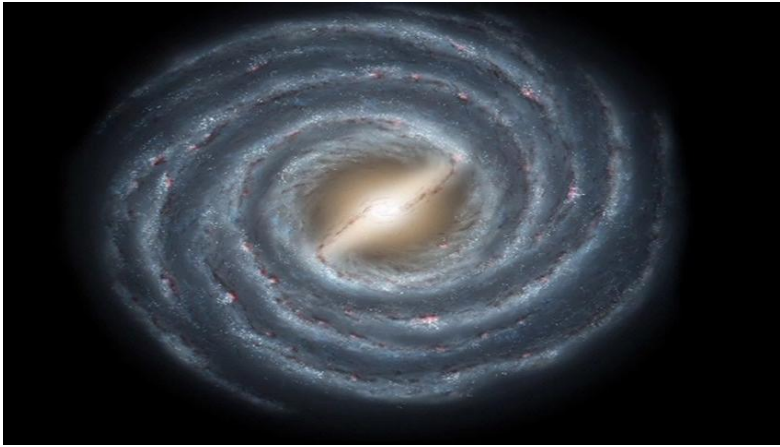
2. The Milky Way galaxy

- a. Measured in light-years
 - i. Speed of light 186,000 miles per second (mps). A beam of light can circle the earth 7 times every second.
 - ii. (186,282 miles per second x 60 seconds x 60 minutes x 24 hours x 365 days)
 - iii. = 5 trillion 874 billion 904 million 512 thousand miles = 5,874,904,512,000 miles
 - iv. 5.88 trillion miles
- b. Consist of billions of stars.
- c. One of hundreds of billions of galaxies in the KNOWN universe.

- d. Zoom in to a star forming region of the Milky Way



- e. If you would count the stars in the Milky Way 1 star per second it would take 2,500 years to count them all.
f. **Isaiah 40:25-26 (HCSB)** "Who will you compare Me to, or who is My equal?" asks the Holy One. Look up and see: who created these? He brings out the starry host by number; He calls all of them by name. Because of His great power and strength, not one of them is missing.
g. Composite shot of the Milky Way

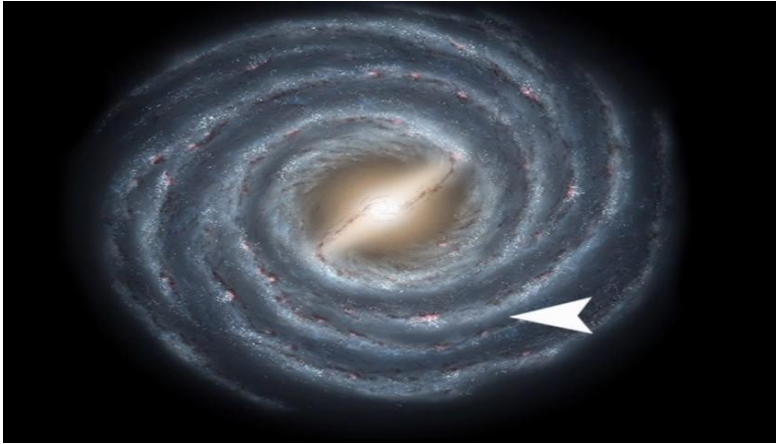


- h. Created by combining hundreds of thousands of individual pictures.



If you traveled 186,000 mps it would take 100,000 years to get from one side to the other

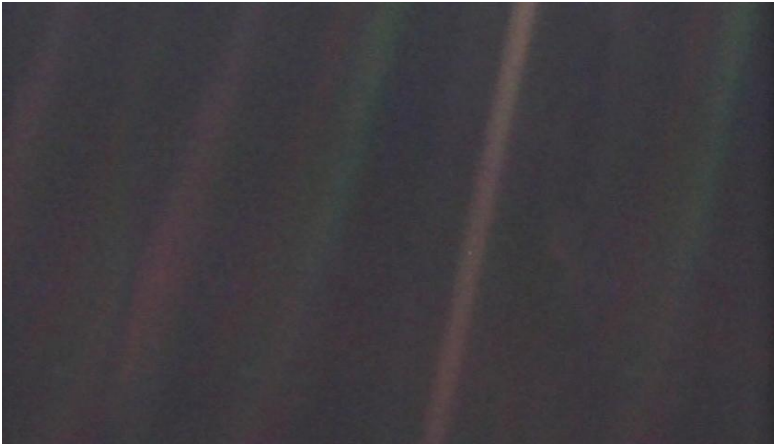
3. Earth.



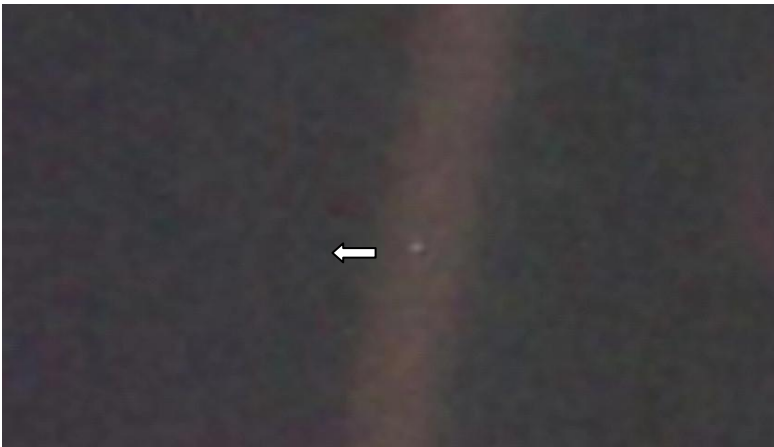
- a. Earth is located somewhere near the point of the arrow.
- b. Our entire solar system cannot be visibly portrayed in this picture.
- c. To compare: Our solar system is the size of a quarter and the Milky Way is the size of the entire North American continent.
- d. One of the billions of stars is the sun but it is not the biggest star in our galaxy. The sun is orbited by the planets of our solar system and the Earth is just one of them.



- e. In this picture from Apollo 17:
 - i. Africa about mid-center and the Cape of good Hope covered by clouds. The Sarah Desert is barren at the top-left, the Sinai peninsula at the top right, the bottom of the Mediterranean sea at the left-top-edge
 - f. Quote: from Neil Armstrong, the first man on the moon: "I remember on the trip home on Apollo 11 it suddenly struck me that that tiny pea, pretty and blue, was the earth. I put up my thumb and shut one eye, and my thumb blotted out the planet earth. I didn't feel like a giant. I felt very, very small."
www.time.com/time/magazine/article/0,9171,878100-2,00.html#ixzz1Bk00Fsyi
 - g. **Psalms 8:3-4 (NASB)** When I consider Your heavens, the work of Your fingers, The moon and the stars, which You have ordained; What is man that You take thought of him, And the son of man that You care for him?
4. Composite Panoramic view of part of our solar system. Called the "Pale Blue Dot"



- a. Panoramic composite of 60 images named "The Pale Blue Dot" from 1990, 13 years after the launch of Voyager now about 4 billion miles away
- b. 640,000 pixels per image, each pixel took 5.5 hours to transmit, each image took months to make it back to Earth
- c. The colored bands are reflections of the sun off Voyager. In one band a tiny speck is seen, that speck is the Earth.



- d. On October 13, 1994, the famous astronomer Dr. Carl Sagan stated: " "We succeeded in taking that picture [from deep space], and, if you look at it, you see a dot. That's here. That's home. That's us. On it, everyone you ever heard of, every human being who ever lived, lived out their lives. The aggregate of all our joys and sufferings, thousands of confident religions, ideologies and economic doctrines, every hunter and forager, every hero and coward, every creator and destroyer of civilizations, every king and peasant, every young couple in love, every hopeful child, every mother and father, every inventor and explorer, every teacher of morals, every corrupt politician, every superstar, every supreme leader, every saint and sinner in the history of our species, lived there on a mote of dust, suspended in a sunbeam.

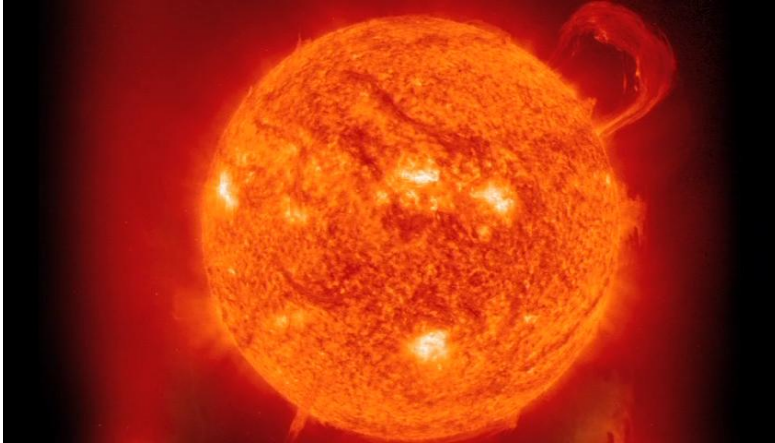
The earth is a very small stage in a vast cosmic arena. Think of the rivers of blood spilled by all those generals and emperors so that in glory and in triumph they could become the momentary masters of a fraction of a dot. Think of the endless cruelties visited by the inhabitants of one corner of the dot on scarcely distinguishable inhabitants of some other corner of the dot. How frequent their misunderstandings, how eager they are to kill one another, how fervent their hatreds. Our posturings, our imagined self-importance, the delusion that we have some privileged position in the universe, are challenged by this point of pale light. Our planet is a lonely speck in the great enveloping cosmic dark. In our obscurity -- in all this vastness -- there is no hint that help will come from elsewhere to save us from ourselves. It is up to us. It's been said that astronomy is a humbling, and I might add, a character-building experience. To my mind, there is perhaps no better demonstration of the folly of human conceits than this distant image of our tiny world. To me, it underscores our responsibility to deal more

kindly and compassionately with one another and to preserve and cherish that pale blue dot, the only home we've ever known."

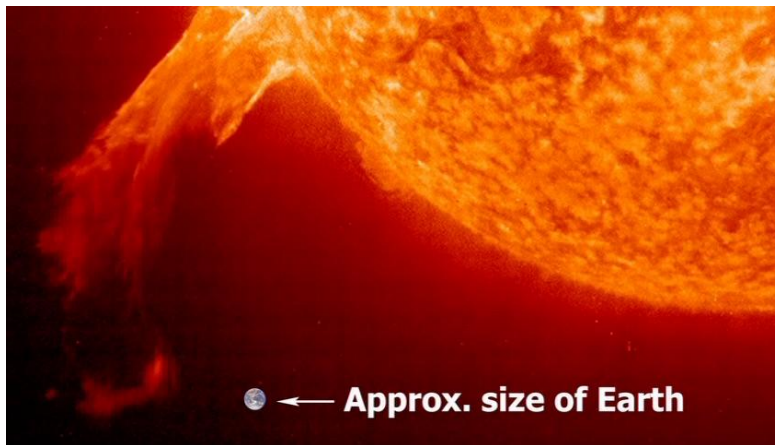
http://www.bigskyastroclub.org/pale_blue_dot.htm

5. The sun & other stars:

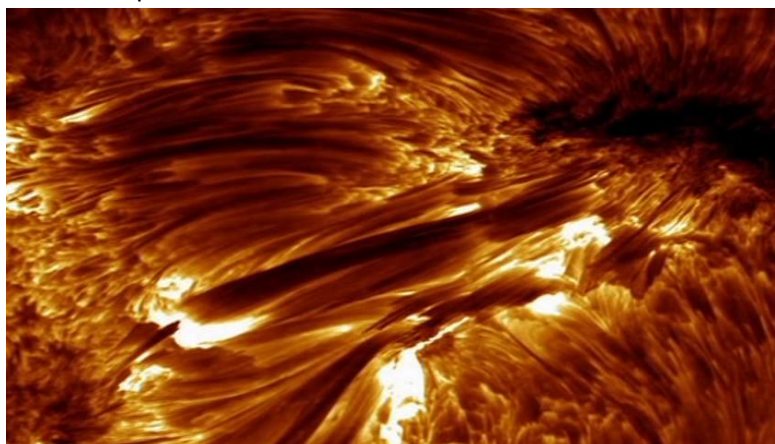
a. The Sun



- i. 10,000 degrees Fahrenheit
- ii. It takes only seconds for the light to reach the Earth 93,000 miles away
- iii. A million times the size of Earth
- iv. If the Earth was the size of a golf-ball the sun would be 15 feet in diameter
- v. 960,000 Earths fit inside the sun



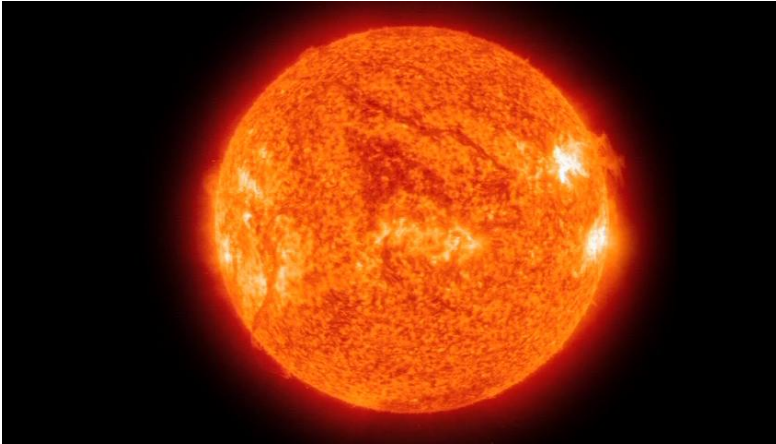
vi. Close up of Sun



- vii. It would take the Gross National Product (GNP) of the U.S. for 7 million years for a power company to run the sun for 1 second

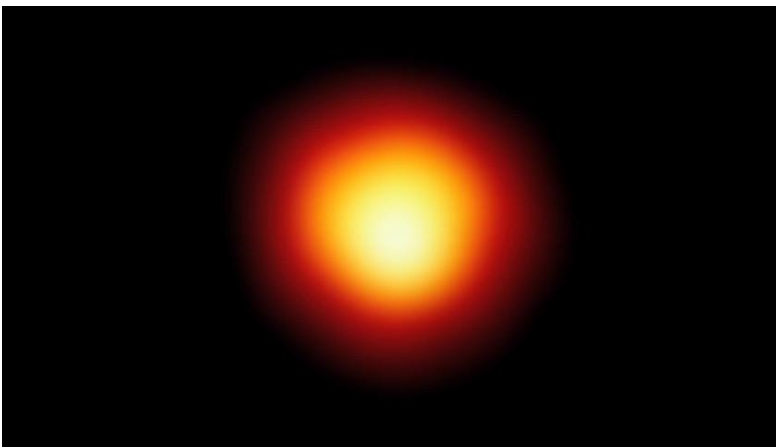
viii. The Sun is just one of the billions of stars in the Milky Way, which is one of hundreds of billions of galaxies in the universe.

b. Betelgeuse.



i. 427 light-years away

ii. Closer view



iii. It is twice the size of the Earth's orbit around the sun

iv. 262 trillion earth's would fit inside Betelgeuse.

c. Mu Cephei.



- i. The Gold Star at top left.
- ii. 3000 light-years away
- iii. 2.7 quadrillion Earth's would fit inside
- iv. Quadrillion: A billion is a thousand million, a trillion is a thousand billion and quadrillion is a thousand trillion.
 1. A million seconds ago = 12 days ago
 2. A billion seconds ago = 32 years ago
 3. A trillion seconds ago = 31,709 years ago
 4. A quadrillion seconds ago = 30.800,000 years ago

d. Canus Majoris - The largest known star



- i. 7 quadrillion Earth's would fit inside
- ii. Size compassion



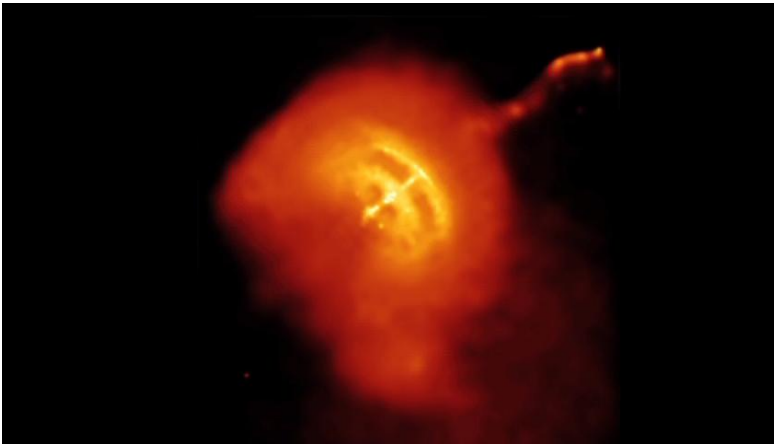
- iii. **Romans 12:16b (AMP)** Never overestimate yourself *or* be wise in your own conceits.

e. Constellation Pleiades



- i. 440 light-years out
- ii. **Job 38:31-32 (AMP)** Can you bind the chains of [the cluster of stars called] Pleiades, or loose the cords of [the constellation] Orion? Can you lead forth the signs of the zodiac in their season? Or can you guide [the stars of] the Bear with her young?
- iii. **Isaiah 40:12 (BBE)** In the hollow of whose hand have the waters been measured? and who is able to take the heavens in his stretched-out fingers? who has got together the dust of the earth in a measure? who has taken the weight of the mountains, or put the hills into the scales?

f. The Vela Pulsar



- i. 1000 light-years out.
- ii. Highly magnetized neutron star osculating at 11 revolutions per second

g. The Hourglass Nebula



- i. A dying star 8,000 light-years away

h. Helix Nebula.



i. 700 light-years away

i. Sombrero Galaxy



i. 28 million light-years away

ii. 50,000 light-years wide & trillions of miles thick

j. Whirlpool NGC 5194 & NGC 5195 galaxies



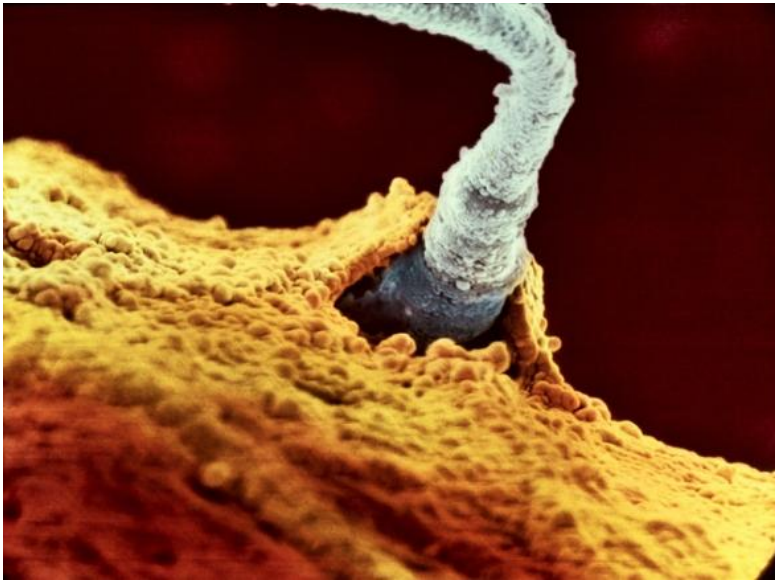
i. 31 million light-years away

ii. Estimated to be 300-500 billion stars

iii. The pink areas are starbirth regions

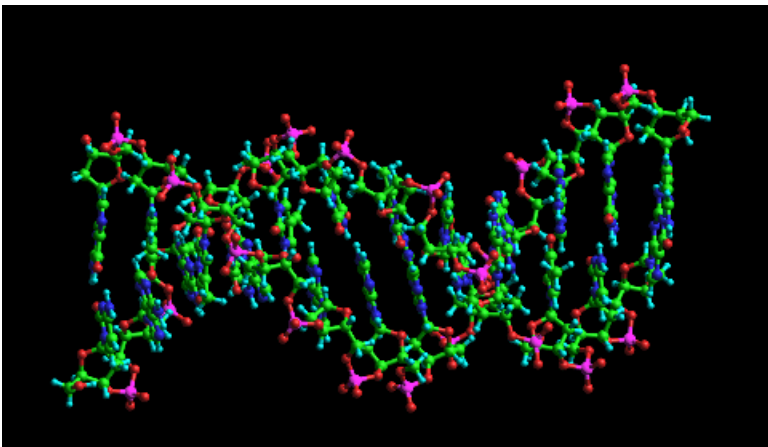
iv. Estimated that a star is born every second

6. Humans (you & I)

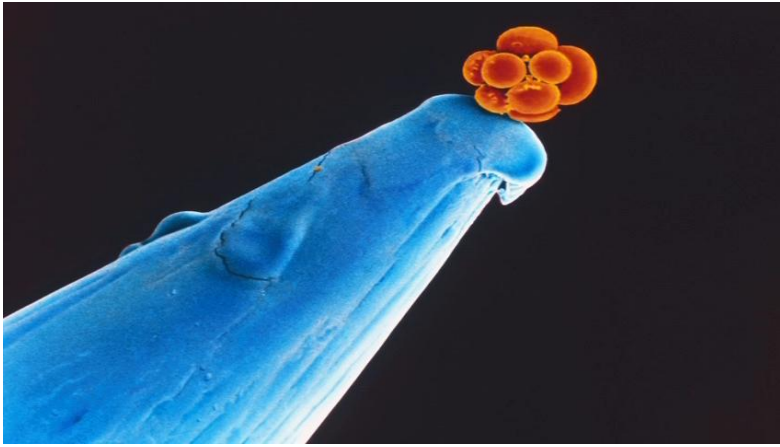


a. Wonders of the human body:

- i. One cell from your mother and one cell from your father giving you 23 chromosomes each and formed your unique DNA code.



1. DNA is a 3 billion character description of you making up your human genome
 - a. It is estimated that if you took the DNA from one cell and stretched it out it would be 6 feet long.
 - b. Reading one character per second of your DNA, reading 24 hours per day, it would take 96 years to read.
 - c. Comprises a picture that has never been recorded before nor will ever be recorded again.
- ii. We multiply from that one cell into a complete being.



- iii. At three days gestation, on the tip of a safety pin & incredibly magnified, we see 16 cells that multiplied from the one cell
- iv. Multiplication continues until we obtain the 75 trillion cells that form us.
 - 1. Combined DNA of all cells stretched end to end would take you to the moon and back 178,000 times.
- v. Augustine stated: "Men go abroad to wonder at the height of mountains, the huge waves of the sea, the long course of rivers, the vast compass of the ocean, the circular motion of the stars... But they pass by themselves and don't even notice."
- vi. 5 months gestation



- vii. Most technologically advanced thing known to man is the human eye.



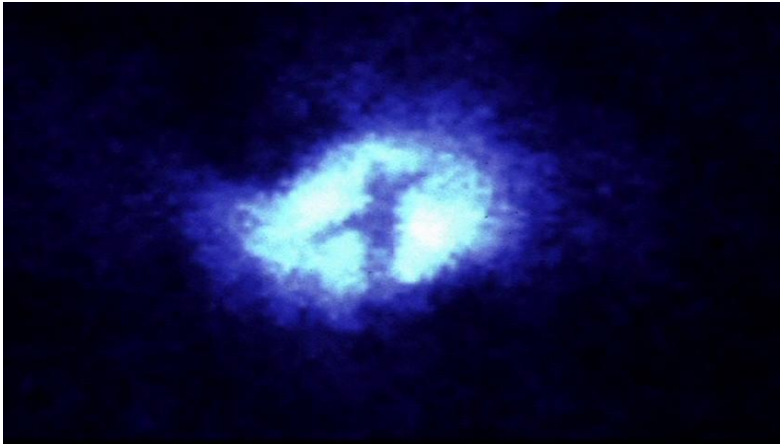
- 1. The retina is composed of 130,000,000 cells
- b. We are one of 6.5 billion people on earth today.
- c. One estimate indicates we are one of 106 billion 456 million 367 thousand 669 people ever born.

- d. **John 10:3 (NKJV)** To him the doorkeeper opens, and the sheep hear his voice; and he calls his own sheep by name and leads them out.
- e. **Psalms 62:9 (HCSB)** Men are only a vapor; exalted men, an illusion. On a balance scale, they go up; together they [weigh] less than a vapor.
- f. **Genesis 1:27 (AMP)** So God created man in His own image, in the image *and* likeness of God He created him; male and female He created them.
- g. **Psalms 139:13-18 (NKJV)** For You formed my inward parts; You covered me in my mother's womb. I will praise You, for I am fearfully *and* wonderfully made; Marvelous are Your works, *And that* my soul knows very well. My frame was not hidden from You, When I was made in secret, *And* skillfully wrought in the lowest parts of the earth. Your eyes saw my substance, being yet unformed. And in Your book they all were written, The days fashioned for me, When *as yet there were* none of them. How precious also are Your thoughts to me, O God! How great is the sum of them! *If* I should count them, they would be more in number than the sand; When I awake, I am still with You.

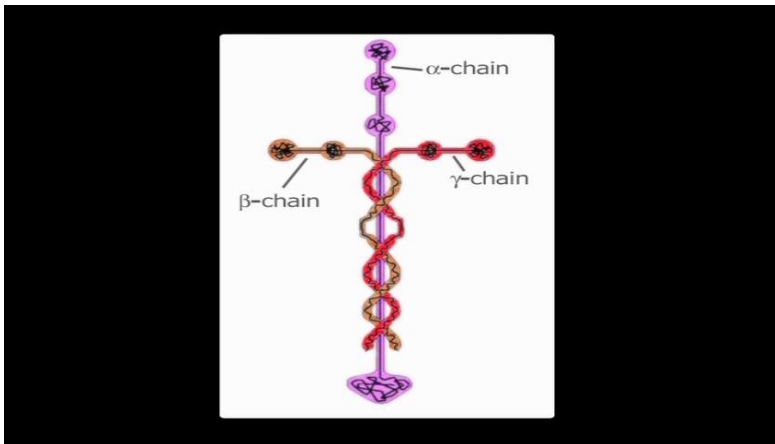
7. Greatest of All



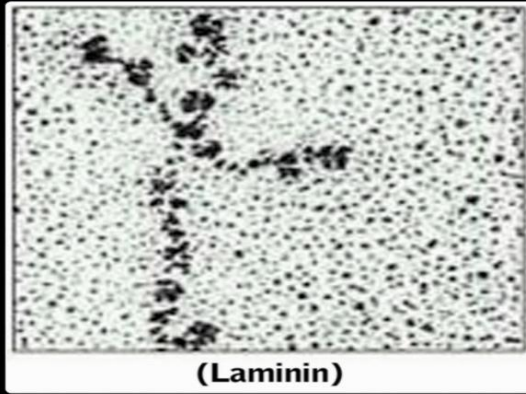
- a. The Creator of it all is so mindful of us that He died so that we can spend eternity with Him.
- b. **Colossians 1:15-16 (NKJV)** He is the image of the invisible God, the firstborn over all creation. For by Him all things were created that are in heaven and that are on earth, visible and invisible, whether thrones or dominions or principalities or powers. All things were created through Him and for Him.
- c. **Philippians 2:5-8 (NKJV)** Let this mind be in you which was also in Christ Jesus, who, being in the form of God, did not consider it robbery to be equal with God, but made Himself of no reputation, taking the form of a bondservant, *and* coming in the likeness of men. And being found in appearance as a man, He humbled Himself and became obedient *to the point of* death, even the death of the cross.
- d. **Psalms 103:8 (AMP)** The Lord is merciful and gracious, slow to anger and plenteous in mercy *and* loving-kindness.
- e. **Psalms 103:10-12 (AMP)** He has not dealt with us after our sins nor rewarded us according to our iniquities. For as the heavens are high above the earth, so great are His mercy *and* loving-kindness toward those who reverently *and* worshipfully fear Him. As far as the east is from the west, so far has He removed our transgressions from us.
- f. Nucleus of the Whirlpool Galaxy.



- i. The Cross marks the location of the black hole at the center of the galaxy
 - ii. **1 Peter 1:19-20 (AMP)** But [you were purchased] with the precious blood of Christ (the Messiah), like that of a [sacrificial] lamb without blemish or spot. It is true that He was chosen *and* foreordained (destined and foreknown for it) before the foundation of the world, but He was brought out to public view (made manifest) in these last days (at the end of the times) for the sake of you.
 - iii. **Isaiah 42:6 (AMP)** I the Lord have called You [the Messiah] for a righteous purpose *and* in righteousness; I will take You by the hand and will keep You; I will give You for a covenant to the people [Israel], for a light to the nations [Gentiles],
 - iv. **Psalms 33:13-15 (AMP)** The Lord looks from heaven, He beholds all the sons of men; From His dwelling place He looks [intently] upon all the inhabitants of the earth— He Who fashions the hearts of them all, Who considers all their doings.
 - v. **Psalms 33:18-19 (NKJV)** Behold, the eye of the Lord *is* on those who fear Him, On those who hope in His mercy, To deliver their soul from death, And to keep them alive in famine.
- g. Protein molecule called Laminin
- i. Cell adhesion molecule that holds all cells in human body together.
 - ii. Diagram of Laminin



- iii. Actual Electron Microscopic Image of a laminin protein molecule.



(Laminin)

- iv. **Colossians 1:15-16 (NKJV)** He is the image of the invisible God, the firstborn over all creation. For by Him all things were created that are in heaven and that are on earth, visible and invisible, whether thrones or dominions or principalities or powers. All things were created through Him and for Him.
- v. **Colossians 1:20-22 (AMP)** And God purposed that through (by the service, the intervention of) Him [the Son] all things should be completely reconciled back to Himself, whether on earth or in heaven, as through Him, [the Father] made peace by means of the blood of His cross. And although you at one time were estranged *and* alienated from Him and were of hostile attitude of mind in your wicked activities, Yet now has [Christ, the Messiah] reconciled [you to God] in the body of His flesh through death, in order to present you holy and faultless and irreproachable in His [the Father's] presence.
- vi. **Isaiah 40:28-31 (AMP)** Have you not known? Have you not heard? The everlasting God, the Lord, the Creator of the ends of the earth, does not faint or grow weary; there is no searching of His understanding. He gives power to the faint *and* weary, and to him who has no might He increases strength [causing it to multiply and making it to abound]. Even youths shall faint and be weary, and [selected] young men shall feebly stumble *and* fall exhausted; But those who wait for the Lord [who expect, look for, and hope in Him] shall change *and* renew their strength *and* power; they shall lift their wings *and* mount up [close to God] as eagles [mount up to the sun]; they shall run and not be weary, they shall walk and not faint *or* become tired.
- vii. **Colossians 1:17 (AMP)** And He Himself existed before all things, and in Him all things consist (cohere, are held together).