

THE FULLNESS OF TIME

INTRODUCTION:

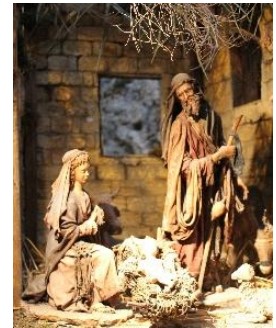
1 Samuel 17:37a *David said moreover, The Lord that delivered me out of the hand of the lion, and out of the hand of the bear, he will deliver me out of the hand of this Philistine.*

**WHAT'S THE SECRET TO WINNING...**

What was David's secret to winning against Goliath? Where did his courage come from when all the others were afraid? How would you take on this task?

This giant "made fun" of the God of Israel; but David believed in the God of Noah, Abraham, Moses, and Joshua. God revealed His power in the desert, at the Red Sea, against the walls of Jericho and the Pharaoh's army. David knew that one small stone in the hands of the Lord could defeat a giant. His faith won the battle and became the foundation of the House of David, the family lineage of Jesus.

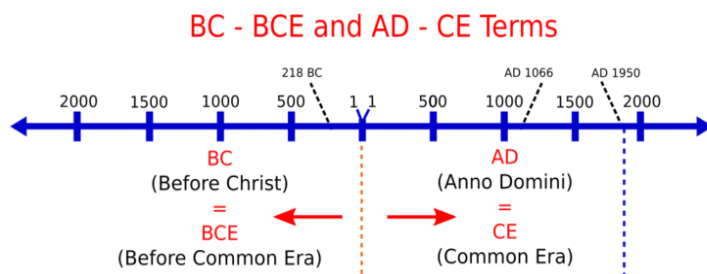
Both Mary and Joseph's families were of the House of David. When Rome called for everyone to register for the census just before Jesus was born, they were required to register in Bethlehem because they were descendants of David. Nearly 700 years prior to Jesus' was born, Isaiah predicted his birthplace. God's prophecies are always fulfilled.



Galatians 4:4-5 *But when the set time had fully come... "in the fullness of time..."*

DEVOTIONS: GALATION 4:4-7

GALATION 4:4-7 *But when the set time had fully come, God sent his Son, born of a woman, born under the law, to redeem those under the law, that we might receive adoption to sonship. Because you are his sons, God sent the Spirit of his Son into our hearts, the Spirit who calls out, "Abba, Father." So, you are no longer a slave, but God's child; and since you are his child, God has made you also an heir. NIV*



Our entire timeline is set to the time before Christ (BC) and the time after Christ (AD), or the year of our Lord. Any one who denies that Christ lived, was crucified, or that His grave was empty Easter morning hasn't read real history books. One day every one will

know it's true. Until then, our time line shows the two eras clearly. As a Christian, we know Jesus lived on earth as fully man and fully God.

From Abraham to David there were around 14 generations (nearly 500 years); from David to Jesus was another 28 generations or about 1000 years. Now, two thousand years after Jesus lived, many people doubt Bible history, the miracles, or the truth the Bible reveals. Since science only deals with the possible, not the impossible, many think science disproves miracles; but, that is far from the truth.

Before Christ (BC), the Jewish nation was responsible for delivering God's words and prophecies to the world. These prophecies point to Christ. God put Israel at the crossroads of nations to tell the world of the one true God. Since Christ (AD), we are the chosen vessels; we are to be the leaders of faith.

When faced with giants in our lives, we can draw on our faith in God like David did as he faced Goliath. David knew the stories of the great men of faith and God's ability to provide. He believed and he acted. Christians have no greater resource to fight giants than knowing God's Word and His power through Christ.

HEBREWS 4:12 *For the word of God is alive and active. Sharper than any double-edged sword, it penetrates even to dividing soul and spirit, joints and marrow; it judges the thoughts and attitudes of the heart.*

VOCABULARY:

ELECTRON – the negatively charged particle of an atom found outside the nucleus.

ION – an atom that has gained or lost electrons, having a positive (cation) or negative (anion) charge.

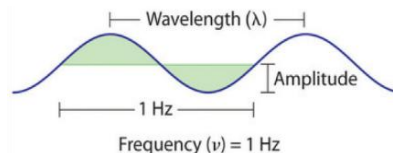
ELECTRICITY – a form of energy that results from the motion of electrons.

BATTERY – a device that transfers electrons from one material to another.

KINETIC ENERGY

Radiant energy is kinetic energy transferred by electromagnetic **photons or waves**. Photons are light particles whereas waves are continuous light.

[This Photo](#) by Unknown Author is licensed under [CC BY-SA-NC](#)



THEME: THE FULLNESS OF TIME

“Timing is everything,” or so the saying goes. Everything in life is time-stamped. Our birth, the events we remember and those we don’t, life and death, all happen at a given time. Time as we know it began on Day 1 of creation. God, however, is outside of time and can assert control over it.

At the time of Jesus birth, Roman roads had been built to assist with travel and trade. From 27 BC to 180 AD there was peace, a “golden age.” God’s timing for Christ’s birth, death, and resurrection, happened at just the right time for God’s message and His messengers to go into all the world and tell the Good News.

ECCLESIASTES 3:1-2a *To everything there is a season, a time for every purpose under heaven: a time to be born, a time to die.*

TIMELINE/Introduction (History): The Classical Era

1000 BC to 500 AD Roman roads, battering rams, cranes, static electricity, even organs.

During the time Israel had kings, most of the wars were in the northern and eastern part of the Fertile Crescent. The desert between Israel and the crescent protected Israel for a time. Under King David (~1000 BC) the twelve tribes of Israel, large family groups from Jacobs twelve sons, were united.



But eventually, the Babylonaian army was able to capture and make many Hebrews (Israelites) their slaves, including Daniel. But, God’s plan for the Hebrews was to teach their masters about the one true God. After a time, the slaves were returned to the land of Israel.



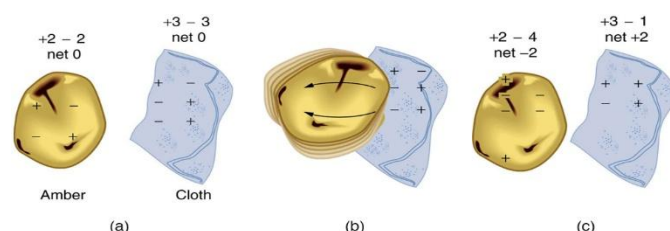
[This Photo](#) by Unknown Author is licensed under [CC BY-SA-NC](#)

Eventually, the Romans grew very powerful and fought using new weapons like fast boats or weapons with battering rams, that could sink ships or knock down fortress gates or walls. Weapons were evolving and wars were often brutal.

Rome’s defeated many nations with their armies and their navy. As word spread, other nations simply agreed to Rome’s demands to fall in line with their government and taxes. The Roman military power actually helped bring peace to most nations around the Medditeranean Sea during “Pax Romana” – Roman Peace.

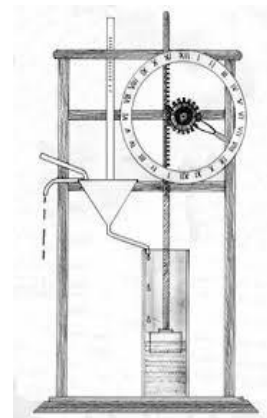
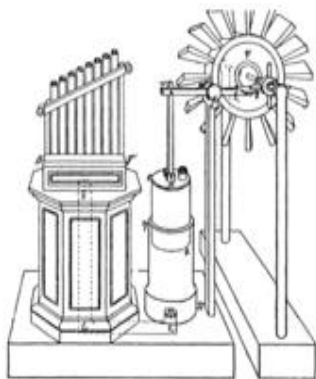
Around the same time, from 600-1 BC, Greek philosophers gained fame for their ability to reason and use advanced math for astronomy and science. and more. Thales of Miletus was considered the earliest philosopher/scientist. He observed that rubbing amber with fur caused the amber to attract objects. As early as 600 BC, he

[This Photo](#) by Unknown Author is licensed under [CC BY](#)



demonstrated and experimented with static electricity. Thales also experimented with magnetism and lodestone.

By the time Jesus was born, wind and water pipe organs to make music, cranes for building, solar system models with cranks and gears known as orreries, water clocks that kept time, even alarm clocks, and a variety of other geared mechanisms had been invented. Very few people knew about these items, or how they worked, and even fewer had them, but thinkers were thinking and inventing.



Man can make timekeepers to monitor the present. Historians record what happened in the past. But only God knows what the future holds. God is outside time and He can alter or affect what happens and when it happens. Jesus' birth, life, and death were events in God's control. Because His presence on earth was such an incredible time, our timeline reflects it as two separate era's: BC and AD!

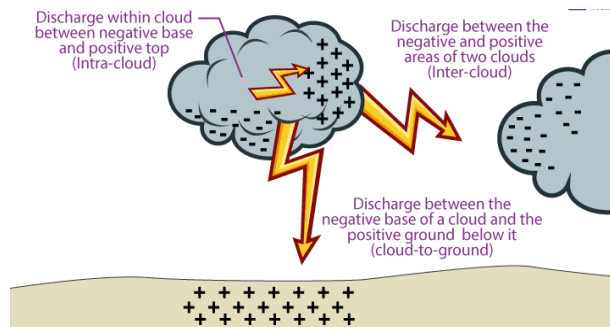
Ecclesiastes 3:11 *He has made everything beautiful in its time. Also, He has put eternity in their hearts, except that no one can find out the work that God does from beginning to end.*

EQUIPPED/Science Principles: **ELECTRON FLOW**



Lightning is static electricity created by ice crystals in clouds, rubbing and bumping, interacting with H₂O molecules. Just like balloons sticking to your head, static electricity causes objects to attract positive or negative charged **ions**.

Static electricity results in shocks as electrons are passed between atoms due to heat and friction (kinetic energy) and light or **photons**. Electricity is a constant flow of electrons. Like a river, electricity has a high- or low-energy current and a narrow or wide channel (wires) to flow along.



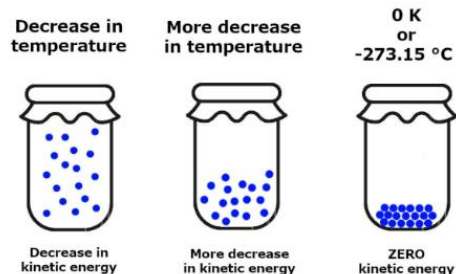
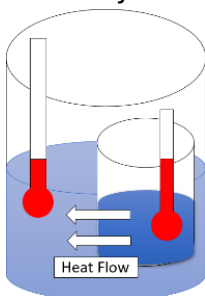
Powerlines are the electrical channels between the source and the user (outlets). The objects you “plug-in,” like a lightbulb or a powerful vacuum, use the energy coming through the powerlines. The energy is used to do work. Even a lightbulb is “working” when it radiates light energy.

SCIENCE LAWS (about energy) – Law 1: Energy can be changed from one form to another. The energy traveling along the wires is changed into light within the lightbulb.

Law 2: Heat naturally flows from higher to lower-temperature in a system.

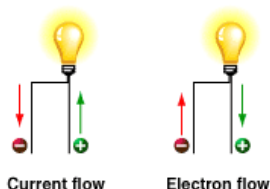
Heat is kinetic or thermal energy and it spreads out naturally. Heat flows from hot → cold. If you have a pan of hot water in a room, that HEAT will spread out into the cooler room. Since temperature is a measure of kinetic energy, the greater the temperature, the greater the kinetic energy of atoms. At the temperature of **absolute 0 K =**

-273.15 Celsius, kinetic and heat energy are zero. There is no more energy in the system at absolute zero.



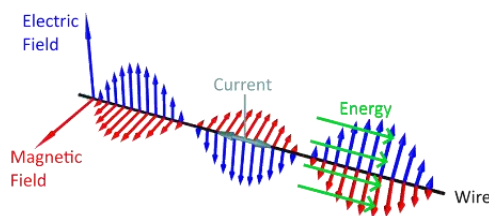
GEAR-UP/Practical Illustration: **MATTER AND ENERGY ACTING TOGETHER**

Magnetic fields and static electricity are great examples of matter and energy acting together. The energy exchange is clearly visible with lightning, with magnets pulling and pushing, or a balloon sticking to a wall.



Whenever photons pass their energy to electrons, both matter and energy are changed. Photons supply energy to plants that we can eat. Photons turn solid ice into water or liquid water into water vapor.

Photons are “FUEL” for electrons to move. A solar panel collects photons to make electricity, which is moving electrons down the wire. By experimenting, scientists discovered that metals conduct electrons well. Copper electrons flow well, so copper is commonly used inside power cords.



Metal wires provide the channel to pass on the energy. Plastic coatings keep the energy from escaping and from shocking anyone. The electric and magnetic fields follow the direction of the wire, but in up and down patterns making an S curve. The magnetic field is at right angles to the electric field. The word electromagnetism tells us that these fields are part of the same energy force.

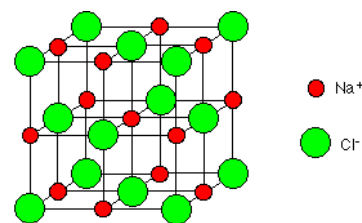
Batteries can store electron energy. They use acids and ions, or chemicals, to transfer electrons. Even salt can be dissolved and used to transfer electrons from one atom to another and to electrical wires.

MATTHEW 24:27 *For as lightning that comes from the east is visible even in the west, so will be the coming of the Son of Man.*

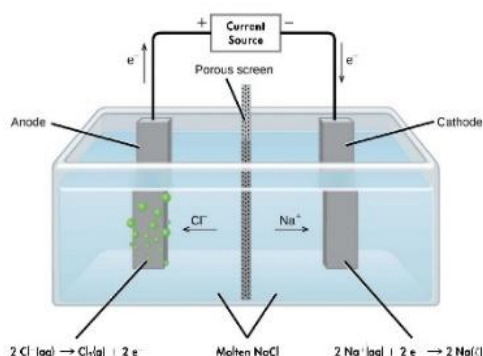
EXPERIMENT/EXPLORE: BATTERIES

Salt is used by our bodies to transfer electrons that also attract vitamins and minerals. Since salt is a molecule made of two different atoms, one tends to be positive and the other negative. These atoms act like a charged balloon sticks to your hair after rubbing it.

Na is often Na^+ and has lost electron(s)
Cl is often Cl^- and has gained electron(s)



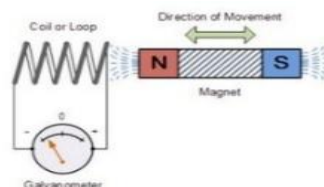
Any electrons with extra photon energy are capable of shocking, bonding, repelling, or adding energy to a system. Adding a battery to a magnet makes the magnet much stronger.



[This Photo](#) by Unknown Author is licensed under [CC BY-SA-NC](#)

SALTWATER BATTERY

1. COPPER
2. ZINC
3. Connecting wires/electron carriers
4. Ionizing liquid - water
5. Ions from Na & Cl = salt
6. Poles – one positive, one negative
7. Current flow direction (vectors)



ANSWER THE FOLLOWING:

1. An element that has a negative charge, like the chloride (Cl^-) ion, has _____ electrons?
LOST GAINED NEITHER

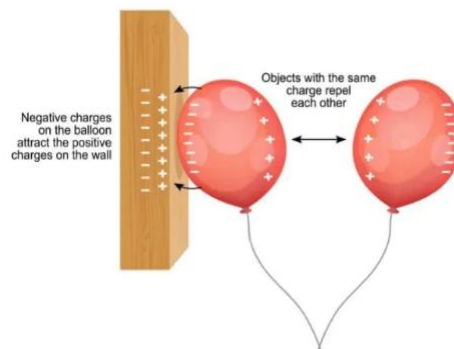
2. Rubbing a balloon in your hair causes electrons to jump to the: BALLOON or HAIR

HINT: The one most likely to shock you is the one that gained electrons. Try it to see. Does your hair shock you?

GOT-IT/Apologetics:

Romans 1:20 *For since the creation of the world God's invisible qualities—his eternal power and divine nature—have been clearly seen, being understood from what has been made, so that people are without excuse.*

It's clear that created things contain qualities that reflect God. Every element on earth has electrons that can be changed by energy. Every person on earth can be changed by the



power of God. Remember David's faith allowed God's power to be seen. His small stone delivered Israel from the giant not because David was powerful, but because God was.

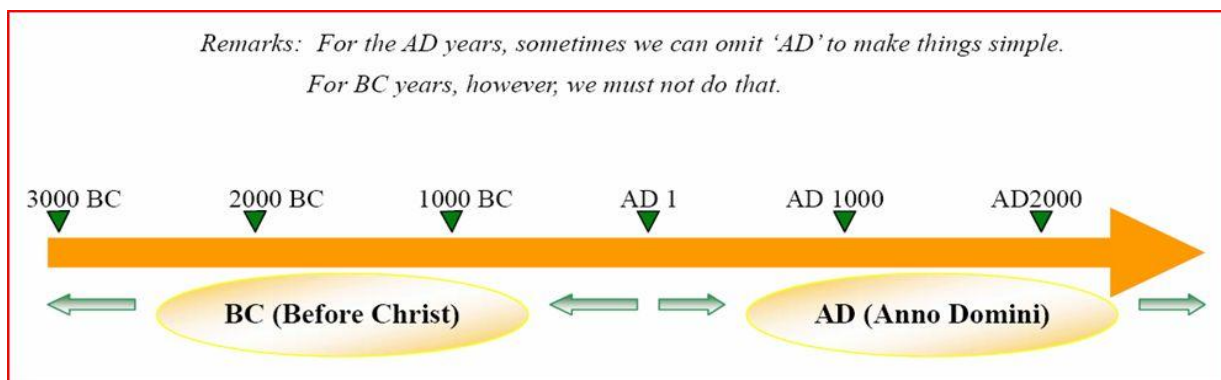
The key to defeating giants in our life is having enough faith to see that everything works together for good to them that love God. This includes times of victory or even times of defeat. In the fullness of time, Jesus was born; but, even Jesus had to suffer and die on a cross before victory was won. Death may seem "bad" to our finite minds, but when God's in charge, His plan for our good always brings victory.

Romans 8:28 *And we know that all things work together for good to them that love God, to them who are the called according to his purpose.*

REFLECTION/Devotion:

John 3:16 *For God so loved the world that He gave His only begotten Son, that whosoever believes in Him shall not perish but have everlasting life.*

This verse, John 3:16, is the most recited verse of all the scriptures. It is the gospel, the good news of Jesus Christ. From start to finish, the Bible tells the story of God's plan for the world. From the history of His chosen people (all those who would listen to His voice and follow Him) to the greatest love story of all time – the story of God's Son giving His life so that we may be adopted as sons of the Kingdom of God.



[This Photo](#) by Unknown Author is licensed under [CC BY-NC-ND](#)

God's desire is to save His creation, not to condemn it. But, as created beings with the gift of free choice, it's a choice only we can make for ourselves. God entered into the world in the FULLNESS OF TIME. His plan, His timing, and His love guides us from death to everlasting life.

John 3:17 *For God sent not his Son into the world to condemn the world; but that the world through him might be saved.*

REMEMBER THESE THINGS/Devotion:

Power isn't over-rated, it's undercharged. We've rarely been charged with defeating giants even though we have been given power from above. Our fears tell us to avoid tough jobs.



They may even make us think, "You can't talk about Christ at school or to your friends." But, Ephesians 1:19b-20a commands us to, "understand the incredible greatness of God's power for us who believe in Him. This is the same mighty power ²⁰ that raised Christ from the dead..."

Ephesians 6:10-12 *¹⁰ Finally, be strong in the Lord and in his mighty power. ¹¹ Put on the full armor of God, so that you can take your stand against the devil's schemes. ¹² For our struggle is not against flesh and blood, but against the rulers, against the authorities, against the powers of this dark world and against the spiritual forces of evil in the heavenly realms.*

Nothing in history compares to the brief time that separates the Age of Promise (BC) from the Age of Church (AD). These brief years of Christ's time on earth changed everything. We may struggle, we may have to fight a war, but we have already won the victory. As Christians, life is no longer defined by what happens to us or what we accomplish, but who we are in Him. The more we embrace Him, the gift, the more fulfilling life will be even in the midst of suffering.



Ephesians 2:8-9 *For by grace are ye saved through faith; and that not of yourselves: it is the gift of God: ⁹ Not of works, lest any man should boast.*