

The Sixes in the Book of Moses (Genesis)

Psalm 19:1 *“The heavens declare the glory of God, and the expanse proclaims the work of his hands.”*

The Structure of the Universe and the essentials of life are based on some fundamental concepts, processes, and symmetries. God is the Creator and we should not be surprised that He reveals evidences of underlying spiritual essence and design to the physical laws governing His creation given in Genesis.

The Number Six Represents the Created Order. God created the heavens and the earth in six days (Genesis 1). Thus, “six” symbolizes the created order, which is the medium through which God’s nature is revealed. The number six becomes a numerical symbol for the visible testimony of God's existence. Genesis says creation is a 6 part, 6 day process, and the number 6 represents the physical world.

General Revelation is Progressive: The Physical Laws Uncovered in the Last 200 Years.

God’s invisible attributes can be perceived by observing nature. Man can observe and reason.

Romans 1:20 *“For his invisible attributes, namely, his eternal power and divine nature, have been clearly perceived, ever since the creation of the world, in the things that have been made. So they are without excuse.”*

The Carbon Cycle of Life.

Carbon is the chemical backbone of all life on Earth. Carbon forms key molecules like protein and DNA. The carbon cycle describes the continuous movement of carbon atoms between the atmosphere, Earth's land and oceans, and living organisms. Key processes include photosynthesis, where plants absorb atmospheric carbon dioxide for growth; respiration and decomposition, which release carbon back into the environment; and combustion, which occurs when fossil fuels or biomass are burned. This cycle is crucial for sustaining life and regulating the Earth's temperature. Industry, transportation, medicine, and electric power plants all depend on the energy stored in carbon by photosynthesis. Carbon is the core element and is fundamental to plastics. The mighty oak tree is built from CO₂.

The Six Molecules in Photosynthesis and the Chemistry of the Carbon Cycle

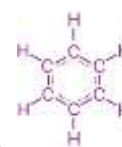
Sunlight supplies the energy for photosynthesis. Six molecules of carbon dioxide and six molecules of water form to produce glucose and release 6 molecules of oxygen. A hexad is a group or set of six.

Six Nucleons Form the Atomic Structure of Carbon:

Carbon is the 6th element in the periodic table. Carbon consists of 6 protons, 6 neutrons, and 6 electrons.

Hexagonal Symmetry – Glucose is Necessary for Life. It is the primary biological source of energy.

Glucose has a six-member ring structure C₆H₁₂O₆ and has many six carbon isomers. A 6-fold symmetry is seen in natural physical systems like snowflakes, **benzene rings** (π bonds are formed from the side-by-side overlap of unhybridized p orbitals), graphene, honeycombs, and certain quantum lattices. Hexagonal symmetry is important in topological materials and condensed matter physics.



Six is the Number of Matter Fields:

In particle physics the fundamental building blocks of hadrons (like protons and neutrons)

- There are six quark flavors: up, down, charm, strange, top, and bottom.
- Six types of leptons: Two types (Charge Conjugation Symmetry) of Electrons, muons, and tau.
- There are six neutrino states (3 flavors \times 2 spins)

There are Six Dimensions of Phase Space. Variables needed to fully specify the state of a physical system.

Six dimensions are required to specify the state of a physical system: 3 of position and 3 of momentum.

Crystals are Classified into 6 Crystal Families

A gemologist will tell you that gems come in six different fundamental shapes.

Crystals are classified into 6 crystal families: triclinic, monoclinic, orthorhombic, tetragonal, hexagonal, and cubic.

The basic crystal shape is cubic. The cubic has six sides with very high rotational symmetry.

The hardest form of carbon is diamond with a face-centered cubic symmetry. (In the Book of Revelation, New Jerusalem's wall is described as being made of diamond, symbolizing its strength and perfection.)

Our Sun Provides the Radiant Energy at the Temperature Essential for Life

The light required for photosynthesis must be of the right wavelength (color). The temperature of a body determines the color of the light that it radiates. The deep red of an oven's heating element reveals that its temperature is about 1000K (1200 °F). The temperature of our sun radiates at approximately 6000K, this gives the color temperature needed to produce the blue and red light photosynthetically active radiation needed for photosynthesis. The light energy is then stored in the chemical bonds of carbon-based compounds (like sugars, starches, and cellulose). The resulting intensity of sunlight is also perfect to keep the earth at the temperature needed for life. Incoming solar energy and the energy stored in chemical bonds is released and it then radiates back into the cold vacuum of space at 3K, maintaining the energy balance.

The 2nd Law of Thermodynamics dictates that low entropy solar photons drive earth's entropy production.

Six is the Constituent Number of Electro-Magnetic (EM) Waves (light, radio waves, x-rays, etc.)

Light consists in the transverse propagation of the six components of electric and magnetic fields.

Field Theory: The EM field tensor $F_{\mu\nu}$ is antisymmetric and has 6 independent components:

- 3 electric field components (E_x, E_y, E_z)
- 3 magnetic field components (B_x, B_y, B_z)



Six is the Number of Special Relativity – Revealed by the Hand of Progressive Revelation

In 1905, Albert Einstein discovered that the six components of EM are asymmetric with regard to the velocity of an observer. The six electric and magnetic fields are not independent of one another. From this, Einstein deduced the Theory of Special Relativity. Special Relativity unveils physical behaviors such as the nature of Spacetime, time-dilation, and space contraction. Likewise, from this Einstein deduced his famous equation of the relationship between mass and energy: $E = mc^2$.

The Symmetry of Spacetime (Six Lorentz Generators) and General Relativity

The Lorentz group (the set of all rotations and boosts in special relativity) also has six generators: 3 spatial rotations (around x, y, z) and 3 boosts (changes of velocity along x, y, z)

Einstein's Special Theory of Relativity led to his General Theory, which gives deep insights into the Riemannian curved spacetime of gravity, black holes, and the structure of the Universe as a whole.

- General Relativity and basic processes suggest a model of the universe with six core parameters.

There are Six Fundamental Units for Measurement in Science

The modern SI system defines 6 directly used units in most classical physics applications:

- Meter (length)
- Kilogram (mass)
- Second (time)
- Ampere (electric current)
- Kelvin (temperature)
- Mole (amount of substance)

The First Perfect Number

Six is the first "perfect number" because its divisors (1, 2, 3) add up to itself ($1 + 2 + 3 = 6$).

The Greek mathematician Euclid first defined and labeled the number six as a perfect number around 300 BC in his classic work, *Elements*. Euclid is often referred to as the "Father of Geometry."

Observations and Conclusions

The Beginnings and Purpose of My Career in Physics

The number six marks the beginning of my career as a Physicist. I started working on the Apollo Space Program as an analyst on 6-16-66. Only the Lord can arrange gifts, abilities, dispositions, and purpose.

Are all these hexads just a result of chance?

Nonbelievers may think that these hexads (a group of six) in creation result by chance alone. But, the probability of getting all of these hexads by chance is much smaller than one in 100 billion.

There is something special about the number six in nature. Genesis 1: Six symbolizes created order. God gives us evidence of the working of His hand (invisible attributes) in the laws and wonders of nature.

Project Word Light <https://WordLight.org/Moses Sixes.pdf>