

The Big Bang

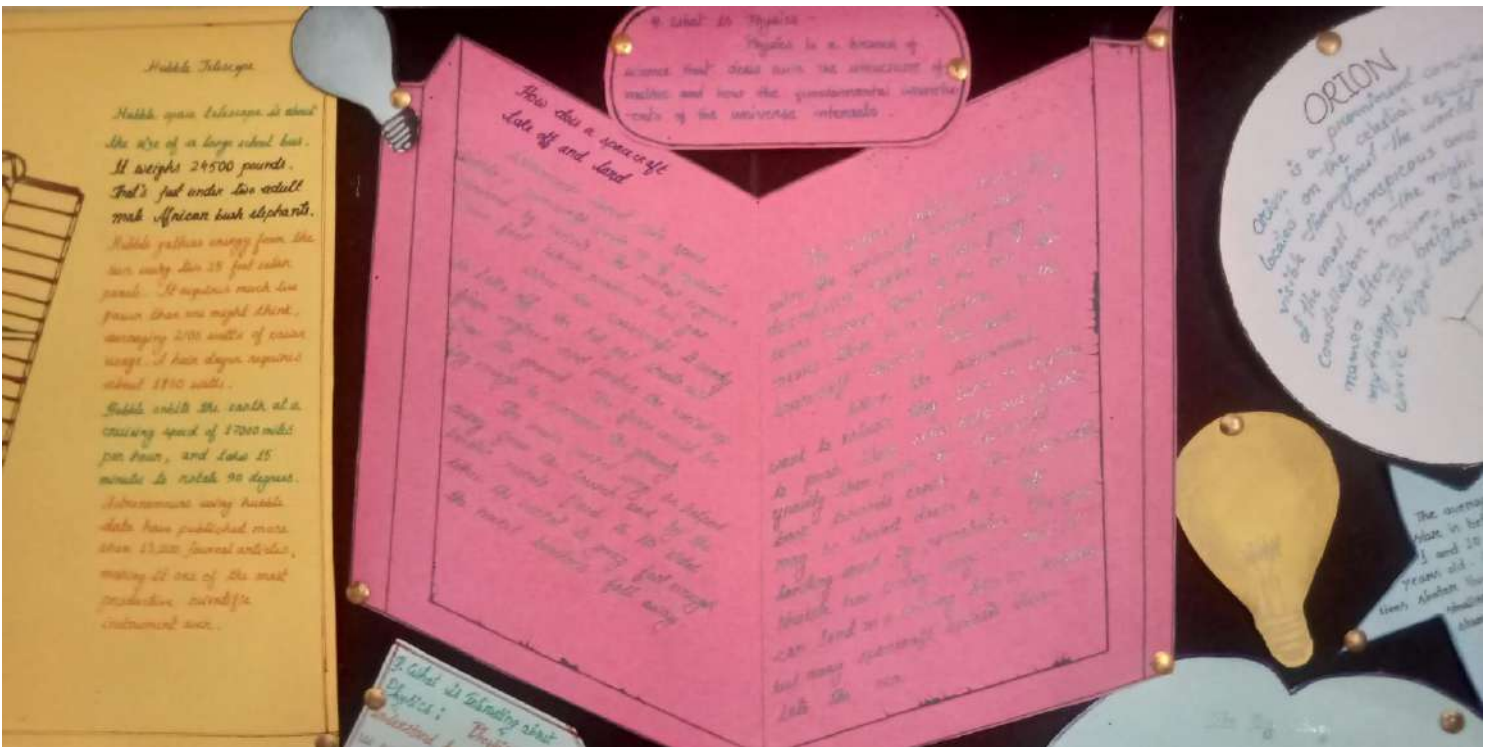
The big bang is how astronomers explain the way the universe began. It is the idea that the universe began as just a single point, then expanded and stretched to grow as large as it is right now and it is still stretching! And the name of the astronomer is Georges Lemaitre.

When the universe began, it was just hot big particles mixed with light and energy. It was nothing like what we see now. As everything expanded and took up more space, it cooled down.

The big particles jumped together. They formed atoms. Then those atoms grouped together. Over lots of time, atoms came together to form stars and galaxies.

The first atoms created bigger atoms and groups of atoms. That led to more stars being born. At the same time, galaxies were crashing and grouping together. In new stars are being born and dying, then things like asteroids, comets, planets and black holes formed. That's pretty much how the universe began and it is 13.8 billion years old.

Tom of
Mikala's
Inventions...



Hubble Telescope

Hubble space telescope is about the size of a large school bus. It weighs 24500 pounds. It's put under two solid mah African bush elephants. Hubble gathers energy from the sun only two 25 foot solar panels. It requires much less power than we might think, averaging 200 watts of power usage. A hair dryer requires about 1100 watts. Hubble orbits the earth at a cruising speed of 17000 miles per hour, and takes 96 minutes to rotate 90 degrees. Astronomers using Hubble data have published more than 13,000 journal articles, making it one of the most productive scientific instruments ever.



Q. What is Physics -
Physics is a branch of science that deals with the structure of matter and how the fundamental particles work of the universe interact.

How does a spacecraft take off and land

When a spacecraft is launched, it is first lifted by a rocket. The rocket engine produces a large amount of thrust, which propels the spacecraft upwards. As the spacecraft ascends, it must overcome the force of gravity. Once it reaches a certain altitude, the rocket engine is shut off, and the spacecraft enters a free-fall trajectory. To land, the spacecraft must first slow down its descent. This is typically done by using a parachute or a retro-thrust engine. Once the spacecraft is close to the ground, it must be able to land safely. This is often done by using a landing gear or a soft-landing system.

Q. What is Quantum Physics?
Quantum physics is the study of the behavior of matter and energy at the atomic and subatomic level.

ORION
Orion is a prominent constellation located on the celestial equator of the night sky. It is one of the most conspicuous and prominent constellations in the night sky. Orion is the brightest constellation in the night sky.



The constellation Orion is the largest constellation in the night sky. It is one of the most prominent constellations in the night sky.

How does rainbow form

Sometimes after rain we see rainbow in the sky and it looks spectacular, doesn't it ?

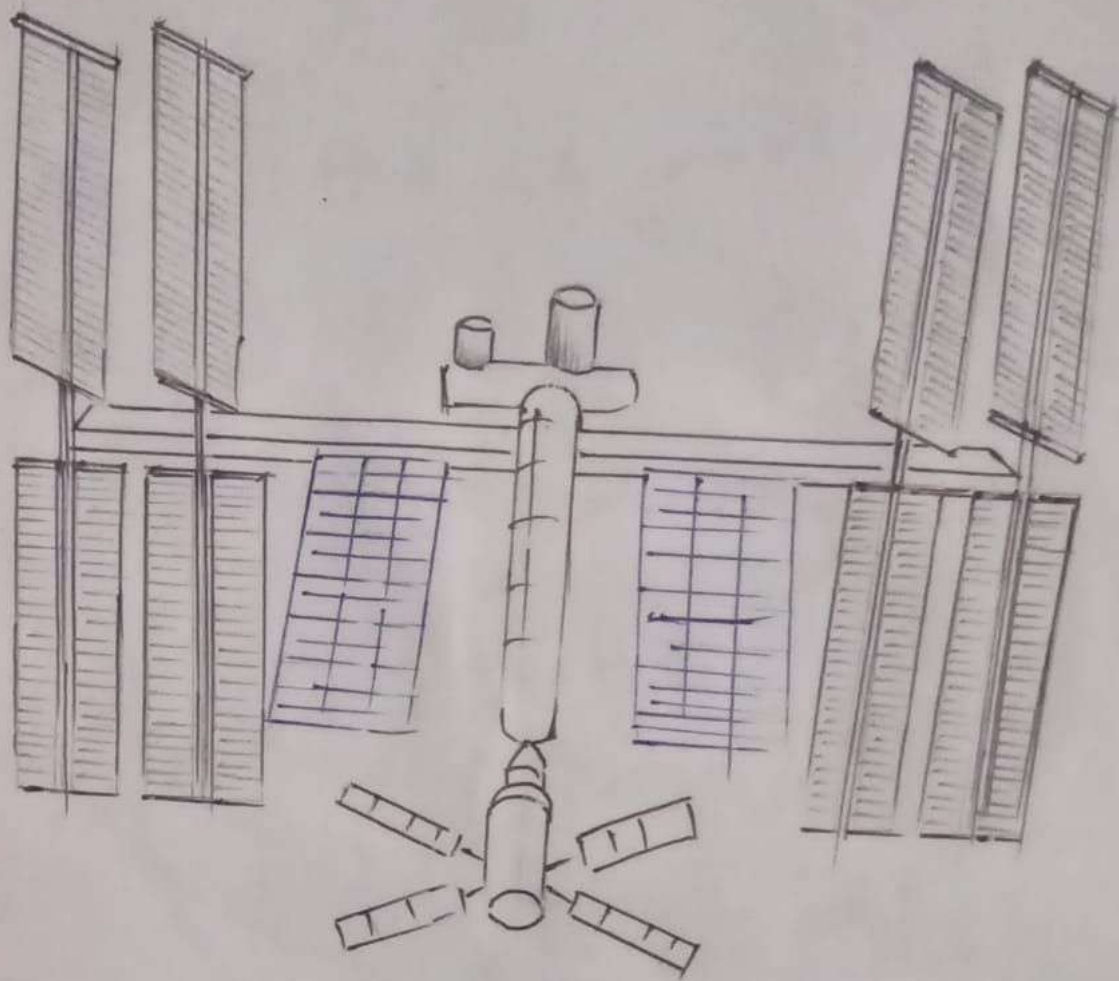
Do we all know how a rainbow is formed ?

A rainbow is formed due to the phenomenon of "dispersion of light".

When a glass prism is placed in the path of a narrow beam of white light, it gets dispersed into its seven colours at different angles. All these colours are arranged according to their wavelengths. The colours are - Violet, Indigo, Blue, Green, Yellow, Orange and red from down to up. This shows that white colour is a pack of seven colours. This phenomenon is first described by Sir Isaac Newton.

A rainbow is generally formed when the sun appears just after it has rained. At this time many water droplets are present at the air. When the sunlight passes through water droplets in the atmosphere each water droplet acts like a small prism and refracts the sunlight as soon as the sunlight enters into the prism that is the water droplets it splits into its constituent 7 colours VIBGYOR. Within the drop when this band strikes the other edge of the drop it gets reflected internally towards the 1st edge of the drop and reaches the 1st edge it gets refracted again and finally comes out of the raindrops. This band of colours which finally comes out of the raindrops which we see as rainbow. A rainbow is always formed in the opposite direction of sun. Thus the appearance of rainbow in the sky is due to the dispersion of sunlight by the water droplets present at the atmosphere.

International space station



Station Statistics :-

Launch: 20 November 1998.

Mass: 444,615 Kg

Length: 73.0 m (239.4 ft)

Width: 109.0 m (357.5 ft)

Orbital speed: 7.66 Km/s (27600 Km/h)

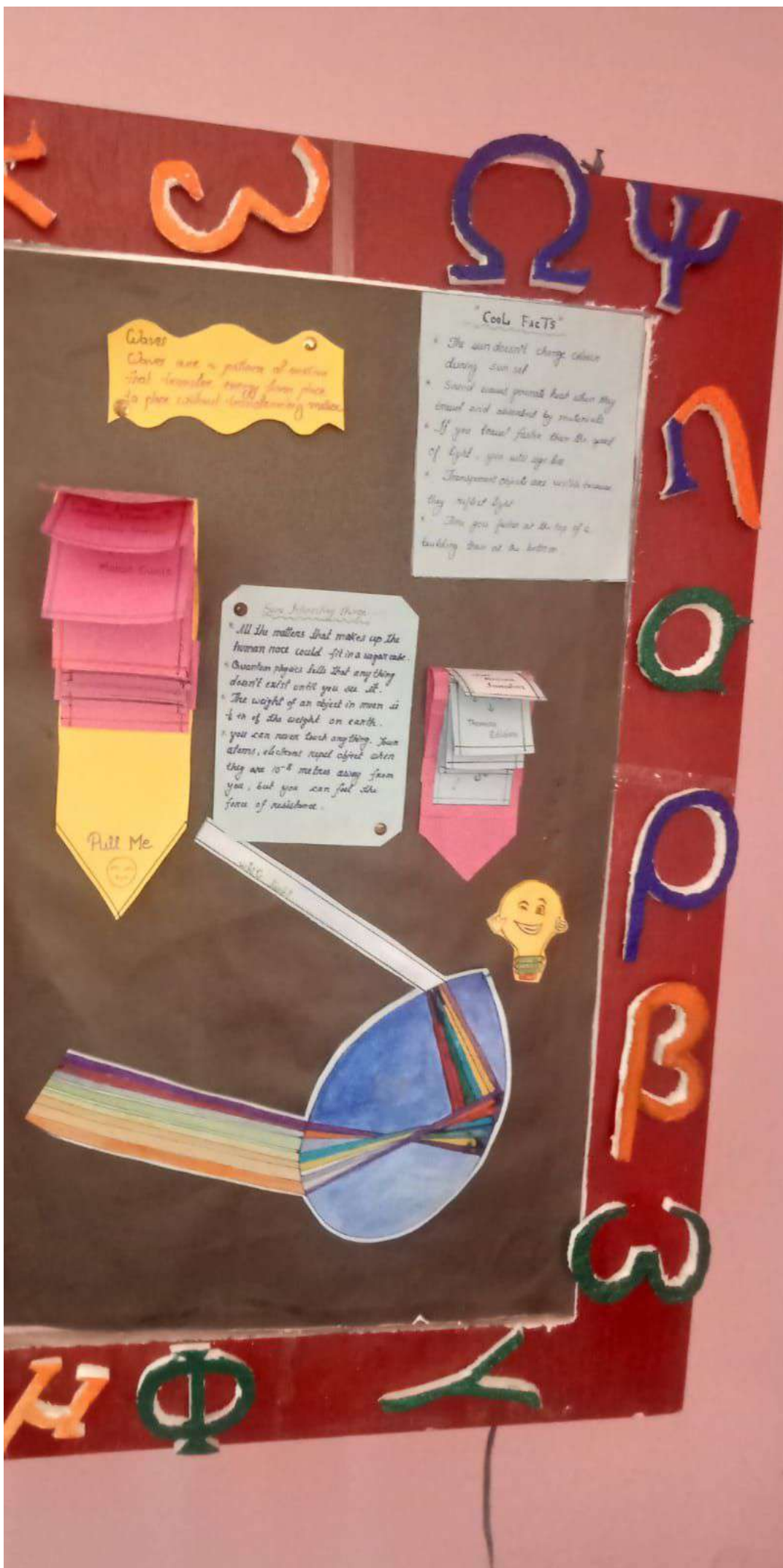
Orbital period: 92.68 minutes

Orbits per day: 15.49

International Space Station (ISS)

The International Space Station (ISS) is a modular space station (habitable artificial satellite) in low earth orbit. It is a multinational collaborative project involving five participating space agencies: NASA (United States), Roscosmos (Russia), JAXA (Japan), ESA (Europe) and CSA (Canada). The station serves as a microgravity and space environment research laboratory in which scientific research is conducted in astrobology, astronomy, meteorology, physics and other fields.

The ISS is suited for testing the spacecraft systems and equipment required for possible future long duration mission to the moon and Mars.



Colors
Colors are a pattern of waves that transfer energy from place to place without transferring matter.

"Cool Facts"

- The sun doesn't change color during sun set
- Sound cannot provide heat when they travel and absorbed by materials
- If you travel faster than the speed of light, you will age less
- Transparent objects are visible because they reflect light
- The air you feel at the top of a building than at the bottom.

Some Interesting Things

- All the matter that makes up the human race could fit in a sugar cube.
- Quantum physics tells that anything doesn't exist until you see it.
- The weight of an object in space is 1/4 of its weight on earth.
- you can never touch anything, two atoms, electrons repel objects when they are 10^{-8} meters away from you, but you can feel the force of resistance.

Make a stack of sticky notes with a pink top and a yellow bottom. The yellow part has the text "Pull Me" and a smiley face.

Another stack of sticky notes with a pink top and a yellow bottom.



A vertical column of Greek letters on the right side of the board: Gamma, Psi, Omega, Phi, Chi, and Eta.

A horizontal row of Greek letters at the bottom of the board: Chi, Phi, and Eta.

a pattern of motion
energy from place
not understanding matter

"Cool Facts"

- * The sun doesn't change colour during sun set.
- * Sound waves generate heat when they travel and absorbed by materials.
- * If you travel faster than the speed of light, you will age less.
- * Transparent objects are visible because they reflect light.
- * Time goes faster at the top of a building than at the bottom.

Some Interesting things.....

- * All the matters that makes up the human nose could fit in a sugar cube.
- * Quantum physics tells that anything doesn't exist until you see it.
- * The weight of an object in moon is $\frac{1}{6}$ th of the weight on earth.
- * you can never touch anything. Your atoms, electrons repel object when they are 10^{-8} metres away from you, but you can feel the force of resistance.



ORION

Orion is a prominent constellation located on the celestial equator and visible throughout the world. It is one of the most conspicuous and recognizable constellations in the night sky. It is named after Orion, a hunter in Greek mythology. Its brightest stars are blue-white Rigel and red Betgeuse.



How X-ray machine works

The machine emits a heavy and concentrated beam of electrons called x-ray photons. The photons pass through the mass and interact with the body and its tissues and produce an image on a metal film. The latent image energy is converted to electrons by a light source for the film and...



The average between

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