

A New Discovery Claim:

SATELLITE MOON

Conclusion based over discovered materialistic properties of the rays and true states of the matter confirms that Moon was a small planet behind the young Earth. On close approach at critical gravity attraction point between the two (small planet Moon and young Earth) small planet Moon derailed from the orbit around the Sun to orbit around the Earth. The said phenomenon shifted small planet Moon from the category of the planet to satellite of the Earth.

Planet Earth and planet Moon both have rotational direction as that of the Sun but Venus is/was rotating in the reverse direction. Moon while orbiting around the Earth, whenever came in alignment with the Venus; Venus attempted to reverse rotational direction of the satellite Moon in its own reverse direction by its materialistic particles curved rays. The said phenomenon at repeated encounters gradually resulted to stop rotation of the satellite Moon with the result denser core of the Moon went eccentric by the gravity of the Earth to permanently lock rotation of the Moon resulting to face its one side forever towards the Earth.

Almost all riddles and mysteries related to the Moon have been solved by correctly understanding materialistic properties of the rays and true states of the matter.

World by not knowing materialistic properties of the rays correctly and true states of the matter has not been able to know correctly most of the phenomena of the Moon and thus have wrong and false information.

Note:Chapter over the Moon is not an encyclopedia. Challenger has only illustrated what relates to the new or contrary findings/understandings with some existing references to make the subject understandable.

Chapter over the Moon has answers to the following queries (riddles and mysteries):

1. How the Earth got its Moon?
2. Why orbital plane of the Moon does not coincide with the equatorial plane of the Earth?
3. One sixth gravity attraction of the Moon than the Earth over the ocean water forms high tides; if the Moon had deep ocean like the Earth has; how much high tide would have been over the Moon by the Earth's Gravity?
4. (a) Why are the volcanic eruptions and maria over the Moon concentrated on the side near to the Earth or facing the Earth?
(b) Why meteors which strike over the Moon have some pattern according to their sizes?
5. What causes mysterious quakes that vibrate through lunar rocks over the side of the Moon which is away from the Earth?
6. Why the Moon always faces the same side towards the Earth?
7. Why the Moon is closer to the Earth when it is closer to the Sun and farther away when away from the Sun?
8. Is the Moon moving away from the Earth?
9. Fate of the Moon forecasted that how and when Earth would engulf it (Moon)?
10. Does Moon have water; if so from where did it get water?
11. Mean density of the satellite Moon: it requires re-check because of ignored thrust factor by the materialistic particle rays of the Sun, planet and the satellite while calculating mean density of the Moon based over known planetary laws.
12. What relation the Moon has for twelve months in a year and seven days in a week?
13. How the Moon on becoming a satellite of the Earth tilted the axis of the Earth?
14. Does Moon have any linking to formation of life and extinction of species over the Earth?

1. How the Earth got its Moon?

What the World understands?

From Internet dated 26/03/2018
 Website: <https://starchild.gsfc.nasa.gov/docs/StarChild/questions/question38.html>

How Earth got its moon

.....Various theories had been proposed for the formation of the Moon. Below these theories are listed along with the reasons they have since been discounted.

The Fission Theory: This theory proposes that the Moon was once part of the Earth and somehow separated from the Earth early in the history of the solar system.....

The Capture Theory: This theory proposes that the Moon was formed somewhere else in the solar system, and was later captured by the gravitational field of the Earth. The Moon's different chemical composition could be explained if it formed elsewhere in the solar system, however, capture into the Moon's present orbit is very improbable. Something would have to slow it down by just the right amount at just the right time, and scientists are reluctant to believe in such "fine tuning". Also, this hypothesis does not have a natural explanation for the extra baking the lunar material has received.

The Condensation Theory: This theory proposes that the Moon and the Earth condensed individually from the nebula that formed the solar system, with the Moon formed in orbit around the Earth....

The Giant Impactor Theory (sometimes called The Ejected Ring Theory): This theory proposes that a planetesimal (or small planet) the size of Mars struck the Earth just after the formation of the solar system, ejecting large volumes of heated material from the outer layers of both objects. A disk of orbiting material was formed, and this matter eventually stuck together to form the Moon in orbit around the Earth.....

From Internet dated 26/03/2018
 Website: https://www.sciencenews.org/sites/default/files/2017/04/main/SNHS_Earth_Moon_Full_Guide.pdf

How Earth Got its Moon

The article "How Earth got its moon" describes theories of how the Earth's moon formed. Did it form as the result of a collision with a large protoplanet called Theia, or did multiple impacts create many mini moons that then merged over time? Computer modeling and isotopic analyses provide some data used to support or refute current theories. Scientists are still searching for other moon formation ideas and ways to test them.

From Internet dated 26/03/2018
 Website: <https://www.sciencenewsforstudents.org/article/how-earth-got-its-moon>

How Earth got its moon

The story of our moon's origin does not add up. Most scientists think that that the moon formed in the earliest days of our solar system. That would have been back around 4.5 billion years ago. At that time, some scientists suspect, a Mars-sized rocky object — what they call a protoplanet — smacked into the young Earth. This collision would have sent debris from both worlds hurling into orbit. Some of the rubble eventually would have stuck together, creating our moon.....

Newspaper: The Tribune, Chandigarh (India) dated 31. 01. 2010

LONDON: Contradicting the commonly held theory that moon is a chunk of rock that broke away from Earth due to an explosion in space, a new study has claimed it was created as a result of a nuclear blast on the surface of the planet itself. According to the study, if the moon had been separated from the Earth by an impacting eternal force, it would be composed of whatever knocked into it and the planet. But lunar samples show that the moon is almost identical in chemical composition to the Earth—suggesting there was no impactor involved.--PTI

Discoverer and the Challenger:

The Moon in the early history was a small planet following the small young earth. Both gained mass by adding mass of the asteroids which were in front of them, like now planet Jupiter has in the form of asteroid belt. By the addition of mass, Moon approached faster than the Earth towards the Sun with the result planet Moon came closer to the Earth at critical gravity attraction. Gravity of the Earth pulled the Moon to orbit around it by derailing it from the orbit of the Sun. From that moment planet Moon has migrated to the category of a satellite with the Earth.

Explanation by the Challenger:

Before any proper explanation under **PART-B** that how the Earth got its Moon; Challenger would like to state under **PART-A** something about (i) Why do the Scientists/Astronomers had rejected 'Capture hypotheses' and adopted 'Giant impact hypotheses to understand that how the Earth got its Moon and (ii) Where did the Scientists do the mistake under 'Capture hypotheses?

PART-A

Astronomers and Scientists from centuries are struggling hard to know that how the Earth got its Moon. There are numbers of theories, hypotheses, postulations and speculations like, giant impact hypotheses, Fission theory, Accretion hypotheses and so many others that need no explanation. Presently 'giant impact' hypotheses is being widely accepted among the Scientists (which is absolute wrong and false as concluded by the Challenger). There is no need of explanation over here about any of those hypotheses or theory; please read it over the Internet or in the books related to the subject.

(i) Why do the Scientists/Astronomers have rejected 'Capture hypotheses' and adopted 'Giant impact hypotheses' to understand that how the Earth got its Moon?

Bad luck with the Scientists:

Scientists came closer to understand that how the Earth got its Moon but because of their mind-set over the factor 'collisions' that collision is the prime phenomenon for them to conclude reason behind most of the phenomena, though truly it is not so. Further, Scientists have not yet correctly understood about the formation and working mechanism of the solar system thus they remained at bay from understanding, though they came closer to the fact under the 'capture hypotheses'. Some information below has been exhibited, which has been taken from the Internet and that would reveal that how they missed the target. Their understanding exhibited below would put a stamp over the discovery claim claimed by the Challenger that Moon was a planet following the Earth, which Earth has captured on its (Moon) approach nearer to the Earth at critical distance.

From Internet dated 12/04/2018
Website: https://en.wikipedia.org/wiki/Origin_of_the_Moon

Origin of the Moon

Capture hypotheses

This hypothesis states that the Moon was captured by the Earth. This was popular until the 1980s, and some things in favor of this model include the Moon's size, orbit, and tidal locking.

One problem in understanding the capture mechanism. A close encounter with Earth typically results in either collision or altered trajectories. For this hypothesis to function, there might have been a large atmosphere around the primitive Earth, which would slow the movement of the Moon by natural aerobraking before it could escape. That hypothesis may also explain the irregular satellite orbits of Jupiter and Saturn. This hypothesis also has difficulty explaining the essentially identical oxygen isotope ratios of the two bodies.....

From Internet dated 12/04/2018
Website: <https://www.nature.com/news/puzzle-of-moon-s-origin-resolved-1.17279>

Puzzle of Moon's origin

Simulations show that Earth probably collided with an unnervingly similar sister planet to form our lunar neighbour.

.....Since lunar and Earth rocks have such similar compositions, this suggests that Earth and the planet that smacked into it resembled each other too. They would have needed to be sister planets, with a relationship much closer than that of any other planetary bodies we have studied in our Solar System. The odds of this being possible were thought to be around a 1% chance, or "uncomfortably rare",.....

The planets would have closely resembled each other because of their similar distance from the Sun, meaning that they would have formed from the same kind of orbiting proto-planetary material. "The Earth and the Moon are not twins born from the same planet, but they are sisters in the sense that they grew up in the same environment," says Perets.....

From 'Astronomy' magazine July, 2012

New origin story? A study of lunar samples, such as this one brought back on the Apollo 17 mission in 1972, suggests that the current lunar formation hypothesis is wrong.

Lunar formation idea may be wrong

The long-answered question of lunar formation might need revisiting. The scientific consensus is that a nascent Earth collided with a Mars-sized object billions of years ago, creating the Moon as we know it. However, a new analysis of Moon rocks gathered during the Apollo missions of the 1970s shows a majority of our satellite's material came from early Earth, in contradiction with the established hypothesis. Details appeared in a Nature Geo-science paper published online March 25.

"Just like in humans, the Moon would have inherited some of the material from the Earth and some of the material from the impactor, approximately half and half", says co-author Nicolas Dauphas of the University of Chicago in Illinois. "What we found is that the child does not look any different compared to the Earth. It's a child with only one parent, as far as we can tell.".....

.....Other ideas about lunar formation exist but none is problem-free, leaving the issue an open question for now. "We thought we knew what the Moon was made of and how it formed", says Dauphas. "Even 40 years after Apollo there is still a lot of Science to do with those samples."

From Internet

Oxygen isotope factor: Moon and Earth, both have exactly the same oxygen isotopes. Planet Mars rocks and meteorites have different oxygen isotope composition. This suggests that Moon has been formed from the material of Earth's neighborhood.

Moon was a small planet behind the young Earth before being captured by the Earth to make its satellite. How Earth captured it, read under the **PART-B**.

(ii) Where did the Scientists do the mistake under 'Capture Hypotheses'?

From beginning era of the subject Astronomy; Astronomers and Scientists had/have attempted to understand most of the phenomena by the factor of 'collision' of a celestial body with the another; whereas for most of the phenomena; collision was/is not the factor behind. Mind-set developed for the 'factor of collision' has drifted the thought of the Scientists to 'giant impact hypotheses' than understanding the way, the Challenger has understood.

Scientists thought that if the Earth had to capture the fast moving Moon (like catching cricket ball); it (Earth) should have thick and vast atmosphere to slow down speed of the fast approaching Moon towards the Earth and also it should not have the aim to dash over the Earth but had to pass closely by the Earth to capture in its (Earth's) orbit. But such a combination is possible only one in billions of chances, thus the Scientists have rejected the 'Capture Hypotheses' and adopted the 'Giant impact hypotheses' (which is absolutely wrong and false).



PART-B

Moon was a small planet following the young Earth:

World does not know correctly the basics of Astronomy (discovered materialistic properties of the rays and true states of the matter) thus the Astronomers are finding the secrets of the Moon i.e., its origin by speculations.

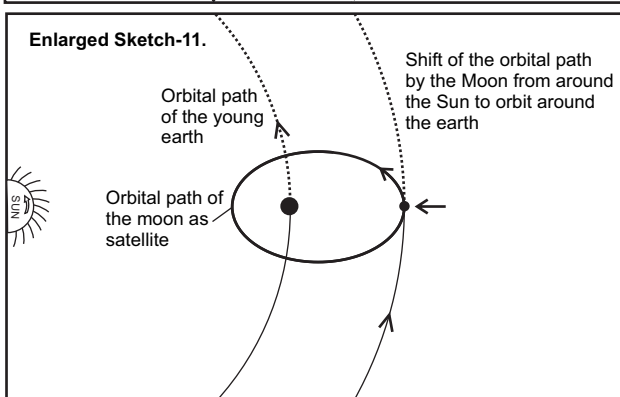
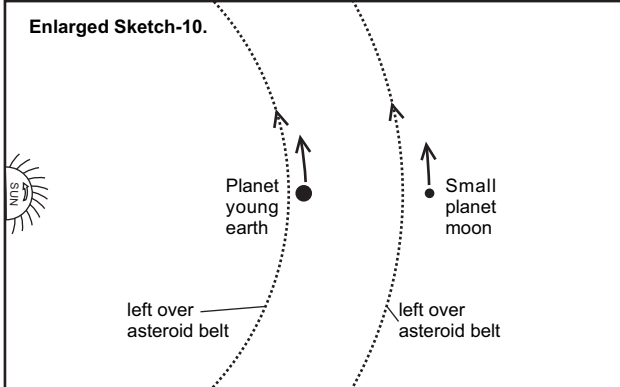
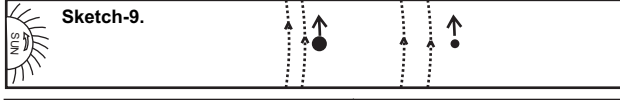
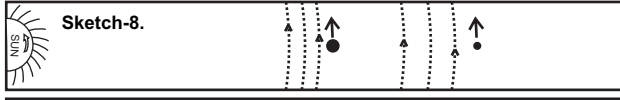
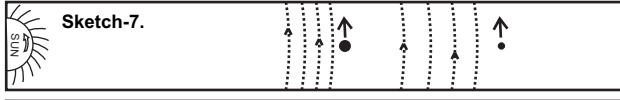
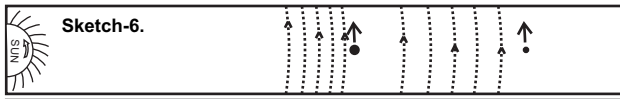
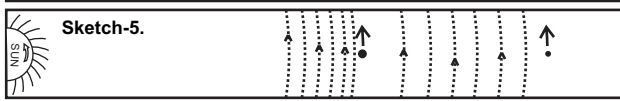
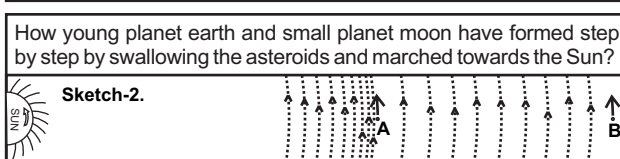
Moon has not been created by the collision of Earth with any Mars' sized planet or by the nuclear-blast or by the explosion of the Earth or by any other factor and it has not been captured as **wandering** object by the young Earth.

In early history of solar system both, the planet Moon and the young planet Earth were of smaller sizes, than the present and were far away from the Sun than the present location. Small planet Moon was following the young planet Earth. Both the planets have been formed from the mass (particles and asteroids) of the flat disc which existed around the protostar i.e., Sun prior to formation of the planets. Both the planets have almost similar composition because they have been formed from the mass of adjacent rings of the flat disc. (Sketches shown below from 1 to 9 show formation of the planets from the asteroids).

Scientists have not yet understood that planets gradually move towards the Sun by the addition of mass; though it is very simple thought/understanding. Because of a scientific fact that a following planet by the gravity factor and due to thrust from the materialistic particles curved rays of the Sun always moves faster towards the Sun (by the same quantum of addition of mass) than the planet which is ahead to it. The planet which is near to the Sun faces great magnitude of the thrust by the Sun rays as compared with the planet which is farther away from the Sun; by this said factor, small planet Moon on its move towards the Sun by the addition of mass, moved faster thus came closer to the young planet Earth slowly and slowly (bit by bit by the addition of mass bit by bit).

Said phenomenon resulted in shifting of the orbital track of the small planet Moon from the orbit around the Sun to the orbit around the young planet Earth by the high gravity of the young planet Earth, like shifting of a train engine from a line-track to another as shown below over the sketch Nos. 10 and 11.

Some flat rings of the orbiting asteroids have been shown below from where the two planets (young earth 'A' and small planet moon 'B') have originated their formation.



Conclusion:

Some facts discovered by the Scientists as exhibited earlier and below put a stamp over the discovery claim that satellite Moon was a planet following the Earth.

Lunar samples show that the Moon is almost identical in chemical composition to the Earth suggesting there was no impactor involved. (Moon and the Earth formed from the adjacent flat rings material which existed around the protostar. So, chemical composition of the Moon and the Earth is identical.)

2. Why orbital plane of the Moon does not coincide with the equatorial plane of the Earth?

World: World does not know the reason because it has not yet understood discovered materialistic properties of the rays and true states of the matter.

Challenger: Earth axis of spin is tilted over equatorial plane of the Sun. For the Moon; both the bodies i.e., Sun and the Earth are guiding its (Moon's) orbital plane by their materialistic particles curved rays besides some effect of the rays by the other planets/bodies. Because of this fact (rays' effect), orbital plane of the Moon does not exactly coincide with the equatorial plane of the Earth, it has to adopt its orbital plane as per the computed effect of the materialistic particles curved rays of the Sun and Earth in particular.

3. One sixth gravity attraction of the Moon than the Earth over the ocean water forms high tides; if the Moon had deep ocean like the Earth has; how much high tide would have been over the Moon by the Earth's Gravity?

World: World does not know the reason because it has not yet thought like this.

Challenger: It is not an absurd query; its understanding would result to understand deep rooted riddle/mystery over the volcanic eruptions that why they are concentrated over the side of the Moon which faces the Earth.

Gravity of the Moon is one-sixth than that of the Earth. If the Moon had deep ocean then six times high gravity of the Earth would have pulled the ocean water upward over the Moon $6 \times 6 = 36$ times higher than what the Moon is pulling ocean water over the Earth.

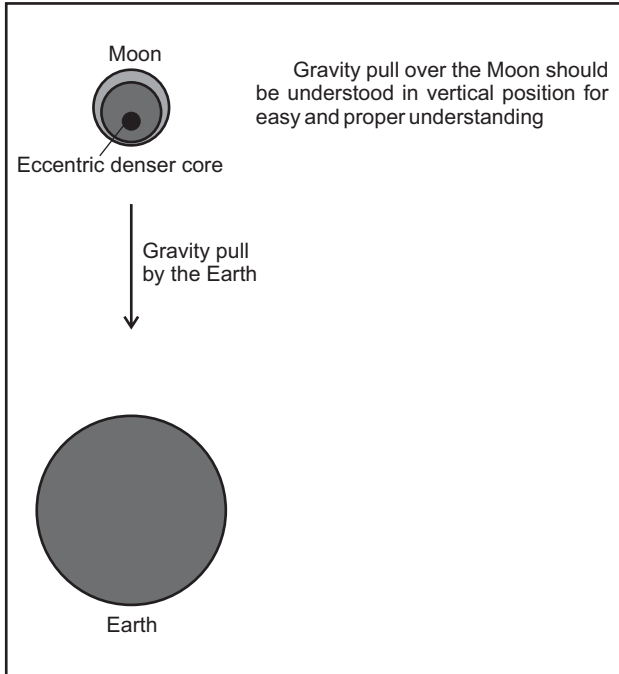
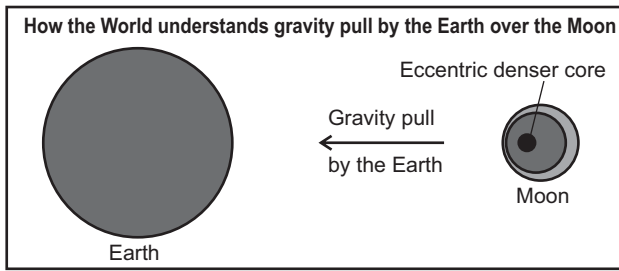
Keep the stated factor in mind to understand next query (riddle/mystery) that why are the volcanic eruptions over the Moon concentrated on the side near to the Earth or facing the Earth?

4. (a) Why are the volcanic eruptions and maria over the Moon concentrated on the side near to the Earth or facing the Earth?

World: World does not know the reason because it has not yet understood discovered materialistic properties of the rays and true states of the matter.

Explanation by the Challenger:

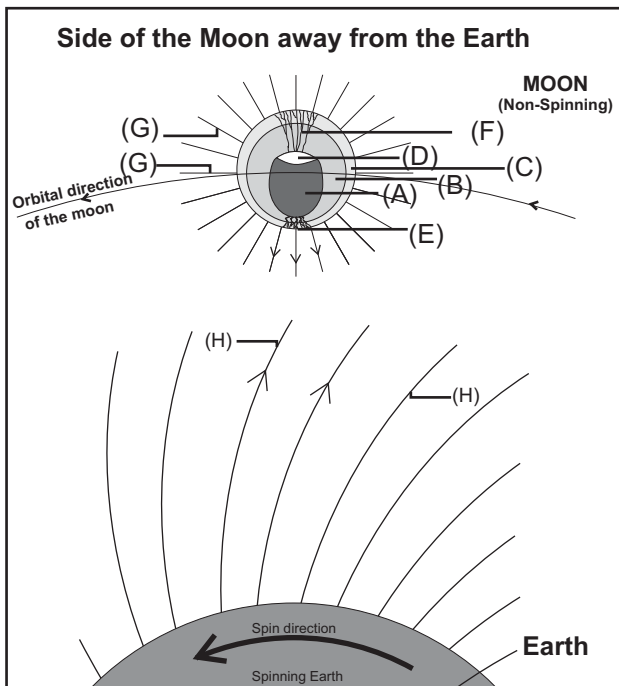
Note: Though we see the Moon upwards in our personal life but we have developed mind-set to understand Moon related phenomena by the gravity of the Earth over the paper or computer screen in horizontal position because layout of the solar system is being understood in horizontal position. So, to understand any phenomenon (riddle/mystery) related to the Moon based over the gravity factor of the Earth should be understood in vertical position. That is why sketches exhibited over here of the Moon in this chapter are in vertical position.



Volcanic eruptions over the Moon:

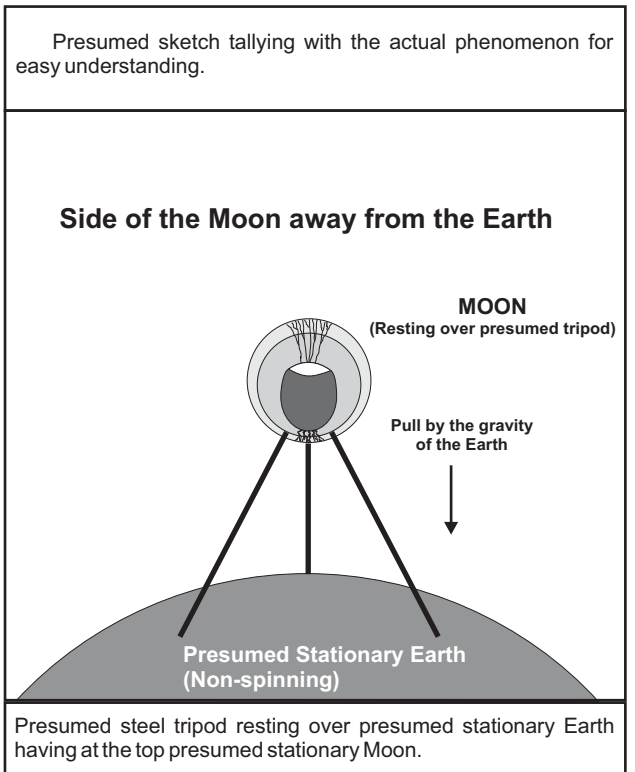
Understanding of the volcano eruptions over the Moon surface which faces the Earth:

This all is due to the fact that the Moon does not spin and Moon always keeps its same face towards the Earth and also Earth has great gravity pull as compared to the Moon.



- A-** Pear shaped (towards the Earth) semi-solid or semi molten dense core with dipped surface (away from the Earth).
- B-** Past era mantle.
- C-** Young mantle.
- D-** Pocket of hot gases under pressure.
- E-** Molten lava channels (towards the Earth) and lava sucked (pulled) by high gravity pull of the Earth when Moon core was perfectly molten and was at the centre of the Moon just when it was captured.
- F-** Channels of hot gases and gases escaping under pressure causing vibrations to rocks and quakes over the side of the Moon which is away from Earth.
- G-** Materialistic particles rays of the Moon (straight rays because Moon does not rotate).
- H-** Materialistic particles curved rays of the rotating Earth.

The following explanation is understandable by the presumed sketch exhibited below:



Phenomenon of volcanic eruptions was/is very easy to understand, but the Challenger is surprised that why this simple gravity related effect could not be understood by the World. (Said phenomenon is due to the factor that Moon does not rotate and always keeps its same face toward the Earth and gravity of the Earth is six times higher than that of the Moon).

Presume that our Earth is stationary (not rotating nor orbiting). Further presume that we have developed a device by which we can regulate the gravity of the Earth from zero to existing.

Now presume that we have placed a replica body of the Moon named Mooni over the Earth. Now we have lifted the Mooni to a height with support of steel structure in the form of a tripod. The Mooni has a molten core. Said molten core due to hot gases is exerting pressure in the shell; pressure is over the walls of the shell of the body Mooni.

Because we have reduced the gravity of our Earth to zero, so the pressure of the molten core mass inside the body Mooni would be towards all directions. Thus molten lava could come out from anywhere as per the shell structure, strength, thickness and cracks etc, where lava would find weakness.

Now enhance the gravity of the Earth to its originality. Gravity of the Earth would put a gravity (sucking/pull) effect over the molten lava to come out from the shell and from the side which is facing the Earth. Lava would come out like water from the leaking ceiling. Gravity-sucking/pulling effect would be greater if the fluid is of high density material besides highly molten. Lava is always composed of denser substances, so lava in the body would bear more Earth's gravity effect besides pressure of hot gases over the lava but inside the core. (Water can come out easily because of low viscosity than lava, but gravity (pulling) effects would be more over the lava surface than the water). In addition to pressure of gases over the lava, it is the pull or the earth's gravity which is putting a great pulling effect over the lava to pull it out from the mantle of the Moon, thus almost all volcano eruptions are over the side which is facing the Earth. Had the Moon been rotating, nothing like this would have happened.

Note: If gravity of the Moon (which is 1/6th of the Earth) can pull ocean water to cause tides over the Earth; then imagine how much force the Earth gravity has to pull (or suck out) lava from the mantle/core of the Moon to cause volcano eruptions (or bleeding with lava over the surface of the Moon). Earth would pull molten lava from the Moon with 6x6=36 times greater gravity pull than the pull by the Moon over the Earth's ocean as already stated above.

Impact of the meteors would have helped the lava to come out easily by creating cracks:

Author/Challenger had observed that whenever a meteor or some big sized object had/has its impact over the Moon, meteor created crater and produced vibrations resulting in some cracks. These cracks opened the way for the lava to come out easily. Molten lava is always under the pull of the Earth's gravity and under the pressure of gases from the top and thus lava always finding a chance to come out, so the lava has filled these already formed craters.

(b) Why meteors which strike over the Moon have some pattern according to their sizes?

Maria over the Moon:

From Internet dated 12/04/2018
 Website: https://astronomy.stackexchange.com/questions/1850/why-are-most-lunar-maria-on-the-visible-side?utm_medium=organic&utm_source=google_rich_qa&utm_campaign=google_rich_qa

Why are most lunar maria on the visible side?

Is there any reason why the Earth side of the Moon has enormous plains and mountains, while the far side contains just few small ones inside largest craters?
 The two hemispheres have distinctly different appearances, with the near side covered in multiple, large maria.....
 The far side has a battered, densely cratered appearance with few maria.....
 One commonly accepted explanation for this difference is related to a higher concentration of heat-producing elements on the near-side hemisphere.....While other factors such as surface elevation and crustal thickness could also affect where basalts erupt.....
 It has also been proposed that the differences between the two hemispheres may have been caused by a collision with a smaller companion moon.....
 From space craft orbiting the moon, it has been found that the centre of mass of the moon is displaced toward Earth. An explanation of seas distribution states that lunar core, aesthenosphere and the mantle is off-centre, whereas the crust is not — so the crust is thicker on the far side (see figure). Thus the basalt would reach the surface more easily on the near side due to thinner crust (to 60 km near side, 100 km far) than on the far side....

.....
 So it's not the case that the near side has more maria because it's the near side. Rather, it's the near side because it has more maria (and because of the mass concentrations associated with the maria).....

From Internet April 2008

Mare (plural maria) means "sea", but maria on the Moon are plains on the moon.....
 Maria are concentrated on the side of the moon that faces the Earth; the far side has very few of these plains, Scientists don't know why this is so.

There are two types of terrain on the Moon which faces the Earth.

- The heavily cratered and very old bright 'Highlands'.
- The relatively smooth and younger "Maria". The dark and relatively featureless lunar plains which can clearly be seen with the naked eye are called maria. The maria comprises about 16 percent of the Moon surface. It has huge impact craters that were later flooded by molten lava. Most of the maria surface is covered with 'regolith'. The regolith is a mixture of fine dust and rocky debris produced by the meteor impacts.

World does not know the reason because it has not yet understood discovered materialistic properties of the rays and true states of the matter.

Challenger:

World does not know that why maria over the Moon are concentrated on the side near to the Earth, because World has not understood materialistic rays (white-matter) and some other observations. Author has observed the reason and his explanation is as under:

Craters which were existing over the planet Moon; on becoming satellite of the Earth filled with molten Lava. Later these were filled with fine dust and rocks etc.

(b) Why meteors which strike the Moon had some pattern according to their sizes?

Author had observed that the pattern of strike by meteors over the Moon surface is the computing result of the following factors:

- Moon is not too far away from the Earth.
- Difference in their sizes thus difference in their gravity is great.
- Moon does not spin, it always keeps the same face towards the Earth.
- Moon emits/radiates very less materialistic particles rays as compared to the Earth.
- Striking meteors/particles, Moon and Earth all the three were/ are in almost one plane of the solar system.
- Further, destination of strike by the meteor(s) depends upon the location of meteor (when meteor moved to hit the Moon surface) and position of Moon and Earth. This also depends upon the size (surface area), density, distance and speed on its (meteors) approach near to the Moon.

(Inow consider a very big meteor approaching towards these two bodies (Moon and Earth). On its approach near the Moon, Earth will not be able to expel it by the thrust of its materialistic particles curved rays, but due to its greater gravity, Earth may pull it toward itself thus preventing its strike over the face of the Moon which is facing towards the Earth. But if meteor is coming from any direction and is near the Moon, it would be pulled by the Moon and the strike ite could be any except the side which the Moon is facing toward the Earth. If the impact over the Moon is at the site which is opposite to the side facing the Earth, impact would be with greatest force due to clubbed gravity magnitude of the Moon and the Earth in line to the impact direction. So, big impact or meteor strikes are over the surface of the Moon which is away from the Earth.

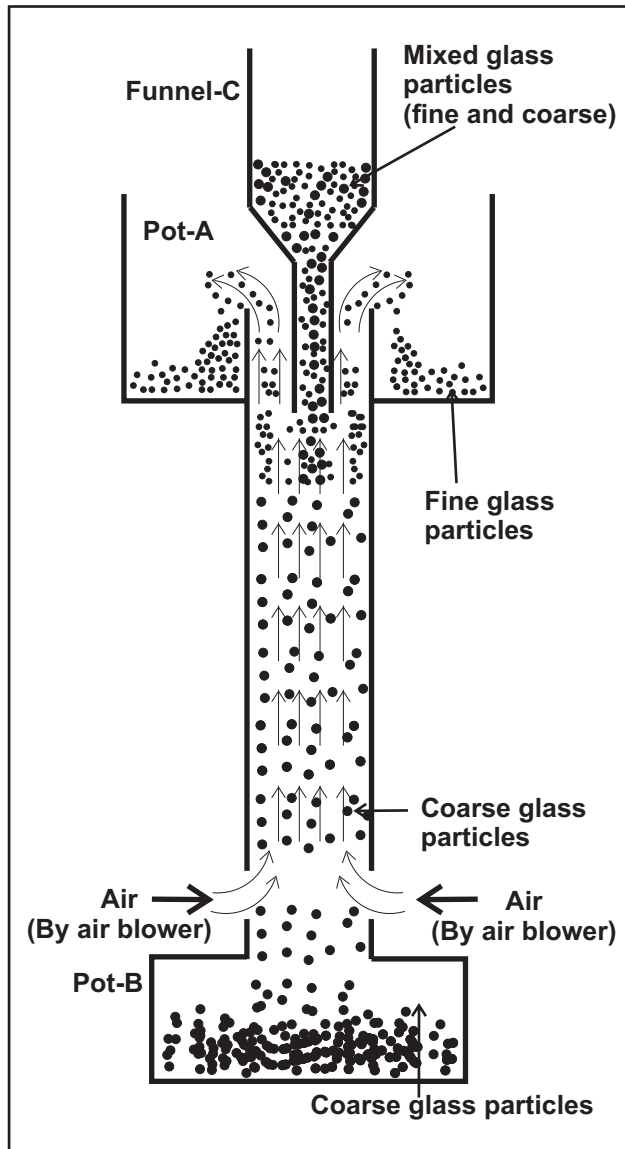
(ii) Any meteor of reasonable small sized can strike the Moon surface from any side. This all can be well observed and understood by understanding as stated below.

Meteor of reasonable small sized to fine dust can strike or settle over the surface of the Moon anywhere, or dust if comes in between the Earth and the Moon, strong materialistic particles curved rays of the Earth would thrust it towards the Moon because thrust by the materialistic particles curved rays of the Earth over small objects at some distance from the Earth, would be greater than the Earth's gravity, so these floating objects (small meteors and dust) would be directed towards the Moon. Moon's rays could not oppose much due

to its low thrust effect by its rays' intensity, so these small meteors and dust keep on striking and settling over the moon surface facing the Earth. Said phenomenon has created maria over the surface of the Moon and surface would be mostly which is facing the Earth.

Linking of above said fact that why fine dust over the Moon is towards the side which faces the Earth with a practical performed by the Challenger (during the year 1977) for manufacture of micro glass beads (spheres):

For the manufacture of micro glass beads fine crushed particles of the glass are required prior to converting them to spheres. Challenger washed powdered glass in the water to take out extremely fine powder which was sticking to the glass particles and separated the glass particles into two sizes (fine and coarse particles) by the air thrust separator as shown below over the sketch.



Air was thrust by the air-blower from below the vertical pipe through a number of big holes. Mixed glass particles were put in the funnel. Because of the thrust of the air, fine particles were pushed upward and collected in the pot (A) and the coarse (big particles) fell at the bottom and were collected in the pot (B).

But in the case of the Earth and the Moon; fine particles are being thrust by the Earth rays upward i.e., towards the Moon. Moon pulls these fine particles to settle over the surface which faces the Earth. But whereas particles/objects other than the fine particles the Earth rays cannot thrust towards the Moon thus are being pulled by the Earth.

5. What causes mysterious quakes that vibrate through lunar rocks over the side of the Moon which is away from the Earth?

From Newspaper, The Tribune Chandigarh, Nov. 2008

.....The existence of moon-quakes has puzzled scientists as the moon does not have the tectonic plate activity that cause quakes on the Earth.

The moon still holds an awful lot of secrets. Most of what we know about the Moon is from a relatively small area on the nearside of the Moon and we have no samples or data from the far side.....

From Internet dated 12/04/2018
 Website: <https://www.telegraph.co.uk/news/science/3501391/Brit-aims-first-mission-to-the-Moon-to-probe-mysterious-moonquakes.html>

Britain's first mission to the Moon to probe mysterious moonquakes

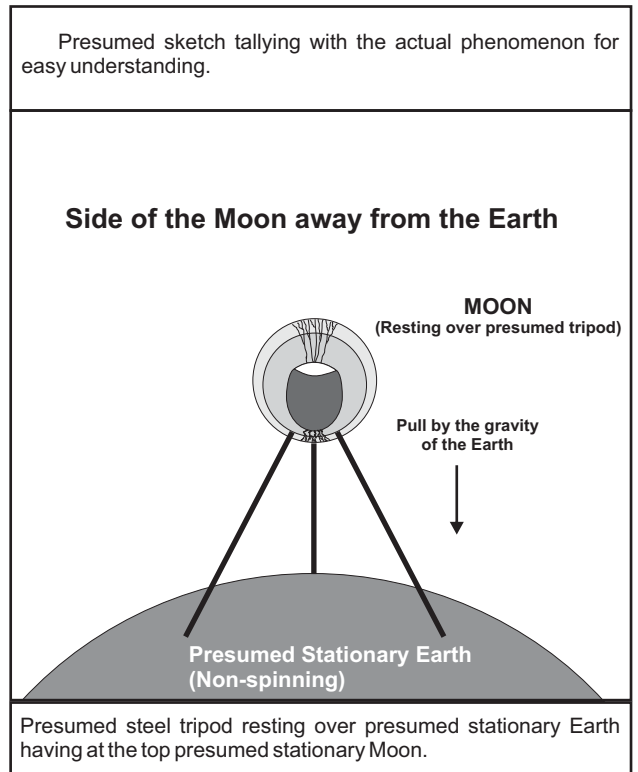
Britain is to launch its first mission to the Moon to try and understand the cause of mysterious quakes which vibrate through the lunar rock.....

Scientists hope to use the penetrators to examine the chemical composition of the rocks and even search for water if they are fired into the lunar poles.

The existence of Moonquakes has puzzled scientists because the Moon does not have the tectonic plate activity that causes quakes on the Earth.....

It was reported (2008) in newspaper that Britain is planning to send its space mission 'MoonLITE' with the aim to understand the said cause but the said cause is not under the purview of space missions/devices; it is only the human brain observation that can solve the said riddle.

Answer is similar to the answer that why volcano eruptions over the Moon are over the side which faces the Earth. Both the phenomena are co-related. Denser lava comes out from the Moon from the side which is facing the Earth but whereas lighter hot gases are escaping upwards from other side, which we are not seeing.



Moon is always keeping the same face towards the Earth. Further Moon is not very much far away from the Earth and gravity of the Earth is much more than that of the Moon (Six times greater than the Moon). Because of the said factor, situation of the Moon is like a body resting over the Earth but at some height.

Gravity of the Earth had/has pulled the semi-molten dense core of the Moon towards its side. Further constant gravity effect over the non-spinning Moon has pulled the core to make its half part slightly pear-shaped; other side might not be spherical but somewhat flat or dipped. This flat or dipped upper side (other side) of the dense-core would be having pocket of gases under pressure, which on their escape would be vibrating the deep-mantle/rocks to cause quakes over the Moon. Said phenomenon would be always towards the side which we cannot see from the Earth.



6. Why the Moon always faces the same side towards the Earth?

World:

From Internet dated 12/04/2018
 Website: <https://www.space.com/24871-does-the-moon-rotate.html>

Does the Moon Rotate?

.....
 The moon orbits the Earth once every 27.322 days. It also takes approximately 27 days for the moon to rotate once on its axis. As a result, the moon does not seem to be spinning but appears to observers from Earth to be keeping almost perfectly still. Scientists call this synchronous rotation.....

Challenger:

Most Scientists to skip away from the reality have understood that Moon has synchronized its rotation with the Earth to make one rotation in a synodic month (29.53 days); thus it keeps the same face towards the Earth. It is rubbish understanding to mislead the General Science Concerned. (Moon and the Earth are not live bodies, like human that if two people go for a walk together they would synchronize their walking speed.)

Further, World does not know the prime reason except understanding the secondary reason formed by the prime reason. Experts understand from the secondary reason that the Moon is not spinning because of the tidal friction formed by the Earth's gravity has stopped rotation and now gravity pull over its (Moon's) dense core has resulted to it being off the centre thus locking the spin forever and ever.

Tidal friction over the surface of the Moon by the Earth's gravity is not the cause which has stopped spin of the Moon. Experts consider so because they understand that the Moon was spinning in the past by the conservation of energy.

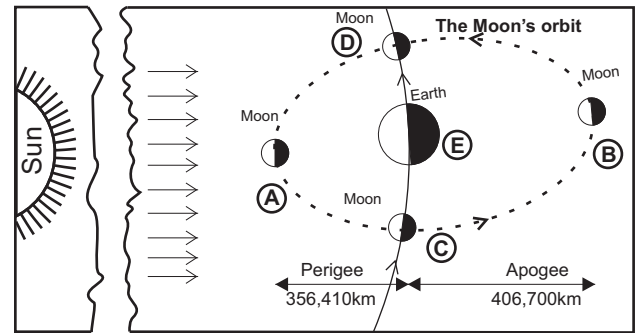
Explanation:

Small Moon was a planet following the young Earth. Both were rotating in the same direction as that of the Sun. They were rotating by their own materialistic particles curved rays and rays from the Sun. When the Earth adopted the Moon as its satellite; Moon got rotation by the materialistic particles curved rays of the Earth too. A moment came when satellite Moon came in between the Earth and the Venus at their alignment.

Venus rotates in the reverse direction; it attempted to rotate the Moon in its own direction by its materialistic particles curved rays. Moon with its feeble materialistic particles curved rays could not retain its rotation speed. By the numbers of such alignments; Moon has to stop its rotation. At stop of the rotation by the Moon; great gravity of the Earth pulled denser core of the Moon to make it eccentric, with the result Moon got permanent lock to rotation and forced to keep the same face towards the Earth.



7. Why the Moon is closer to the Earth when it is closer to the Sun and farther away when away from the Sun?



World:

World has measured that when Moon is closer to the Sun, it is closer to the Earth and when it is farthest from the Sun, it is further away from the Earth.

Author/Challenger:

Said phenomenon is due to thrust from materialistic particles curved rays of the Sun which puts thrust over the Moon to make its orbit eccentric to the Earth. This all results by the Sun rays to push the Moon towards the Earth when the Moon is in between the Sun and Earth and Sun-rays push the Moon away from the Earth when Moon is away from the Sun. Pushing/thrusting force over the Moon by the Sun rays is great than the push/thrust force by the Sun rays over the Earth because Moon is of smaller size than the Earth and also Moon has lesser mean density than the Earth. This factor besides some other factors results so.

Comparison of thrust magnitude of the materialistic particles curved rays of the Sun over the Moon and the Earth to understand orbit of the Moon:

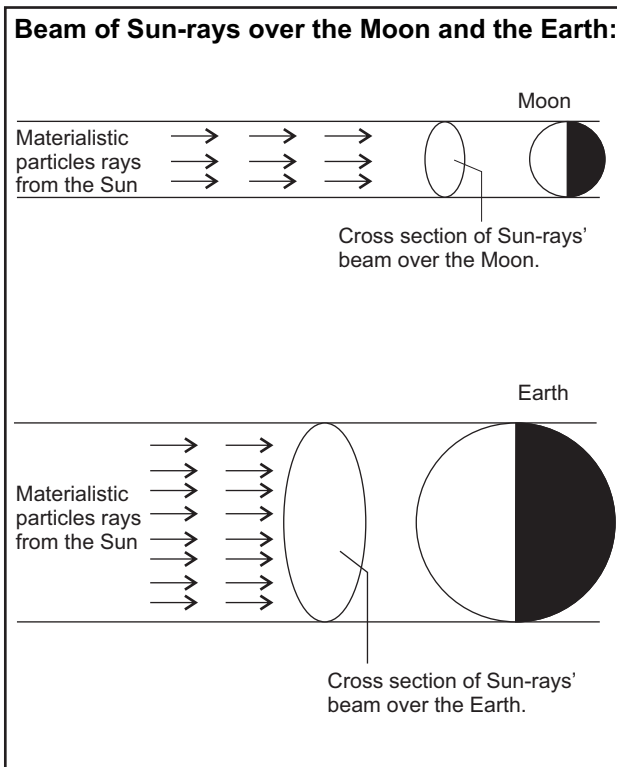
Note: For easy understanding in below stated explanation; repelling thrust by the rays of the Moon and the Earth has been ignored, only rays by the Sun has been taken into account.

Sun-rays give thrust/push to the Moon and the Earth in two directions; like foot-ball and also like a flick to ball by the hockey stick. Forward moving materialistic particles curved rays of the Sun give repelling thrust like foot-ball "(to keep the bodies away) but whereas the same Sun-rays because of emerging from the spinning-Sun give flick (push-thrust) to bodies like hockey stick (to provide move in the orbit).

Moon is small sized than the Earth and also Moon has low mean density than the Earth thus magnitude of the thrust by the Sun rays over the Moon would be greater than the Earth. If Moon is snatched from the Earth and put before the Sun in its (Sun's) orbit by keeping the Earth away from solar system; Moon would be far away and would be near to the Mars. And if the Moon is taken away by keeping the Earth in solar orbit; Earth would adopt slightly further bigger orbit because of its reduced mass (Moon is the part of Earth and Earth is the part of the Moon).

Greater thrust by the Sun rays over the Moon is due to the fact (surface area, mass, density ratio). This can be understood as stated below: (Here in brief and more explanation is under the relevant chapter over calculated mean densities of the planets).

Note: Diameter of the Moon and the Earth calculated by the World are correct; it is only the mean densities calculated of all the solar/celestial-bodies except the Earth are wrong because of ignored factor (Thrust and repelling force by the rays). But for comparison purpose that too only for comparison purpose between the two particular bodies i.e., the Moon and the Earth, wrong density calculated would pose no problem because Moon has lower mean density than the Earth in reality.



- Moon's diameter is 27% of the diameter of the Earth (In other words, if diameter of the Moon is 27 diameter units then the Earth is of 100 diameter units)
- Moon's mass is 1/81 of the Earth (in other words if Moon has mass of 1 mass unit then Earth has 81 mass units.
- From this data calculated cross sections of the Sun beam rays which is thrusting the Moon and the Earth are as below.

Moon: $22 \div 7 \times (27 \div 2)^2 = 572.78$ say 573 square area units.
 Earth: $22 \div 7 \times (100 \div 2)^2 = 7857.14$ say 7857 square area units.

- Consider: 1 square unit of rays' beam area = 1 thrust unit

Thrust factor calculation:

573 square units area of the Sun rays has to thrust 1 mass unit of the Moon but whereas 7857 square unit area of the Sun rays has to thrust 81 mass units of the Earth. **(Or in other words 1 mass unit of the Moon will have Sun rays thrust of 573 thrust units but whereas 1 mass unit of the Earth would have Sun rays thrust of only $7857 \div 81 = 97$ thrust units, thus Moon would be pushed far off by the thrust of Sun rays than the Earth. (Moon is getting $573 \div 97 = 5.91$ i.e., six times greater thrust by the Sun rays than the Earth).**

Because of the stated fact, Moon is closer to the Earth when Moon is near to the Sun and Moon is away from the Earth when Moon is away from the Sun by the thrust of Sun rays (like kick by the foot to foot-ball).

Thrust magnitude by the Sun rays for orbital move of the Moon and Earth: For orbital move by the Sun rays, gravity factor has ineffective role to play but whereas to keep the bodies away by the rays, gravity factor plays the full role. Because of this fact, Sun rays' thrust factor works quite differently over the thrust which causes orbital movement to the planets/satellites/objects than the rays' thrust factor which keeps them away. To keep the bodies away, Sun rays thrust is more on the bodies which have small size but whereas to provide push to the bodies for their orbital move, thrust of the Sun rays is more over the big bodies than the small sized. (Stated fact is applicable over the bodies which have the same mean density).

8. Is the Moon moving away from the Earth?

World:

From Internet dated 17/04/2018
 Website: <http://curious.astro.cornell.edu/disclaimer/37-our-solar-system/the-moon/the-moon-and-the-earth/111-is-the-moon-moving-away-from-the-earth-when-was-this-discovered-intermediate>

Is the Moon moving away from the Earth?

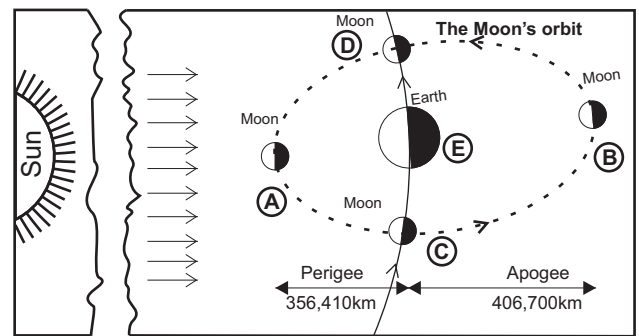
.....The Moon's orbit (its circular path around the Earth) is indeed getting larger, at a rate of about 3.8 centimeters per year.....

.....all mass exerts a gravitational force, and the tidal bulges on the Earth exert a gravitational pull on the Moon. Because the Earth rotates faster (once every 24 hours) than the Moon orbits (once every 27.3 days) the bulge tries to "speed up" the Moon, and pull it ahead in its orbit. The Moon is also pulling back on the tidal bulge of the Earth, slowing the Earth's rotation. Tidal friction, caused by the movement of the tidal bulge around the Earth, takes energy out of the Earth and puts it into the Moon's orbit, making the Moon's orbit bigger (but, a bit paradoxically, the Moon actually moves slower!).....

Author/Challenger:

(a) Tidal bulge in no way seems to be responsible for the Moon to go far away from the Earth or Earth from the Moon. The reason for the moon going away would be the expanding Universe. This Universe expansion is not only at far away in space. Its effects are over each and every body to its proportional distance. So this Universe expansion would be responsible for the increase in the distance of Moon from the Earth.

(b) Another reason of noticing by the Experts that the Moon is going away from the Earth would be the measurement of Apogee (or the distance EB). As the Earth moves ahead towards the Sun, Perigee would decrease but whereas Apogee will increase. This increase of Apogee may be the distance measured which has been understood that the Moon is going away from the Earth.



(c) Some other factors that can widen orbit of the Moon:

- Decrease in the mass or gravity of the Moon and Earth but whereas this factor is on the rise.
- Increase in the generation of materialistic particles curved rays by the Earth or Moon or by the both but whereas this factor is on the decline.
- Increase in the radiated rays of the Moon and the Earth or the both. This factor is also responsible for some widening of the orbit of the Moon as both the Moon and the Earth are going closer fraction by fraction towards the Sun thus both are radiating more and more rays with the passage of time.



9. Fate of the Moon forecasted that how and when Earth would engulf it (Moon)?

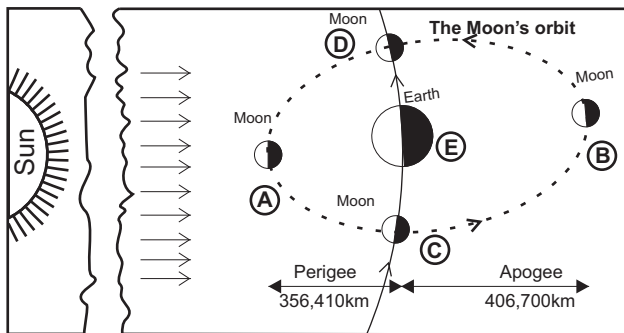
Every planet/satellite is gaining mass bit by bit. One such information is exhibited below: This Information is must to understand concluded fate of the Earth and the Moon.

From Amateur Astronomy: Issue Winter 2010.

How Much Does the Earth Weigh?

.....The earth's weight increases by 100,000 pounds each year from dust and meteoric material falling from the sky. Time to start thinking about that diet again isn't it?.....

(a) Every planet is marching ahead towards the Sun fraction by fraction by the addition of mass bit by bit, so is the Earth. As Earth moves ahead towards the Sun, Earth forces its satellite i.e., Moon to go near to the Sun when the Moon is in between the Sun and the Earth but high thrust-powered materialistic particles rays of the Sun pushes the Moon towards the Earth. Moon being smaller in size and of lesser density than the Earth thus faces high magnitude (six times more than the Earth) of the thrust by the Sun rays resulting to shorten the perigee distance (distance between the Moon and Earth). When Moon was captured by the Earth as its satellite the difference of distance between apogee and perigee was very less and now it has increased and would keep on increasing till Earth engulfs the Moon.



(b) As Earth moves ahead, by the gain in gravity. Increased gravity of the Earth would pull the Moon to make the orbital distance lesser thus perigee distance would further shortens by the gravity factor.

(c) Materialistic particles curved rays emerging from the spinning Sun give a push to the Earth to orbit around the Sun. But when the Moon moves to go in between the Sun and the Earth, it (Moon) gets thrust from the Sun rays in the opposite direction than its forward move, thus reducing its orbital speed. Said resistance to orbital speed to the Moon would increase further as the Earth moves ahead towards the Sun.

(d) Addition of mass over the Moon which may be negligible than the Earth that would also play its own role.

10. Does Moon have water; if so from where did it get water?

(a) Does Moon have water or ice?

Water over the Earth is due to semi-live life which in early history of the Earth has converted thick atmosphere (gases) of the Earth to water as explained by the Author under the relevant Chapter. Water over any other solar body including comets and in the flat rings of the planets is due to the condensation of evaporated water which had evaporated from the planet Venus. Venus once had water that may be almost similar to now Earth has; it had lost water on approach nearer to the Sun. The fate of the Earth would also be the same. Prior to approach nearer to the Sun, planet Venus would also be having its satellite like Moon of the Earth to sustain life over it somewhat similar to the Earth has.

Moon has two permanent colder regions which face the least Sun light. In these regions the depressions have never faced Sun light thus may have traces of water in the form of ice. These two

colder regions over the Moon have quite different situation than the cold regions (specifically the poles) of the Earth and the Mars thus possibility of liquid water over these two permanent colder regions too depends upon some factors which are not applicable over other bodies.

Water in the liquid form below the surface over these colder regions has the least possibility. Challenger has not gone deeper in the fact related to water over the Moon thus can't write much more.

11. Mean density of the satellite Moon: it requires re-check because of the thrust factor by the materialistic particle rays of the Sun, planet and the satellite.

Explanation is over under the relevant chapter over mean densities of the planets Mercury, Venus and Earth.

12. What relation the Moon has for twelve months in a year and seven days in a week?

It is the Moon, who has resulted so.

(a) Twelve months in a year:

Moon has time period of 29.53 days between the two same phases (i.e., between two full Moons) and this period is called synodic month. But whereas for the ancient person (Astronomer) full Moon would reappear after 30 days and also for the ancient person (Astronomer) days in a year can be any in approximation to 360 days against correct 365.26 days. So, for the ancient person(s) (Astronomers) who introduced the months in a year, for whom Moon had/has twelve periods of full Moon to full Moon in a year, thus we got twelve months in a year.

If the Moon had 36 days in between the two full Moons; we would had 10 months in a years and not twelve.

(b) Seven days in a week:

Moon is second brightest object in the sky after the Sun. There are seven bright objects in the sky which are visible to our naked eye and these are Sun, Moon and five planets as per their sequence of brightness observed by the introducer of the days. He named the days, like Sunday for the Sun, Monday for the Moon and rest of the five days were named for the bright planets which were known to past era people/Astronomers. Explanation is under the relevant chapter.

13. How the Moon on becoming satellite of the Earth tilted axis of the Earth?

Explanation is under the relevant chapter over tilted axis of the planets.

14. Does Moon have any linking to formation of life and extinction of species over the Earth?

World: World has not gone deeper to understand it.

Challenger: Challenger has concluded that had there been no Moon; life over the Earth would be quite different and might not have existed like this.

Prior to adopting the Moon as satellite by the Earth; Earth would be rotating with very small (negligible) tilt to its axis thus over the Earth there would be no seasons like the Earth now has.

It seems from some noted facts over the existence of life that life cannot be formed if there is a steady/constant one type of season or climate. So, prior to adopting Moon as satellite what type of life would be over the Earth; it requires study.

Further, if life had existed prior to adopting the Moon as its satellite; it (life) would have got drastic change by the tilt of the axis of the Earth. Imagine what would have happened then?
