

**GYAN BHARATI SCHOOL**

# **QUEST**

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# IDENTIFY THE SCIENTIST ???

- Was awarded “PADMAVIBHUSHAN” in 1954.
- He is an Indian physicist, a polymath and a self-taught scholar.
- known for: Bose-Einstein statistics and  
Bose –Einstein condensate
- Born on: 1<sup>st</sup> January 1894.
- The elementary particle “boson” was coined after his name.



## BRAIN TEASER

A man in a restaurant asked a waiter for a juice glass, a dinner plate, water, a match and a lemon wedge. The man then poured enough water onto the plate to cover it.

“If you can get the water on the plate into this glass, without touching or moving this plate, I will give you 100\$” the man said. He further said, “you can use the match and the lemon to do this”.

A few minutes later, the waiter walked away with the prize money in his pocket.

How did he manage to get the water into the glass???



# FACT FILE...!!!

CHINA successfully landed a probe on the dark side of the moon , in the latest milestone for the country's space programme.

The Chang'e-4 touched down in the Von Karman crater.

Having landed intact, it will deploy a rover that will gather samples that could provide insights into the moon's internal composition.

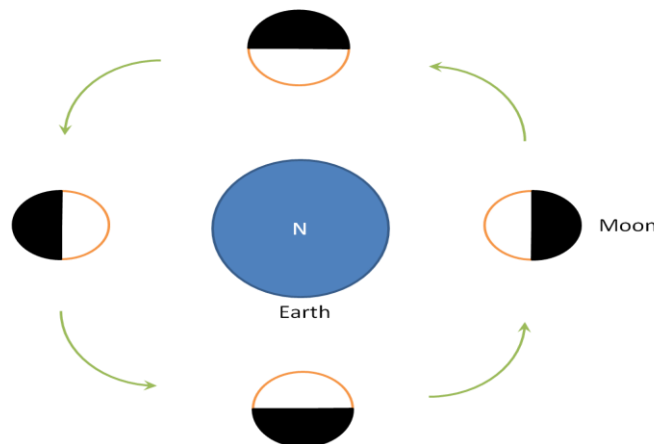
**BUT WHAT IS THIS DARK SIDE OF THE MOON? IS IT REALLY DARK...???**



## TELL ME WHY??

### THE FAR SIDE OF THE MOON:

1. The far side of the moon is the hemisphere of the moon that always faces away from the Earth.
2. The moon is tidally locked to the Earth- ie.when the moon rotates, the earth's gravity holds on to the moon tightly, the same side(the near side) of the moon faces towards us at all times.
3. This causes time of Moon's Rotation = Moon's revolution around the Earth.
4. The other face of the moon which is invisible is called the far side of the moon!!!



### WHY IS THE FAR SIDE ALSO CALLED THE DARK SIDE OF THE MOON??

1. Both sides of the moon experiences two weeks of sunlight followed by two weeks of darkness.
2. It is known as the dark side because of being invisible to the earth.

### OBSERVATIONS ABOUT THE FAR SIDE OF THE MOON:

1. It contains many impact craters including the largest in the solar system-south pole-Aitken basin.
2. The first of the pictures of the far side of the moon taken in 1959 by lunar 3 is:



taken on 7<sup>th</sup> October,1959

### SOME THEORY ABOUT THE FAR SIDE:

1. Some scientists believe the crust of the far side of the moon is thicker than the near side of the moon.

THE FUTURE?? Unlocking the mysteries of the internal composition of the moon,local lunar geology.



IMAGE TAKEN BY CHANG'E 4

# RIDDLE TIME

1. Many have heard it, but nobody has seen it. It will not speak back until spoken to.

What is it??

2. I can be good for you, I can be bad, I can be found all over inside and outside your body. I am microscopic, single-celled and have no nucleus.

Who am I ?

3. I am the amount of mass per volume in something. I am low in Styrofoam and very high in chemical element lead.

Who am I ?

4. It is impossible for me to be created, and I can never ever be destroyed, I can only change my form.

Who am I ?

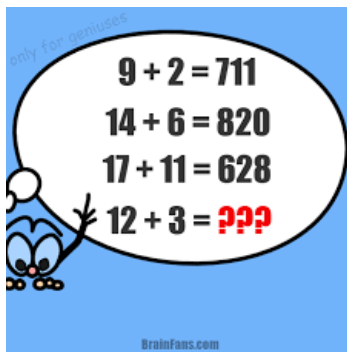
5. I can rush, I can be still, I can be hard, I can be cold, I can slip through almost anything.

What am I??

**ANSWERS : IDENTIFY THE SCIENTIST: Satyendra Nath Bose**

**Brain teaser:**First,the waiter stuck the match into the lemon wedge so that it would stand straight.Then he lit the match,and put it in the middle of the plate with lemon.Then,he place the glass upside down over the match.As the flame used up the oxygen,it created a vaccum,which sucked in the water through the space between the glass and the plate.

**RIDDLE:** 1. An echo 2. Bacteria 3. Density 4. Energy 5. water



|   |   |   |   |    |
|---|---|---|---|----|
| 1 | 2 | 3 | = | 8  |
| 2 | 3 | 4 | = | 18 |
| 3 | 4 | 5 | = | 32 |
| 4 | 5 | 6 | = | 50 |
| 5 | 6 | 7 | = | ?  |