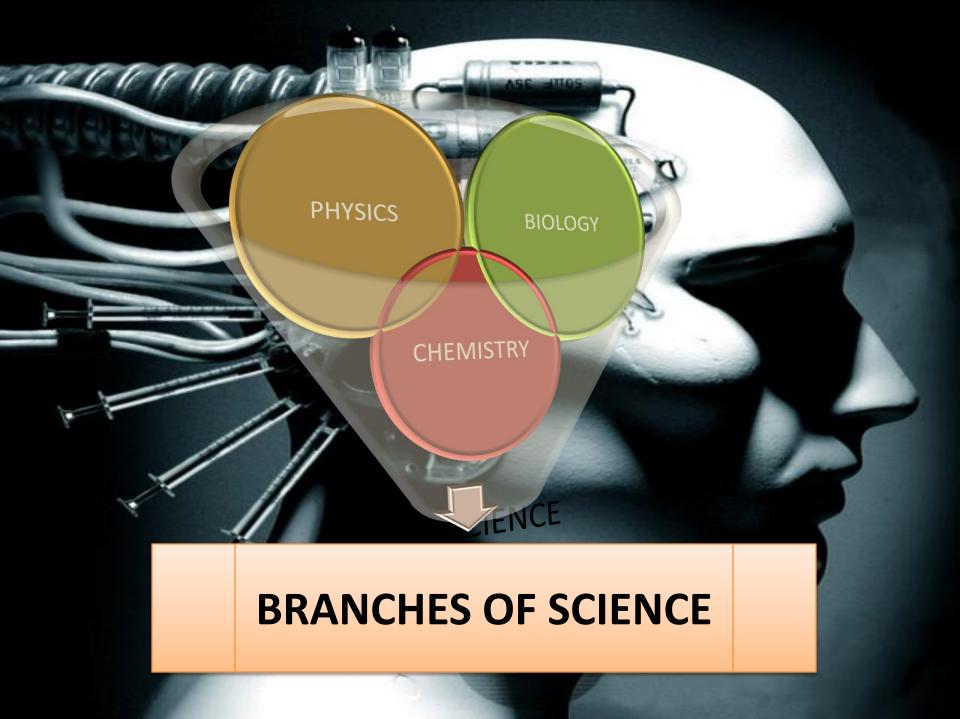


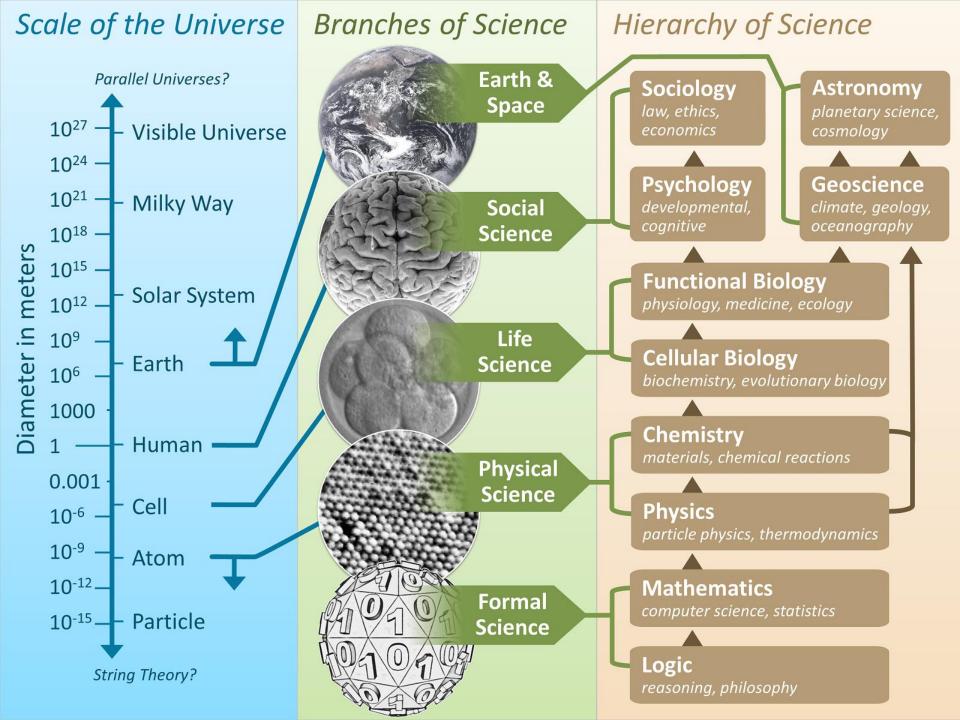
## MEANING OF SCIENCE

The word science comes from the Latin "scientia," meaning knowledge.

How do we define science? According to Webster's New Collegiate Dictionary, the definition of science is "knowledge attained through study or practice," or "knowledge covering general truths of the operation of general laws, esp. as obtained and tested through scientific method [and] concerned with the physical world." What does that really mean? Science refers to a system of acquiring knowledge. This system uses observation and experimentation to describe and explain natural phenomena.

The term science also refers to the organized body of knowledge people have gained using that system. Less formally, the word science often describes any systematic field of study or the knowledge gained from it.







#### Thinking Like a Scientist By Jennie Munson

I want to think like a scientist Observing animals, earth, or sky. I want to ask good questions Wondering how, and what, and why.

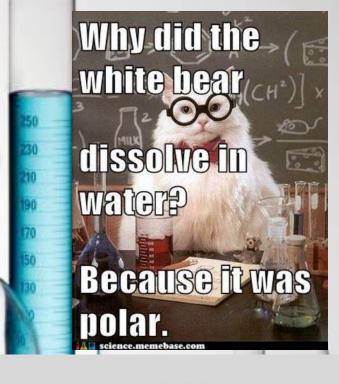
I want to make smart guesses Hypothesizing what might happen and when. I want to do cool experiments Testing my thinking again and again.

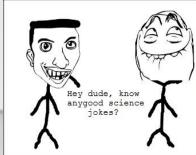
I want to write up all my data,
Recording pictures, charts, or words.
I want to think through all I've done
Drawing conclusions about what I've learned.

Wondering, asking, testing, concluding.
This is what scientists do.
If you want to think like a scientist
Then you must do them too!

BY MUSKAN SINHA (XII-C)

# FUNTIME LETS LAUGH OUT LOUD

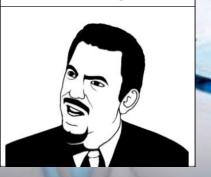




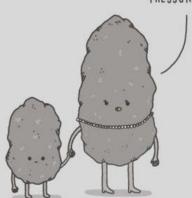


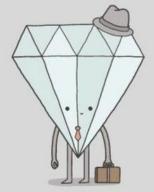






YOUR DAD'S BEEN UNDER A LOT OF PRESSURE LATELY.





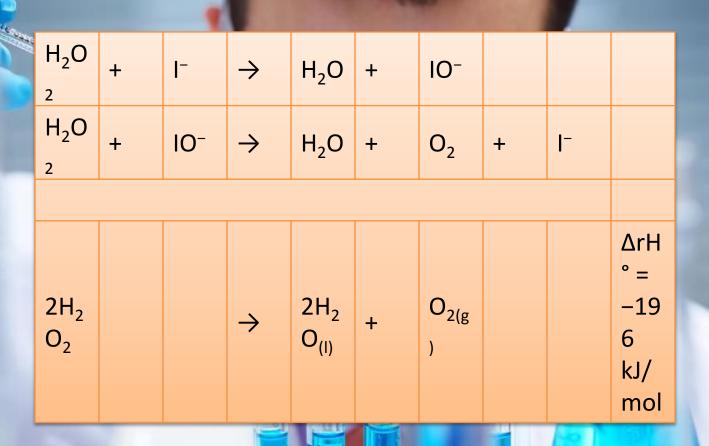
Elephant toothpaste is a foamy substance caused by the rapid decomposition of hydrogen peroxide. This is often used for classroom demonstrations because it requires only a small number of ingredients and makes a "volcano of foam". This sometimes is known as the "Marshmallow Experiment", but is unrelated to the psychological <a href="Stanford marshmallow experiment">Stanford marshmallow experiment</a>.

#### **Description**

Concentrated (30%) hydrogen peroxide is first mixed with liquid soap. Then a catalyst, often potassium iodide, is added to make the hydrogen peroxide decompose very quickly. Hydrogen peroxide breaks down into oxygen and water. As a small amount of hydrogen peroxide generates a large volume of oxygen, the oxygen quickly pushes out of the container. The soapy water traps the oxygen, creating bubbles, and turns into foam. Often some food coloring is also added before the catalyst.

# FUN WITH SCIENCE EXPERMIENTS

BY MUSKAN JINDAL (XII-C)



The reaction is exothermic; the foam produced is hot. A glowing splint can be used to show that the gas produced is oxygen

#### DNA is flame retardant.

### Chemistry

One bucketful of water contains more atoms than the Atlantic
Ocean does bucketful of water.

If you slowly pour a handful of salt into a completely full glass of water, it will not overflow. In fact, the water level will go down.

Although oxygen gas is colourless (light refraction aside), both the liquid and solid forms are blue.

One inch of rain is equal to 10 inches of snow.

You have chemoreceptor (taste buds) on the inside of your cheeks

Hydrofluoric acid is so corrosive that it will dissolve glass.

Although it is corrosive, hydrofluoric acid is considered to be a weak acid'.

Approximately 20% of the oxygen in the atmosphere was produced by the Amazonian rainforests.

The only elements that are liquid at room temperature are bromine and mercury.





## FACIS

- 1. Squirrels plant thousands of new trees each year simply by forgetting where they put their acorns.
- 2. Ants never sleep
- 3. when the moon is directly overhead you will weigh slightly less
- 4. -40C is same as 40f of temperature
- 5. strongest muscle in the body is tongue
- 6. Camels have 3 eyelids to protect themselves from blowing sand
- 7. you can't lick your elbow
- 8. Dogs' nose prints are as unique as human fingerprints and can be used to identify them.
- 9. Butterflies taste with their feet



#### Refraction

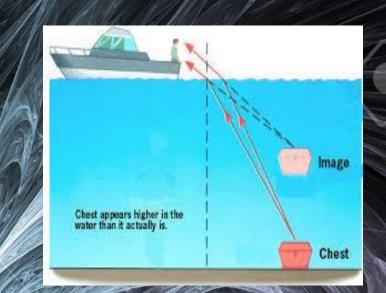
Refraction is based on the idea that LIGHT is passing through one MEDIUM into another. The question is, WHAT HAPPENS?



Suppose you are running on the beach with a certain velocity when you suddenly need to run into the water. What happens to your velocity?

IT CHANGES!

Refraction Fact #1: As light goes from one medium to another, the velocity CHANGES!



## Physics in daily life

Daily Phenomena of Refraction

- Swimming pool and ponds appear shallower than it really is.
- \*\* Object is at a deeper depth than where it appears to be.
- \* Bent objects in liquids



### Amorphophallus titanum

Amorphophallus titanum (from Ancient Greek amorphos, "without form, misshapen" + phallos, "phallus", and titan, "giant"), known as thetitan arum, is a flowering plant with the largest unbranched inflorescence in the world. The arum's inflorescence is not as large as that of the talipot palm, Corypha umbraculifera, but the inflorescence of the talipot palm is branched rather than unbranched. Due to its odor, which is like the smell of a rotting animal, the titan arum is characterized as a carrion flower, and is also known as the corpse flower, or corpse plant (Indonesian: bunga bangkai – bunga means flower, while bangkai can be translated as corpse, cadaver, or carrion). For the same reason, the title corpse flower is also attributed to the genus Rafflesia which, like the titan arum, grows in the rainforests of Sumatra, Indonesia.



BY ABHISHEK JAIN (XII-C)

## ARE YOU A BIO-FREAK? DO YOU KNOW YOUR BODY?

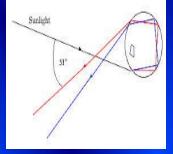
- \* You can't lick your elbow
- \*Rabies are born without knee caps-actually, they're made of cartilage and the bone hardens, between the ages of 2-6 years.
- : ladies blink their eyes twice or thrice as much fellow males
- \* Male brains are bigger than female brains but female brains contain more brain cells. So who you think is smarter?
- \* Suman babies are born with more than 300 bones and grown ups has only 206
- \* Sumans are smartest of all fellow mammals.
- Earlier humans jaws were twice bigger and harder as compare to that today
- \* Early humans have their thumbs as fingers.

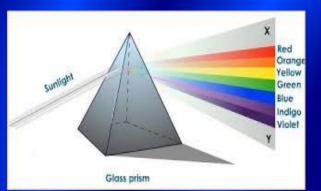


## Light a magic







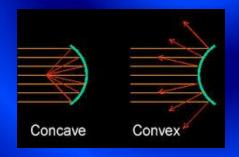


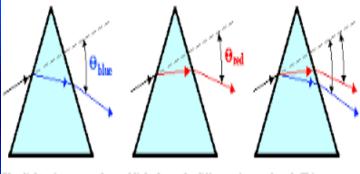
Physdips www.animations.physics.unew.edu.au

Rainbow formation



#### spectrum





Blue light refracts more than red light due to the difference in wavelength. This causes blue light to deviate from its original path by a greater angle than the red light.

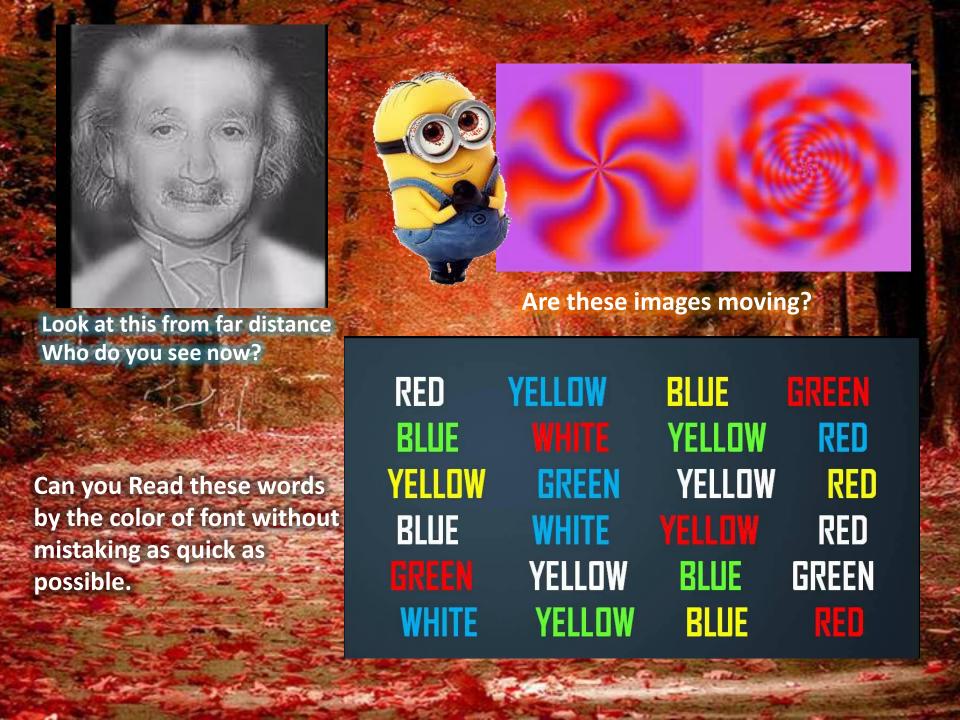
IT APPEARS WHITE WHEN ROTATED AT HIGH SPEED

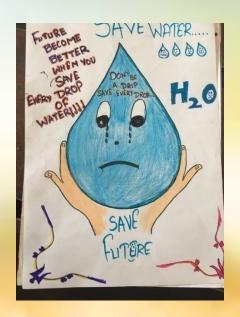
BY SAMIKSHA SINGH (XII-C)

## TEST YOUR BRAIN BRAIN GAMES

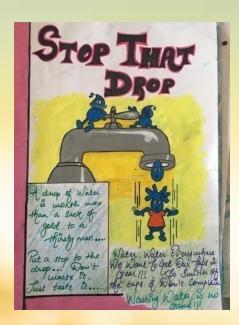


BY SAMIKSHA SINGH (XII-C)





Deepanshu pandey
XI A



Shruti XI A

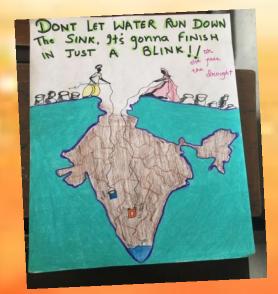


Palak Gemini XI B



Priyanka XI B

# Save Water Endeavors of Vivekians



Deepanshi Gandhi XI A

### Best Science Museum

- 1. Natural History Museum, London, United Kingdom The Natural History Museum in London is most famous for its dinosaur exhibits, that includes some of the rarest and most amazing fossil dinosaur skeletons. The museum also includes exhibits about animals, plants, human biology, fossils, minerals, natural resources and more. The museum was established in 1881, and it received over 5 million visitors yearly
- 2. National Air and Space Museum, Washington D.C., United States The National Air and Space Museum in Washington and is the world's best aviation and human flight history museum

Best Science Museums: National Air and Space Museum, Washington D.







3. Deutsches Museum, Munich, **Germany – The Deutsches Museum is** the world's largest science and technology museum. The museum is located on the small museum island. 4. Academy of Natural Sciences, Philadelphia, United States – Formally The Academy of Natural Science of **Drexel University, this museum opened** as early as 1812, which makes it the world's oldest museum for natural science. The museum holds a collection of over 17 million specimens, including the famous 43 ft (13 m) T-Rex skeleton which greets all visitors on arrival





#### ZONAL SCIENCE ACTIVITIES



**Categories** 

♦ Science debate-Anupriya XII-B 1<sup>st</sup> Muskan jindal XI-A 1<sup>st</sup>

- ❖ Science Slogan Abhishek Jain XI-C 1<sup>st</sup>
  - Science Poster
    Abhishek Jain XI-C 3<sup>rd</sup>
- SCIENCE SEMINAR

  Nandini Misra IX-E 2<sup>nd</sup>







#### Solids

A solid is a solid,
It doesn't change its shape.
It cannot move around,
It stays in just one place.

Your desk is a solid, And so is your chair. Just look in your classroom— Wow! They're everywhere!

