



*Padma Seshadri Bala Bhavan Senior Secondary School, Siruseri*

### Powering the Idea Light bulb

“Curiosity is the only energy that can override what is rational and science is the machine that defines what is rational.”

The students of PSBB are fortunate enough to learn and appreciate the endless subject of science in its eternal practicality, through the Science Club.

On the 28th of November, 2020, Mrs. Vijayasudha Narayanan, Head of the Department of Science from PSBB KK Nagar graced us with her presence and presented a guest lecture

through **Zoom** on the topic “ Powering the idea Light Bulb💡 . A lot of inspiring and beneficial

takeaways were gathered from this lecture. She started with the four different methods of adapting to and learning Science. These four exceedingly fruitful tactics include; **Reading,**

**Observation, Doing and Picturing to learn.** She informed us about the numerous genius

innovations that were inspired by books that have become essential elements in all our lives .So

**Reading** arouses the curiosity in a learner to explore newer horizons.- **Tom Swift And his**

**Electric Rifle**, was of course the acronym and the inspiration for the **TASER**, a gun used in the

United States and most of Europe, to stun criminals briefly. This doesn't harm them in a

permanent fashion but allows the officers to catch them in the event of a chase.

*'Looking Backward'*, a novel written in the 1800s was the blueprint to credit cards. It depicted

these credit cards almost identical as we see them today! She also pointed out that certain

Science fiction movies like the books, were futuristic. In 'Star Trek' a model of a “foldable tiny

computer” was depicted that soon evolved into the classic cell phone used in the early 21st

Century.

The second aspect of a science club is **Observation**. She portrayed this aspect as a product of

two sub aspects; Serendipity and Biomimetics. Serendipity is nothing but a chance discovery.

An example of Serendipity is the discovery of penicillin by Sir Alexander Fleming.. It was discovered while Fleming was studying the Staphylococcus bacterium and noticed that a blue-green mould had contaminated a petri dish, killing off all the surrounding bacteria in the culture.

Biomimetics, the second sub aspect under Observation, is the idea of mimicking the physical properties of objects in nature to one's own benefit. One example of Biomimetics is the invention of velcro by George de Mestral. He was on an expedition when a flower by the name *cockle bur* that has a spiky surface stuck to his pants, he innovated and found a way to replicate this and created velcro.

Finally Mrs.Vijayasudha showed us multiple websites that provide scope for trying hands on experiments, One of these websites is '<https://www.exploratorium.edu>' that supports, guides and inspires students to do practical experiments at home. In the fourth aspect, **Picturing to learn**, she lucidly brought out how visual analogies as imagined by students will help them understand concepts better.

The speaker has switched on the idea bulb and the ignited bulbs will certainly lead us on the path of innovation.

## -Shutterbugs

The Science Club

Hitansh Bhutani VIII A1.

PSBB,SRS

Observation II... **Biomimicry**

Kingfisher's beak  
inspired the model for the nose of Japan's 500 km/h Shinkansen bullet train.

SHARKLET TECHNOLOGIES

Igor Sikorsky-  
"Anything that one man can imagine, another man can make real."