

# **KINDERUNI CURIOSITY CONTEST**

### Questions from Chennai, India

# 1. Why do we have different types of DNA but the DNA always contains Adenine, Guanine, Thymine and Cytosine?

by Kaangshika, JS Global School

**Ans:** Because the combination of these DNA-bricks codes our properties. It's amazing how few bricks are enough to code so many properties. To decode the combination is a big task of science today. And as it often happens: the more you discover, the less you know - as each answer creates a dozen of new questions.

2. When we make a volcano for our school project, we add vinegar and baking soda to show the eruption. I want to know what chemicals are mixed in it for such a reaction to take place.

by Varun Jayanth Rao, Lady Andal School

**Ans:** You are curious, I like that. Vinegar contains some acid. Baking soda is made of Sodium Bicarbonate, a base which is the opposite of an acid. When acid and base are mixed, there's a heavy chemical reaction as you have seen at school. Try it yourself, but be careful.

### 3. Where does the sun get its light from?

by Santhoshini Pandeeswaran, JRK Global School

**Ans:** Our sun creates light by itself. It is called "fusion". Inside the sun there are hydrogen atoms melting together because of enormous temperatures. The result is helium and energy in the form of light and heat. On earth, humans try to do something similar. Researchers are constructing fusion reactors to produce big amounts of energy which is eco-friendly. It is very difficult to reproduce the energy on earth as compared to what happens inside the sun.

# 4. Why does a jelly-like substance form when RO water is stored in a container for more than 5 – 7 days?

by U Ashwin, GGN International School

**Ans:** Because water is full of life. It contains tiny microbes which eat the nutrients present in the water. As a result, they produce that jelly substance which looks like a slime.

### 5. Why is the sky blue?

by Krishmeera Baskaran, JS Global School

**Ans :** This short question needs a longer answer. Sunlight is distorted in atmosphere by very small particles. And sunlight is a mix of different colors which are distorted



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differently. The blue part of our sunlight is distorted the least, so it can reach our eyes on the earth's surface. Therefore, our sky seems to be blue. Imagine if the sky would appear to be green!

#### 6. Why is thread spun up in triangles?

*by Chathurashree, GGN International School* **Ans**: That's a human convention. In Germany, it's spun in squares.

#### 7. Why does water have no color?

by Hriday Kiran, DPS South

**Ans**: Because it's absolutely transparent, so all colors can pass water. If water weren't transparent, it would absorb light and have a certain color.

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