



Yellow is the colour of our contest edition. It ignites hope and happiness in our spirits.  
**Bhuvi Pandey, X D & Tanya Sachdeva, XII F**  
 AIS Saket, Page Editors



# The court of Elementia

Here, Take A Sneak Peek Into The House Of Chemical Elements



SCIENCE  
BEDTIME STORIES

Hridyanshu, AIS Saket, X B

Long time ago, in the land of Mandalorian, there lived a huge family of 118 members. Each of the members had a special atomic number and a unique identification symbol according to which they were allotted houses. The elements were supposed to stay inside these houses and avoid any kind of feud with each other as advised by the organiser of their houses, His Highness Dmitri Mendeleev. He also classified them into different categories on the basis of their properties, grouping them together in rows and columns, and even gave them titles such as metals, non-metals, noble gases, metalloids, etc. All in all, he wanted peace to reign in the land. All was hunky dory until one day, an unknown member was identified in the land. Furore ensued. Nobody knew this person, there was no identification symbol on his body as well and his atomic number was also unknown. Soon, there was an announcement that all the members shall be ready for the reallocation of their houses as the new member had to be accommodated. The announcement led to a huge panic in the land as none of them wanted to shift to a new house. While this was going on, one of the members shouted on a loudspeaker, "Why are we worrying so much? Let's go and meet His Highness and find the solution". Thus, the court of Elementia was set up and all the 118 members quietly took their places around the periodic table with His Highness sitting on the royal chair. The candle was lit, and the discussion begun.

**Hydrogen:** Greetings, your Honor. I was discov-

ered by my master Henry Cavendish, and I am one of the most abundant elements in universe. Without me, no one can get water. I request you to not re allocate me, as I might not be compatible with members belonging to some new group.

**Oxygen:** I would like to stop you there. You are surely the most abundant element but without me, there is no water. Without me, no human or animal can survive. So, my request should be processed first.

**Aluminium:** Hey Oxygen! You might be important, but I belong to the royalty. From being present in the old French crown jewels to being used as the primary metal for the automotive and aircraft parts, containers, etc., I belong to the category of most used metals today. I would contest for being the most useful element.

**Iron:** Well, all my alloys, especially steel, are the most used by humans in civil engineering. I am the frame of all houses and buildings. This magnificent court cannot stand strong without me.

*(The door opens)*

**Carbon:** Hello everyone! I have a whole segment in chemistry dedicated to me called organic chemistry. I can also be a part of this debate, but what you all need to understand is that we are interconnected in our processes. I was quite flabbergasted by the points presented. Without hydrogen and carbon, photosynthesis cannot take place. If it doesn't take place, then oxygen won't be produced. Without oxygen, no burning processes can take place, which are crucial in manufacturing of substances like steel. Without iron and steel alloys, aluminium cannot form specialised magnets.

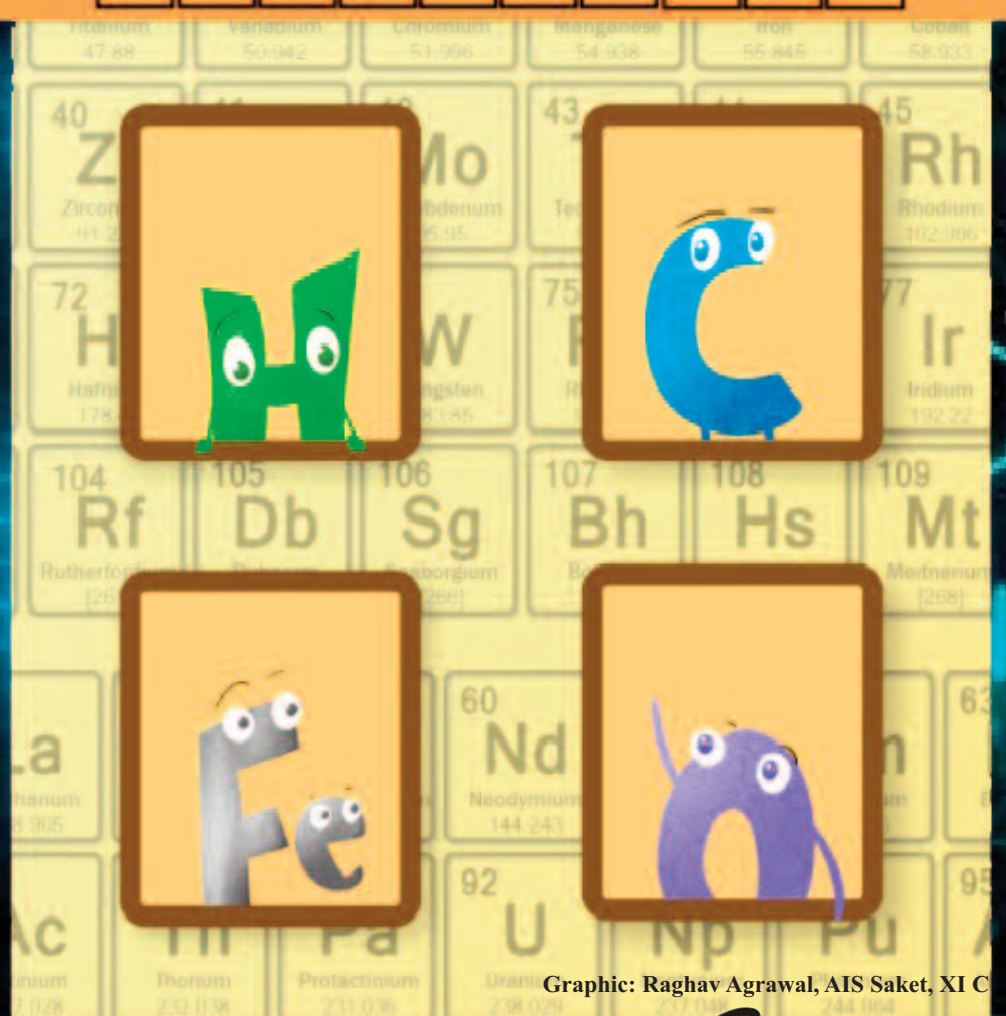
Does everyone now understand that all of us are interconnected? This table and our houses are bound to get updated periodically with every new member found on this land. So, stop contesting for the best element and rather welcome your new housemate with open arms, the way you all were welcomed by His Highness.

The periodic table of elements is an organised array of chemical elements arranged in the order of their increasing atomic number, electronic configuration and properties. Famously known as modern periodic table, it was initially discovered by Russian chemist, Dmitri Mendeleev in the 19th century. The table shows periodic trends that change with addition of every new element coming in.

The science of it



P Er I O Db I C Ho U Se



Graphic: Raghav Agrawal, AIS Saket, XI C

# Luscious lychees



Fruits and vegetables make up the largest chunk of our nutrition. However, their role is not just limited to a wholesome diet. Their significance permeates across economy, environment, health and social impact, proving how they are, in fact, essential commodities to attain a sustainable world. Keeping the same in mind, the United Nations has designated 2021 as the International Year of Fruits and Vegetables to make us cognisant of the diverse roles that they undertake. Shaking hands with this goal, GT brings you a brand-new series, wherein every part will explore the various facets of one fruit or vegetable, highlighting why it is important to preserve these precious gifts of nature.

Yusra Zahra, AIS VKC Lko, VIII A

**Hey! My name is:** Lychee or Litchi  
**I am also known as:** Litchi Chinensis

### About me

- I belong to the Sapindaceae family and am also known as the Queen of fruits as I have a lot of health benefits and a very high nutritional value.
- I was first cultivated in the region of Southern China, particularly in the cities of Fujian and Guangdong. There, I am also called as the 'Chinese strawberry' because of my similar appearance to strawberries.
- Unofficial records state my existence as far back as 2000 BC and China has been cultivating me for over 2300 years. I was a very popular delicacy in the Chinese Imperial Court of the Han Dynasty.
- My name in Chinese, 'Lizhi', translates to 'gift for a joyful life'.
- I am a perennial or evergreen tree, which means



Illustration: Yusra Zahra AIS VKC Lko, VIII A

I can survive up to 1,000 years in the wild.

- The bark of my trees are greyish-black, and my flowers are white and yellow.
- My trees have an average height of around 49 feet or 15 meters mostly, but my highest recorded tree reaches up to 92 feet or 28 meters.

### What I offer

About 90 grams of my consumption will give you:

- Calories: 66
- Protein: 0.8 grams
- Carbohydrates: 16.5 grams
- Sugar: 15.2 grams
- Fiber: 1.3 grams
- Fat: 0.4 grams
- Water content: 82%
- Vitamin C, B complex, A & E
- Other minerals (copper, potassium, magnesium)

### I can help you with

- Improve your immunity
- Provide instant energy
- Fulfil dietary fiber needs
- Boost your metabolism
- Prevent heart diseases
- Reduce risk of cancer
- Regulate your blood pressure
- Improve skin and hair condition

### Where you can find me

I am widely grown in the subtropical regions of the world as I thrive best under sub moist tropical climates. Deep, well-drained loamy soil, rich in organic matter and having pH in the range of 5.0 to 7.0 is ideal for me. India, Taiwan, Southern China, Vietnam and Thailand are the main producers of my fruit, with China producing 950,000 tons a year, India producing 429,000 tons, and Thailand producing 85,083 tons. Some other countries that are involved in my production are Madagascar, Australia, Philippines, Mauritius, the United States and South Africa.

### My different avatars

- Hak Ip lychee
- Bengal lychee

- Emperor lychee
- Sweet Cliff lychee
- No Mai Tsze lychee
- Sweet Heart lychee
- Brewster lychee
- Kaimana lychee
- Mauritius lychee

### Why I fear climate change

Soil moisture, humidity and rainfall are the conditions that are essential for my growth and cultivation. When my fruits mature, they require low humidity and occasional rainfall for proper growth. But in the last decade, research shows that the changes in the climate have been affecting my fruits, causing them to become smaller and less ripe. Due to climate change and erratic weather conditions, farmers are facing a lot of difficulties in producing a good harvest. In Bihar, where my famous variety 'Shahi Litchi' is grown, it has been tough to produce my fruit because of unpredicted heavy rainfalls in mid- May. As a result, Bihar not only struggles to produce me, it also incurs heavy damages in the harvest. I hope we are able to curb global warming in time, so that no further damage is done to our mother earth and farmers are able to produce loads of good harvest for everyone to enjoy the valuable bounty of nutrients that I offer. 🌱