Science & Technology

I don't know who you are, but I will find you, and I will science you. Raunak Gupta, AIS Gur 46, XI B, Page Editor



Element (ary) school

You Have Seen These Groups In School But Never As Parallel To The Periodic Table

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itting in a classroom, you will realise that it contains many different groups, but what if your school was the periodic table and the students were its elements. Which group do you think you will belong to?

Al-cool-i Metals The energetic ones

Though alkali metals are the first to come in the periodic table, these lads don't really come first in the class. They outpour their emotions more often than not, and aren't everybody's favourites. They have pure hearts which you will recognise when you associate with them, just like Sodium and Potassium. This property of theirs will melt your heart like Caesium melts on your palm. Alkali metals are very reactive, soft, brittle and have low melting points.

Al-kal-ine Earth Metals The lazy ones

Just as alkaline earth metals are not the most reactive elements of the table, these students are not the most energetic. They know perfect excuses to delay their work. Like rays of radioac-



tive Radium, their laid back attitude makes them toxic. Nevertheless, these children also show their different colours in different situations. For example, they are the fastest to pounce on other's tiffins, occasionally top examinations, and obviously these couch potatoes show awareness in current affairs. If you still couldn't really tell, the fact is that alkaline earth metals are less reactive than alkali metals. They impart colour to flame while burning.

Crys-pal-logens The bonding ones

These lads are bound to catenate with as many 'bros' as they can. Their bond is one of the strongest in the hood, just like carbons bond together to form dia-

monds. This clan has bookworms, last benchers, athletes and car fanatics, and always come to the rescue of their pals. Of course, we are talking of the carbon family elements. They are stable and exist in a number of allotropes. They also form strong covalent bonds.

Hahahalogens The funny ones

These 'popular kids' are famous for being hilarious and electrifying. Just like Chlorine and Fluorine which react with many metals, they never spare anyone in their laughter count. Influencing everyone around them, they are no less in showing their polarizing power.

Halogens are very reactive and are lethal to biological organisms. They combine with a range of elements and have a high polarizing power.

'Know'ble Gases The quiet ones

They are the silent killers of their class. Sitting quietly in a corner, they virtually never react to what happens around them; but they come out as the brightest stars with their straight A's.

Noble gases are non-reactive. They occur in the last group and are usually in a gaseous state.

Graphic: Suyash Mittal, AIS Gur 46, IX G



Samira Khatri

AIS Gur 46, X A

Tt was a rainy day when my friend and I decided to go get **L**an ice cream. As we walked to the ice cream van, he would not stop blabbering about the amazing day he was having. On asking the reason for his happiness, he told me how he got up early in the morning all fresh and went out for a jog, "Oh! What a way to start the day!" I couldn't believe he was excited for a run. "Actually it's because exercise helps cheer one up and it also relieves stress in general." He didn't like that I gave science the credit for his happiness. Intent on proving that his happiness was solely because of him, he egged me, "Well, can you explain this then; while I was out, it started raining which made me feel good. I bet there's no science behind why that would make me happy," he replied with a sure face. "Of course buddy! Here's a fun fact: We spend most of our lives surrounded by positive ions created by electronics and re-circulated air. Positive ions create happy hormones called 'serotonin', but high levels of the same can cause 'serotonin irritation syndrome'. This is why rain or showers help in reducing stress since they have negative ions and these charges in moving water neutralise our excessive positive charge, reducing stress. Storms have the same effect." I paused to catch my breath. He opened his mouth to say something, but decided against it.

Model: Khwaish Gupta, XII I & Rachit Gupta, IX J, AIS Gur 46





Visiting The Peculiar Planets Around Us

Gurekas Singh AIS Gur 46, IX H

ncapsulating trillions of planets within it, the universe seems boundless. Every planet is unique in its own sense, yet some are so peculiar that they will leave you startled. And these peculiarities do not restrict themselves to just lack of gravity or possessing a ring around it. So let us venture out on an odyssey through the special planets in our galaxy.

Introducing Kepler 16 Real Life Tatooine

The great masterpiece called Tatooine is a desert planet that is integral to the universe. It would be a treat for the Star Wars fandom to know that Kepler-16, a faraway exoplanet, is the real life equivalent of the fictional Star Wars planet, because it is one of the only planets that orbits a dual binary

system. Unfortunately, you can't visit it because it stands 200 light years away.

Introducing HD 189733b Where it rains glass...

Everyone likes a drizzle of rain on a hot summer day. Well, that wouldn't be the case if you inhabit HD 189733b. Why? Because it showers glass there and it definitely won't be a joyful experience! A silica concentrated atmosphere causes clouds to rain molten glass, which hardens as it falls. The winds push the glass so it flies in the air horizontally, slicing everything on the way. So, if you plan to visit, make sure you pack glass-proof gear!

Introducing CoRot-T-7p A rocky snowfall

Do you like snowfall? You won't, if you lived on this planet named CoRot-T-7p. Here, the heat causes lava, not

water to evaporate. This also leads to the creation of huge stone rock clouds, so it snows rocks. A trip to see this magnificent rock show is not a great idea because temperatures here range from 2000°C to -210°C. Talk about moody!

Introducing 55 Cancri e The costliest planet

Diamonds are expensive, aren't they? What about a planet entirely made up of diamonds? 55 Cancri e is a planet that could be completely made up of pure diamond because of its richness in carbon elements. The immense pressure caused by this planet's gravitational pull, can condense the carbon and form a gigantic diamond. You are most likely to forget the Kohinoor if you visit this planet.

Well, this was just a glimpse. All the very best to the coming generations!

Pic: Mehul Chopra, XII I, Graphic: Laxya Pahuja, X F, AIS Gur 46

We walked for about five more minutes to get to the ice cream van and he stopped for a second. "Is there science behind why ice cream would make me happy after your kill-the-mood attitude?" he said. "Well as a matter of fact, yes! Scientists have found out that a spoonful of any cold dessert lights up the pleasure center in the brain. They used imaging techniques to watch blood flowing in the brain and observed the rapid movement of molecules which made one feel calm and contented." I laughed. He turned around, away from the ice cream van, "Let me know if there is science behind people running your day because they are a total know-it-all" "You know what, there is!"