

Wilting under the heatwave

Several parts of north India and some southern states are reeling under a heatwave with the mercury soaring past the 47-degree mark in a few places. The India Meteorological Department, which had issued a red colour-coded alert for north India, said dust and thunderstorms are likely to bring some relief today and tomorrow. What is a heatwave? What causes it? Let's look at the phenomenon in detail



What is a heatwave?

A heatwave is a period of abnormally hot weather, which may be accompanied by high humidity, especially in tropical countries. It is measured relative to the usual weather in a particular region and relative to normal temperatures there for the season.

What causes a heatwave?

A heatwave occurs when a system of high atmospheric pressure enters an area and remains there for two or more days. In such a system, air from the upper levels of our atmosphere is pulled downwards towards the ground where it becomes compressed and increases in temperature.

When is a heatwave declared?

In large areas, a heatwave is declared when the maximum temperature is 45 degrees Celsius for two days consecutively. A severe heatwave is declared when the maximum temperature is 47 degrees Celsius or more for two days at a stretch. In small areas like Delhi, a heatwave is declared if the temperature touches 45 degrees Celsius even for a single day, according to the IMD.



A man quenches his thirst amid rising temperatures in New Delhi. AFP

What do the colour-coded warnings mean?

The IMD issues colour-coded warnings - green, yellow, orange and red - depending on the severity of the weather condition, with red being the most extreme. A 'red' warning is issued for a severe heatwave, while an 'orange' warning is issued for a heatwave. A 'red' warning is issued to caution people not to step out between 1 p.m. and 5 p.m. when the intensity of the heat is the most.

Did cyclone Amphan have an effect?

Heatwave conditions usually prevail in early summer (April) each year, but at times could extend till early June. According to weather experts, most parts of the country have experienced the indirect impact of the recent Super Cyclone Amphan which sent the maximum summer temperatures soaring. There are clear skies almost all over the country with no major weather system developing that could result in clouding. Wind patterns have changed post-Amphan. Hot, dry northwesterly winds are blowing over India, causing heatwave and dry conditions. It is said even June could be very hot in many parts of the country.

What's in the news?



A municipal truck sprays water on the road on a hot summer afternoon, in Churu. PTI

Daytime temperatures over the past few days:
 Most of Rajasthan: Around 45-47 degrees Celsius
 Churu, Rajasthan: 50 degrees Celsius
 Parts of New Delhi: 47.6 degrees Celsius
 Punjab and Haryana: Nearly 46 degrees Celsius
 Allahabad, UP: 46.3 degrees Celsius

PHOTO: AP

LEISURE CORNER

What's 'Up'?

Friday is for films and this week, let's explore a cute and goofy Disney Pixar film "Up" (2009)...



Have you ever taken a ride in a hot-air balloon? If you have, then you may have experienced butterflies in your stomach as it slowly lifts off the ground and floats over hills and valleys. Watching "Up" will give you a similar fluttering sensation and kindle your imagination.

Created by legendary Pixar directors Pete Docter and Bob Peterson, who have worked on most Pixar productions including both "Toy Story" films and "Monsters, Inc", "Up" is a visually stunning film with adorable characters and an imaginative storyline.

What it's about: A square-jawed Carl Fredrickson is a 78-year-old balloon salesman. Real estate developers threaten to bulldoze his precious home. So tying thousands of balloons to his house, he flies away to the South American wilderness to live near Paradise Falls - where his childhood sweetheart and late wife Ellie always wanted to settle down. However, not everything goes to plan as an eager-to-please boy scout Russell becomes a stowaway on-board the flying house.

Why you will love it: Carl and Russell embark on a colourful adventure with the portable house tethered to their backs. Along the way, they encounter an exotic bird; uncover the truth behind a famous celebrity adventurer; and finally, make peace with their past. Watch out for a brilliant montage sequence at the very beginning, sketching out Carl's early married life with Ellie - it is an emotional roller coaster.

So, fasten your seat belts, it's going to be a bumpy ride!

ARTIVITY

Artwork by A. Parvathy, Class 12, Bhaktavatsalam Vidyashram, Chennai

Read the newspaper and create an original artwork based on a news item that interests you and send your entry to school@thehindu.co.in with the subject - Artivity. Select entries will be published. Please mention your name, class, school and city.



GAME ON

Name, place, animal, thing

This fun game can help improve your vocabulary and general knowledge. All you need is a minimum of two players, and pen and paper for each of the players. The rules are simple - draw lines and divide the paper into four columns labelled Name, Place, Animal, Thing. You can add more categories if you like. To start the game, player one says 'Start' to player two, who will start calling out letters from A to Z until player one says 'Stop'. Whatever letter player two stops in becomes the starting letter for that round. Now, players set the timer to one minute and start answering each of the categories with the starting letter for the round. After one minute, they start to call out. If the players have similar answers, they get zero points for that category, otherwise they get one point. This way, the game continues and all the points are totalled in the end. Whoever scores the highest wins the game.

QUEST

Explore the world of Science

What is a spike strip?

When the police pursue criminals who are in a getaway vehicle, it is usually a highspeed chase. A chase may endanger the lives of pedestrians, the criminals and the police themselves. So a device is used to stop the speeding vehicle in the quickest and safest way. The spike strip stops the movement of a vehicle by puncturing its tyres.

Also known as a stinger or tyre deflation device, it is a horizontal strip of lightweight material lined with sharp metal spikes pointing upwards. When laid across a road, the spikes deflate all four tyres of a speeding vehicle running over it.

The 7.5cm long spikes are hollow and designed to impale themselves in the tyres and allow the air to escape slowly. This brings the vehicle to a gradual stop. After the vehicle has run over the strip, the policeman simply pulls it off the road with the help of a long cord to avoid damage to other vehicles.

In 2017, to prevent terrorist vehicle attacks, designers came up with a new kind of spike strip - a net with steel spikes that can be deployed by two people to stop a speeding vehicle in seconds. The spikes puncture the tyres and the net entangles in the front wheels, bringing the vehicle to a safe and complete halt. (Content: Amrita Bharati)



This week in sports history...

As this happens to be a week that normally sees a lot of Champions League finals, we have picked four different Champions League finals across decades...

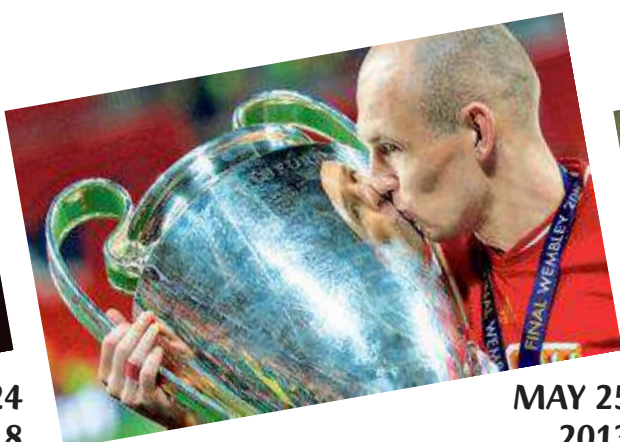
Here, we take a look at interesting, iconic and unforgettable sporting moments that took place in the week of May 24-30 through the years.



MAY 24
2018

LYON HAVE THE LION'S SHARE

Both Ada Hegerberg (left) and Camille Abily scored goals as Lyon defeated Wolfsburg 4-1 - all five goals coming in extra time after Wolfsburg first went in front. This made it a hat-trick of Women's Champions League titles for Lyon, who extended their streak to four in 2019 with a record sixth title in the competition.



MAY 25
2013

ROBBEN ROBBED DORTMUND

The 2013 Champions League final, played between Bayern Munich and Borussia Dortmund, was the first all-German final in the competition. After Ilkay Gundogan's penalty cancelled out Mario Mandzukic's opener for Bayern, man of the match Arjen Robben (above) netted the winner in the 89th minute. By also winning the Bundesliga and the DFB-Pokal, Bayern completed the treble that season.



MAY 26
1999

UNITED'S 1999 TREBLE

Seemingly down and out of the 1999 Champions League final after Mario Basler gave Bayern Munich a sixth minute lead, Manchester United bounced back from the brink to win the title. Goals from Teddy Sheringham and Ole Gunnar Solskjaer in added time (91st and 93rd minutes respectively) gave United the victory. By winning the Premier League and FA Cup also that season, United became the first English club to achieve a treble.



MAY 26
2018

BALE BAILED OUT REAL MADRID

After Liverpool's Sadio Mane cancelled out Karim Benzema's opener to level the scoreline, it was left to Gareth Bale (above) to make the difference in the 2018 Champions League final. Bale scored twice, first in the 64th minute and then again in the 83rd minute, to give Real Madrid a 3-1 victory. With this win, Real became the first side to win three back-to-back titles (having won in 2016 and 2017 as well) in the Champions League era (1992 onwards).