



MacVISTA



tech**news**



world**view**



cross**word**



comic**strip**



jokes & **riddles**



fun**facts**



current**affairs**

Chugging down the tracks

Nothing beats the high of riding trains. It's a little world encompassed by the tracks laid down. Come let's take a train journey into the annals of history and meet the forerunners of railways.

The first evidence of rail transport system can be credited to the Greeks. They laid down a paved track over the Isthmus in Corinth to enable boats to move over land, thus avoiding a long circumnavigation. Later, people found a way of hauling goods and passengers with the help of ropes up a steep hill to the fortress of Salzburg. Interestingly enough, that system known as the Funicular still ferries tourists up. Wagons pulled by horses on wooden tracks helped in hauling and transporting coals to the docks.

Think Through It

"Many times the wrong train took me to the right place."

Paulo Coelho



Two notable inventions, introduction of metal tracks and the use of steam to power engines, revolutionized the railways. James Watt used steam to power heavy pistons and the first ever steam locomotive was born in 1784. Richard Trevithick worked on the first fully operational steam railways in Wales and changed the face of railways forever. Further developments led to George Stephenson commandeering the first ever



steam-powered train to ferry passengers from Liverpool to Manchester. Railway tracks were now steadily mobilising society and economy.



Rudolf Diesel's engines worked more efficiently than steam powered engines. The next big change for train engines was the use of electricity, which made train journeys quieter and comfortable. Soon, the railways started looking at making the

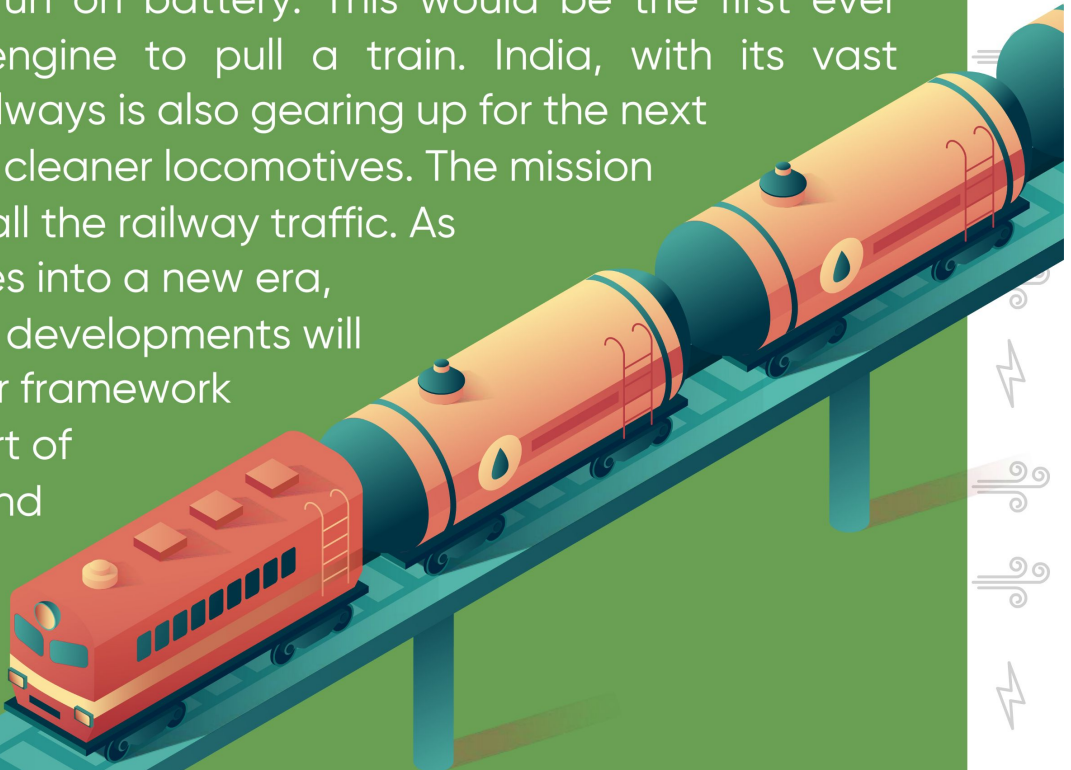
journey more luxurious. The one name synonymous with comfortable train wagons was George Pullman. He designed carriages which had high ceilings, good ventilation and comforts like upholstered beds and dining cars, which made traveling far distances an enjoyable adventure. The next big thing was the introduction of Japan's Shinkansen or the bullet train in 1964, the first high speed train. New designs like green engines and underwater train links are underway now to make the world come closer.





tech NEWS

As the world works at reducing carbon footprint and going green, railways must also chalk out a cleaner, greener future. Hitching trains to cleaner fuels like Hydrogen would reduce pollution. Hydrogen can be produced through process of electrolysis and reaction with hydro carbons. Emissions from such engines would be condensed water and the noise levels would also be very low. Alstom has produced the first such passenger train named Coradia inLint in Berlin, Germany in 2018. Hybrid electric trains by Rolls Royce are currently on a trial with ROSCO Porterbrook in UK as a possible alternative to current fuels. They have developed a power pack to be fitted in the engine to alternatively run on battery. This would be the first ever dual mode engine to pull a train. India, with its vast network of railways is also gearing up for the next generation of cleaner locomotives. The mission is to electrify all the railway traffic. As railways moves into a new era, technological developments will provide better framework for the comfort of passengers and safety of cargo.

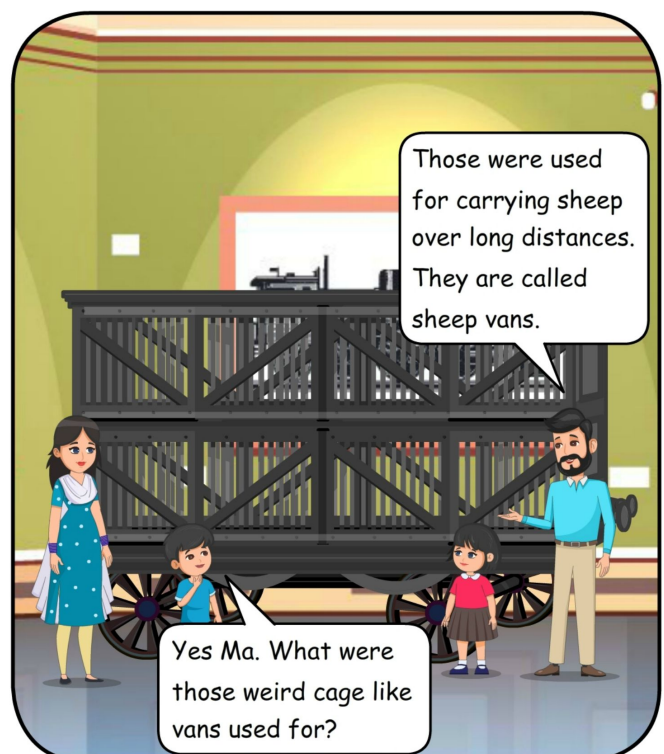
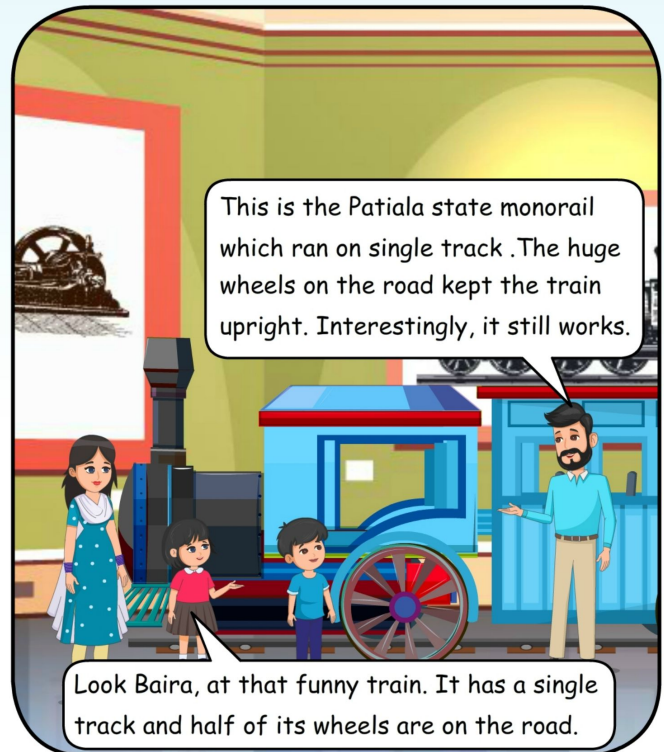


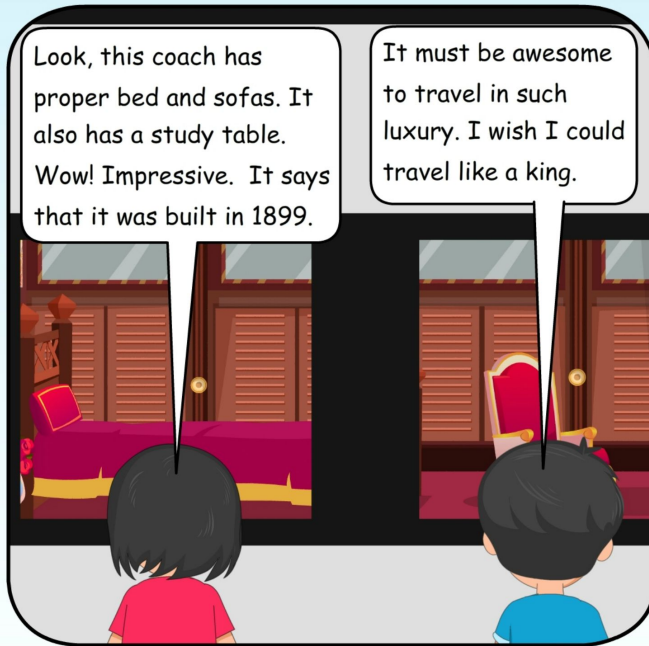


Comic Strip



BAIRA AND BELA

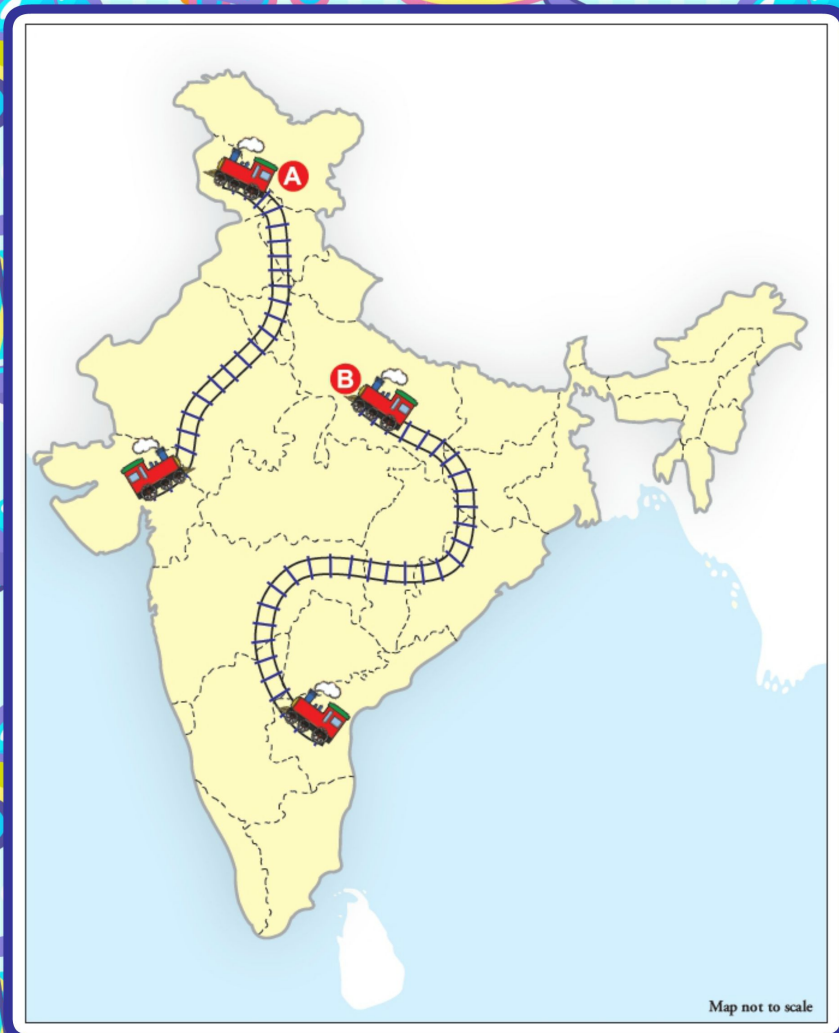




Activity 1

Name the States

Can you identify the states through which the train passes before reaching its destination ?



Train A

RKMISHA AJMUM _____
LIAMHCHA DSHEPRA _____
ARAYHAN _____
JARSTAHAN _____
JUGATAR _____

Answers on page 19

Train B

RTUTA HPRDAESH _____
HJRAKAHND _____
SGRAHTTIHAC _____
HAARMASTRA _____
TANARAKAK _____
DIOHSA _____
ADNHAR RAPESDH _____

LUXURY ON TRACKS

The legacy of lavish luxury is carried forward in the present times by special trains like the Palace on Wheels. Launched in 1982, it travels all across Rajasthan and boasts of interiors in typical Rajasthani splendor. That's not India's only luxury train; there are others such as Maharaja's Express, The Golden Chariot and The Deccan Odyssey which showcase our rich history and traditional hospitality.



The world famous Orient Express (renamed now as the Venice Simplon Orient Express) is the last word in elegant and splendid luxury trains. Stepping into its carriages is like going back in history. The route takes you across London, Verona, Paris and Venice. Rovos Rail, which meanders through the African grasslands from Pretoria to Cape Town, is another name for luxury. Hardcore travel enthusiasts however swear by the Trans Siberian Express, which spans across eight time zones geographically and takes about two weeks to reach its destination. Imagine zooming by the beautiful Lake Baikal or streaking through Ulaanbaatar, Mongolia. If the lonely outback calls out, then board the fantastic Ghan through the red centre of Australia and be bewitched by the huge natural formation of Uluru or the Ayer's rock. While railways started as a common way of connecting people and making travel easy, luxury trains took train travel to another level of experience.



TRAINS IN THE CITY

As satellite cities or suburbs came up, public transport took the burden of conveying thousands of people to and from their workplace to their homes. Railways linked these new found areas by opening up Metro lines, Subways, T-bahns etc. These transport systems were grouped under the Light Rail Transit (LRT). The first such train was the street run electric cars called Trams. They usually had one or two cars with an antenna attached to the overhead electric cables.



Many cities like Prague, Amsterdam, Melbourne and San Francisco still feature trams as the city's lifeline. Subways, Metros and Maglev (magnetic levitation) monorails were the next level of urban transport systems. These train systems did not stop at traffic signals so they needed a separate working area. Subways descended into the underground whereas Monorails worked on a single track and were elevated over the running traffic. There were dedicated platforms and tracks to help them run in time. Electric engines hauled these passenger-filled cars over distances. The plus point was that it was less time consuming and could connect almost all the points of the city to the suburbs. For example, the Delhi metro network which joins Delhi to its satellite towns of Gurgaon, Faridabad and NOIDA. The world's first rapid transit system was the partially underground Metropolitan Railway, 1863 which is now part of the London Underground. Hong Kong's MTR is called the best metro in the world. Tomorrow is a new day for the public transport systems as they look towards driverless engines, AI supported systems and extra safety for its passengers.



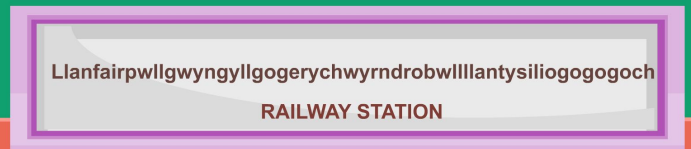
FUN FACTS



The longest train journey is the Trans-Siberian Express running from Moscow to Vladivostok, crossing eight time zones of Russia. India's longest train route is the Vivek Express running from Dibrugarh in Assam to Kanyakumari in Tamil Nadu. Amazing, isn't it?



The slowest train in the world is the Glacier Express of Switzerland as it goes around the valleys and mountains of this beautiful country. The Ooty – Nilgiri passenger train is the slowest train in India, crossing many scenic spots.



The title of the lengthiest name of a railway station in the world is held by Wales' '**Llanfairpwllgwyngyllgogerychwyrndrobwllllantysiliogogoch**' railway station. The name contains 58 alphabets and beat Chennai's **Venkatanarasimharajuvaripeta** railway station with just one extra letter in 2019. The title of the shortest name of a railway station is '**lb**' in Odisha.



The Gotthard Base Tunnel is the world's longest and deepest railway tunnel. It runs under the Swiss Alps. The Pir Panjal Railway Tunnel, Jammu & Kashmir is the longest railway tunnel in India and runs through the Himalayas.



The Seikan Tunnel in northern Japan and the Channel Tunnel between the United Kingdom and France are the world's longest undersea railway tunnels.

From multiple sources





The world over, there are several railway tracks that have gained fame because of the dangerous routes that they traverse. In India, the Pamban railway bridge connects Rameshwaram to Pamban Island and passes over the Palk Strait. During cyclones, the bridge is swept by high tidal waves so it has been designed in a manner to withstand high pressure of these waves. The Aso- Minami route in Japan crosses one of the most active volcanic zones in the country. The Death train track hugs the cliff side on the Myanmar border and passes over river Kwai. This track was built by the prisoners of war (POW) of the Second World War. The Devil's Nose in Ecuador moves laboriously up the slope of the Andes through steep inclines and narrow passes. Argentina's Tren la Nubes or 'Train to the clouds' travels on thirteen bridges at 4,200m above sea level. All of these train tracks have been created by a vision to connect people and places no matter how hard the journey.



TRAINS IN TIMES OF WAR

War time saw the railways being put into action for mass transportation of troops, arms and ammunition to the areas under attack. Special train tracks were developed by the nations at war during World War II to increase the movement of crucial arms and supplies directly to the war zones. Heavy canons and artillery were mounted on flatbeds for ease of transport.



Soon enough, when the wars started returning heavy casualties, the railways also transformed into mobile hospitals. These trains had operating rooms and fully equipped treatment rooms with surgeons and nurses on calls. All forms of treatment and surgeries were conducted on these mobile hospitals.

With most of the able-bodied men away at war as soldiers, women were employed to fill in for all essential jobs such as railway fitters, engineers and maintenance workers. This is how the railways became the largest employer in times of war.

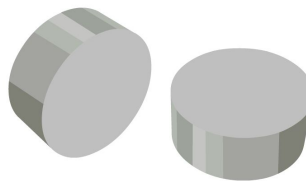


Activity 2

Let's create our very own simple electric train.

What you need

1. 50 ft of 20 gauge non-insulated copper wire
2. A cylindrical wooden rod like a rolling pin or any other smooth wooden surface to coil the copper wire around
3. One AA battery
4. Two circular magnets

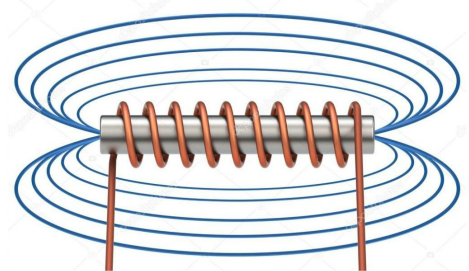


Instructions

1. The first step is to coil the copper wire tightly around the rolling pin to create a track.
2. Attach the two magnets to the two ends of the battery. The magnets will click in place as the battery is made of metal. The positive side of the magnet should face one side and the negative side should face the other. Make sure that the magnets are slightly bigger than the battery.
3. Insert the train fully into the copper coil. Your electric "train" will shoot down the track.
4. Join the two ends of the copper coil to create a loop track. Your train will continue running till the battery lasts.

How does it work?

When the magnet touches the wire, it creates an electric connection. When both the magnets come in contact of the wire, then electric current passes to the ends of the battery. It's a fairly short area but a magnetic field is created around the coil. This pushes the magnets and the train moves. Note: If the train doesn't move and just vibrates, then simply turn one of the magnets around to reverse the polarity. Please do this activity with the help of someone elder in your family.



JOKES

Why did the elephant refuse to travel on the train?

Because she didn't want to leave her trunk in the baggage carriage.



When does a rabbit go at exactly the same speed as a train?

When it is one of the passengers on the train.



How do you locate a stolen train?

By following the tracks.



What do you call a train that can't stop sneezing?

Achoo-choo train.



Why was the train engine humming?

It had forgotten the words.



What happened to the man who took the evening train home?

He had to give it back.



From multiple sources

RIDDLES

An electric train is moving north at 100mph and a wind is blowing to the west at 10mph. Which way does the smoke blow?

It is an electric train. It won't blow smoke.

Two incredibly high speed trains are charging at a speed of 250 mph, on the same track, starting from opposite directions. They leave at the same exact time and continue at the same exact speed. They never slow down. The two trains never touch...how is that possible

The two trains begin back-to-back and charge the track away from each other.

Trains travel from one city to another city all day, always on the same track, always going nonstop and at the same speed. The noon train took 80 minutes to complete the trip, but the 4:00pm train took an hour and 20 minutes. Why?

Sixty minutes make an hour. Add 20 minutes to make it 80 minutes, which is the same as an hour and 20 minutes

A train leaves from Magic City every 40 minutes to Fairy land. When Alice reached the station, the station master told her that the train had left 15 minutes ago and the next train to Magic City would leave at 9:40 pm. At what time did Alice reach the station?

The trains leave Magic City at a gap of 40 minutes, so the train before the 9:40 pm would have been the one at 9:00 pm. The station master said that the train left 15 minutes before Alice reached the station. So, she had reached the station at $9:00 \text{ pm} + 15 \text{ min} = 9:15 \text{ pm}$.

A railroad track runs through a tunnel in a hillside. There's only one track, and the tunnel is wide enough for only one train. But one day, two trains went into the tunnel from opposite directions. Each train entered the tunnel exactly at eight o'clock. Three minutes later, each train came out at the opposite ends of the tunnel. Yet, there was no accident. How was this possible?

One train entered the tunnel at 8am and the other train at 8pm.



MACVISTA
July-Sep 2021

5TH JULY 2021

Jeff Bezos stepped down as the CEO of Amazon after 27 years of steering the company to success and was succeeded by Andy Jassy.



Haiti's President, Jovenel Moise, was assassinated leading to further turmoil and violence.

20TH JULY 2021

Sher Bahadur Deuba took an oath as the new Prime Minister of Nepal.

Saudi Arabia has allowed women to attend Hajj without a male guardian in an effort to expand women's rights.

8TH JULY 2021

Legendary actor Dilip Kumar passed away at 98 after being ill for a long time

**25TH JULY 2021**

Weightlifter Mirabai Chanu opened India's medal tally as she bagged silver medal.



Gymnast Simone Biles dropped out of the individual all-around competition citing her mental well-being.

12TH JULY 2021

World No 1 Novak Djokovic defeated Matteo Berrettini to win Wimbledon 2021 Men's Final.

Italy won the European Championship for the first time since 1968.

27TH JULY 2021

Joe Biden, US president announces a complete withdrawal of US forces from Iraq but will continue to help in the war against terrorism.



Scientists have discovered evidence of water vapour in the atmosphere of Jupiter's icy moon Ganymede.

18TH JULY 2021

Pulitzer Prize-winning Indian journalist Danish Siddiqui was brutally killed while covering the clashes between Afghan security forces and Taliban fighters in Spin Boldak district of Kandahar city in Afghanistan.

**30TH JULY 2021**

China plans to build the first-of-its-kind experimental nuclear reactor that will not require water for cooling and is expected to be safer than traditional reactors.

Lovlina Borgohain of India defeats Chen Nien-Chin of China in the quarterfinals of the women's boxing event in the Olympics.



2nd AUG 2021

Indonesia's Papua region in the Pacific Ring of Fire belt was hit by a 5.9 magnitude earthquake

Min Aung Hlaing, the military chief declared himself as the Prime Minister of Myanmar.



20th AUG 2021

People of Afghanistan crowded Kabul airport to flee from Taliban.

Panj Shir in the Hindu Kush mountains is the only stronghold left in Afghanistan still fighting.

6th AUG 2021

PV Sindhu has become the second Indian after Sushil Kumar to win two individual Olympic medals.

Indian hockey team won the bronze in the Olympics after a four decade long wait. Ravi Kumar Dahiya won silver in the wrestling event giving India its fifth medal.



25th AUG 2021

A suicide bomber blew up in the crowded Kabul airport leaving many dead and injured even as countries scrambled to get their stranded citizens and workers out of Afghanistan.

Hurricane Ida devastates parts of US with heavy rain and flooding.

12th AUG 2021

Violence in Taliban captured cities in Afghanistan is making people flee their country even as US remains adamant on moving out its forces by mid-September.

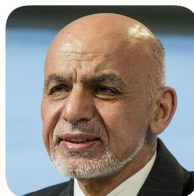
Turkey is reeling from a devastating flash flood as elsewhere Algiers and Siberia are combating furious wildfires.

30th AUG 2021

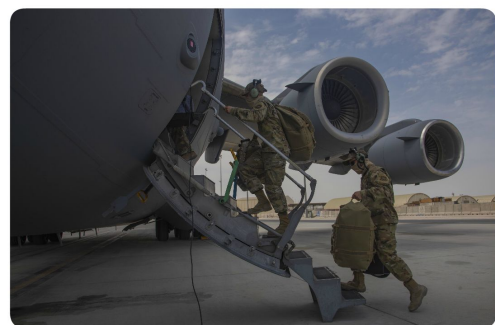
India's shooter Avani Lakhera won gold in air- rifle event in Tokyo Para- Olympics. Nishad Kumar got silver in the high jump event. Bhavina Patel wins silver in table tennis and Vinod Kumar wins the bronze in the discus throw event. India has won 19 medals in the sporting events.

15th AUG 2021

Afghanistan woke up to the news of Kabul falling into the hands of Taliban. Ashraf Ghani, the president of Afghanistan left the country leaving the people of Afghanistan shocked and terrified.



Tokyo announces the start of Para Olympics but without crowds as it battles an upsurge in Coronavirus cases.



US withdrew completely from Afghanistan leaving the Taliban at the centre of power.



3rd SEP 2021

Mullah Hebatullah Akhundzada will be the leader of Afghanistan and will hold political and religious authority.

Dr. Firdausi Qadri from Bangladesh has won the 63rd Ramon Magsaysay Awards 2021 for her work on vaccine procedures for infectious diseases.



17th SEP 2021

Rebecca Grynspan, of Costa Rica became the first woman Secretary-General of the United Nations Conference on Trade and Development (UNCTAD).

Virat Kohli, Indian cricket captain decides to step down from captaincy of T-20, however he will lead the team for the test and ODI forms



8th SEP 2021

Taliban appoints new government with Sirajuddin Haqqani, FBI's most wanted as its interior minister. No women were appointed in the cabinet.



Kongthong village in Meghalaya also called 'whistling village' was promoted as the best tourism village by UNWTO. Here the child is called by a unique tune which the mother composes after birth.

19th SEP 2021

Captain Amarinder Singh resigned from the post of chief minister of Punjab. He is succeeded by Charanjit Singh Channi.

Justin Trudeau emerges as the prime minister of Canada for the third term

21st SEP 2021

Emmy awards were won by Olivia Colman for her portrayal of Queen Elizabeth in the T.V drama, Crown and Kate Winslet for Mare of Easttown.



Ruskin Bond, Sirshendu Mukhopadhyay and Vinod Kumar Shukla were selected for the prestigious Sahitya Akademi Fellowship 2021 in India.

12th SEP 2021

Taliban refuses to let women continue studies or profession as seen by the absence of women students in schools and colleges.

Daniil Medvedev won his first Grand Slam trophy after defeating World No. 1 Novak Djokovic in the 2021 US Open.



15th SEP 2021

Both North Korea and South Korea tested nuclear missiles increasing tensions in the Korean peninsula and neighboring areas.



A newly discovered sketch by artist Van Gogh, titled 'Worn Out' is displayed in the Van Gogh museum, Amsterdam.



ANSWERS

Activity 1

Name the States

Train A

JAMMU KASHMIR
HIMACHAL PRADESH
HARYANA
RAJASTHAN
GUJARAT

Train B

UTTAR PRADESH
JHARKHAND
ODISHA
CHATTISGARH
MAHARASTRA
KARNATAKA
ANDHRA PRADESH

TYPES OF TRAINS

Across

- 3. SUBWAY
- 4. STEAM
- 6. MONORAIL
- 7. MAGLEV

Down

- 1. FUNICULAR
- 2. GHAN
- 4. SHINKANSEN
- 5. LOCOMOTIVE