

#### DAV POLICE PUBLIC SCHOOL, PANCHKULA



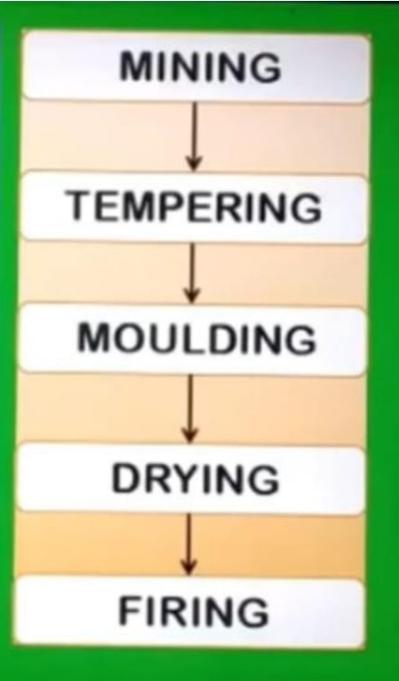
Class - IV

Social Sciences

<u>Chapter – 5</u>

**BRICKS AND BRIDGES - 2** 

**LOKHAN WANTED** TO KNOW HOW BRICKSWERE MADE. **ALI EXPLAINED** THE STEPS INVOLVEDIN **MAKING BRICKS** 



#### **BRICK MAKING PROCESS**

CLAY IS MINED AND
STORED IN THE
OPEN TO MAKE IT
SOFT AND TO
REMOVE UNWANTED
OXIDES



2. TEMPERING CLAY IS MIXED WITH WATER TO MAKE A DOUGH



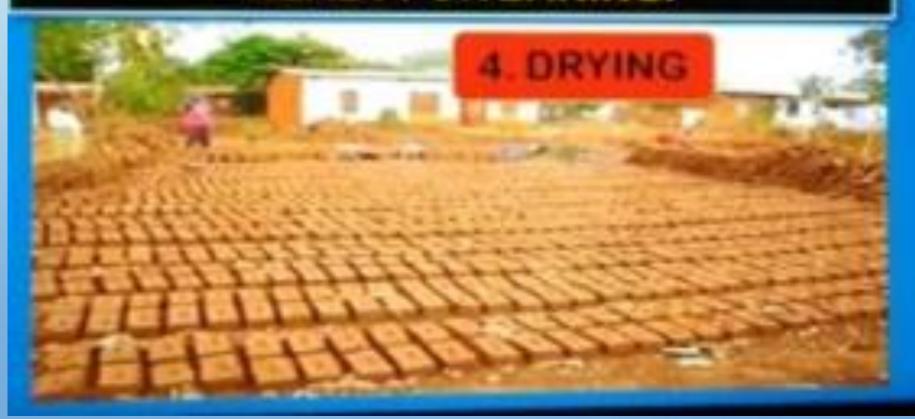
### 3. A LUMP OF MIXTURE IS TAKEN ROLLED IN SAND AND PUT INTO A METAL MOULD



### SAND IS USED SO THAT THE BRICK DOES NOT STICK TO THE MOULD



THE MOULD IS EMPTIED ONTO THE DRYING AREA. AFTER EVERY TWO DAYS THE BRICKS ARE TURNED OVER FOR UNIFORM DRYING. THEN THEY ARE READY FOR BAKING.



### THE BRICKS ARE ARRANGED IN A KILN FOR BAKING IT MAKES THE BRICKS STRONG







Lokhan was surprised to know that the reddish-brown bricks were made in a kiln. They were brought to construction site in trucks.

All explained that bricks were also made by machines. The use of modern building materials made the buildings strong and safe. Lokhan compared the building with his small hut in the village, which was easily damaged by strong winds. It got flooded every time it rained. His parents had to repair the hut regularly!

All took his son to meet the manager of the construction site. Lokhan was happy to see the manager's son Ayaan. The manager told his son that Ali and Lokhan lived on the other side of river. Lokhan told Ayaan that they had to cross a bamboo bridge. Ayaan had seen many types of bridges but had never crossed a bamboo bridge!

### MACHINE MADE BRICKS

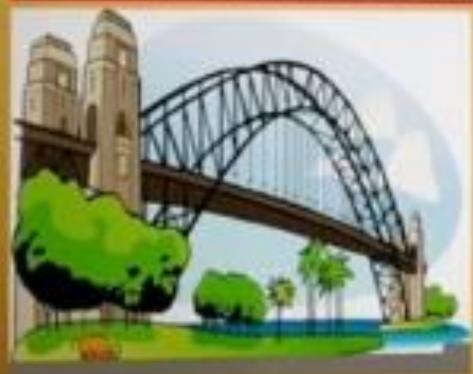


The development in science and sechnology has made it possible to construct strong bridges across water bodies, mountains, valleys, etc. They help in the easy movement of people, goods and vehicles. Ayaan showed Lokhan the pictures of some bridges in India.



#### Do You Know?

The narly bridges were made by nature like a fallen tree on a river, stream and pond.





#### BRIDGES FOR EASY MOVEMENT ACROSS WATER BODIES



### BRIDGES HELP IN THE EASY MOVEMENT OF PEOPLE, GOODS AND VEHICLES



### TYPES OF BRIDGES

### 1. SUSPENSION BRIDGE—IT CAN COVER LONG DISTANCE.



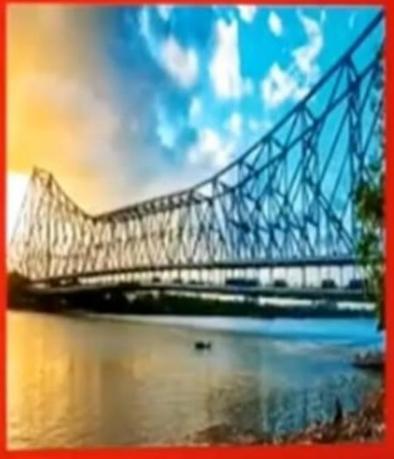


## THEY WERE EARLIER MADE OF WOOD AND ROPES. BUT NOW THEY ARE MADE OF STEEL



## 2. CANTILEVER BRIDGE—THEY SUPPORT THE LOADTHROUGH DIAGONAL BRACING





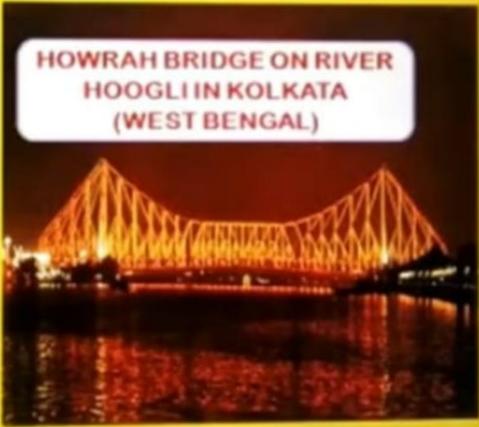
# 3. CABLE STAYED BRIDGE—IT USES SHORT CABLESTHAT ARE ATTACHED TO PILLARS





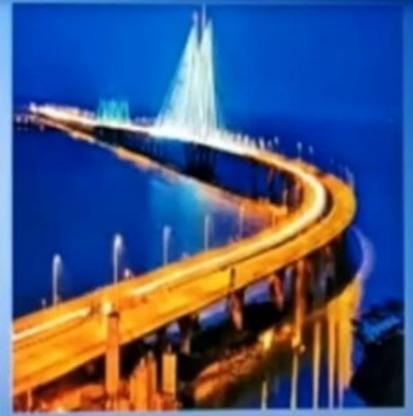
## IT OFTEN USES TRUSS (TIE UP) FORMATIONS BOTH BELOW AND ABOVE THE BRIDGE





#### BANDRA SEA LINK BRIDGE IN THE ARABIAN SEA, MUMBAI MAHARASHTRA





### OTHER TYPES OF BRIDGES (A) TRUSS BRIDGE

RAJMUNDRY RAILWAY BRIDGE ON RIVER GODAVARI ANDHRA PRADESH



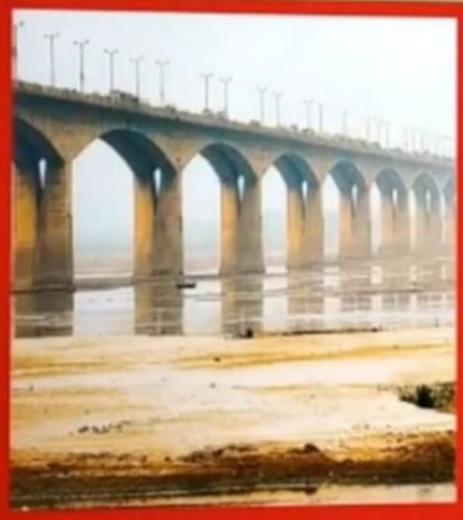


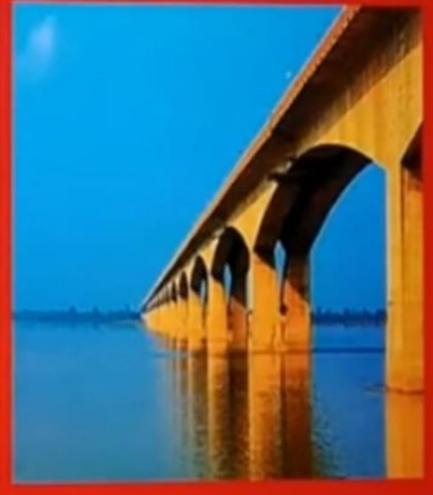
#### SOME OTHER TYPES OF BRIDGES

#### (B) GOLDEN BRIDGE IN RAMESHWARAM TAMIL NADU



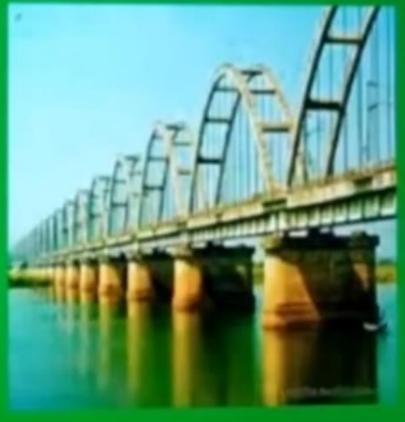
#### (C) BEAM BRIDGE GANDHI SETU IN PATNA





## (D) <u>ARCH BRIDGE</u> GODAVARI RIVER IN RAJMUNDRY ANDHRA PRADESH





# FLYOVERS ARE THE BRIDGES BUILT OVER ROADS TO EASE THE MOVEMENT OF TRAFFIC

