

#### KENDRIYA VIDYALAYA VIJAYAPURA

CLASS – 4 Mathematics

### Building with Bricks

Presented By Miss Rashmi

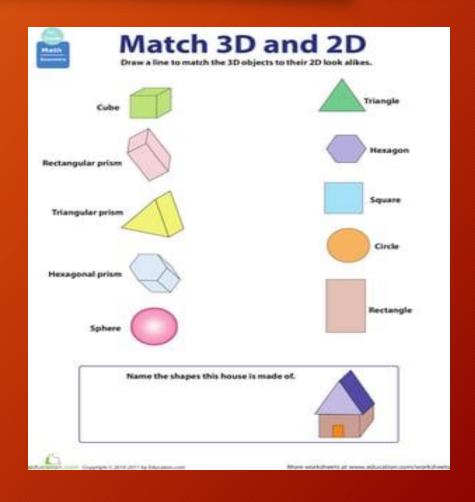
### Revision of 2D and 3D shape

https://www.youtube.com/watch?v=Acr2bu9FbPM&feature=youtu.be

https://www.youtube.com/watch?v=61lZpLRnXUM&feature=youtu.be

#### Practice sheet

- Draw a line to match the 3D objects to their 2D look a likes.
- 2. Name the shapes this house is made of.



# Day -2

#### Introduction

- What we will learn in this chapter?
- 1. Bricks pattern for jagriti school.
- 2. Some bricks pattern of wall and floor with different shapes.
- 3. How to draw a brick on paper?
- 4. How to make a brick?
- 5. A wall that will not fall.
- 6. Mental Math (ability to compute)

#### Brick Patterns for Jagriti School

This is the true story of Jagriti School in Murshidabad (West Bengal). When its building was being made, there was a plan to make brick patterns on the floor and walls. Jamaal, Kaalu and Piyaar were the masons for the brick work. They wanted to get new ideas for the school building. So they took their other friends to see the old tomb of Murshid Kuli Khan. (See photos.)



This building has a big floor with about two thousand beautiful brick patterns. These were made by masons long back – about three hundred years ago.







Look how the bricks are arranged in these five floor patterns.

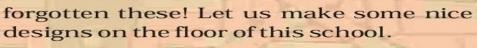






Which floor pattern do you like the most? \_\_\_\_\_ Have you seen such patterns anywhere?

The masons came back excited. Jamaal said — Ah! In those days they had made so many interesting brick patterns. We had



Each mason made a different brick pattern. The school is proud to have such a beautiful building! Children play and sing on it and also make new patterns themselves.



## Some bricks pattern of wall and floor with different shape

 Find out different shapes from these designs and write there names also?



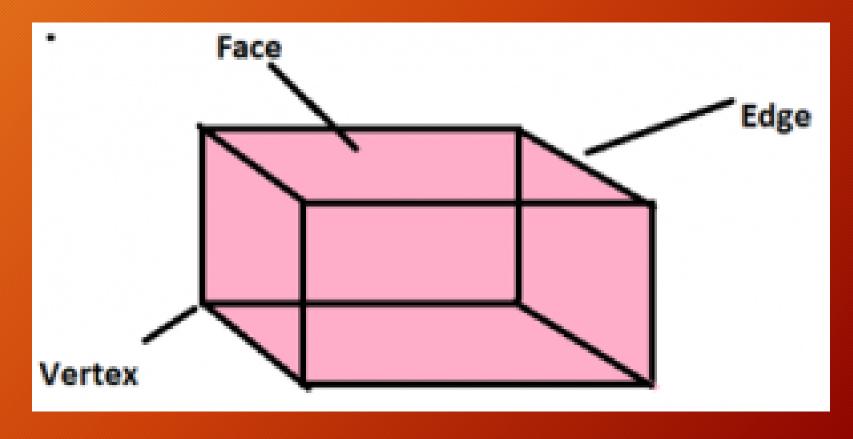
### How to draw a brick on paper?

 https://www.youtube.com/ watch?v=WdyQoghXX5A&fea ture=youtu.be



### Faces, Edges and Vertices

https://www.youtube.com/watch?v=mip6Jryn19E&feature= youtu.be



### Answer the following questions.

1. How many faces, vertices and edges in all does a brick have ?

Faces \_\_\_\_\_

Vertices\_\_\_\_\_

Edges \_\_\_\_\_

2. Draw the smallest faces of the brick.

#### Process of making a brick?

 Dig the soil and grind it in fine prticles and make a paste mixing it with water



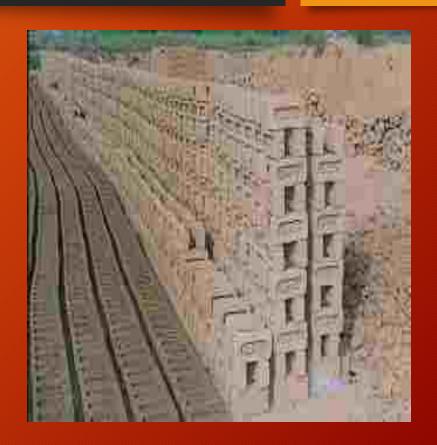
 Put the clay paste in brick mould and get a shape of brick



• Put these row bricks in the sun light



 Make a parallel rows with hole designs for baking these bricks in sun light.



- At last put these row bricks in chimney for baking them in fire.
- After baking in fire these bricks are turned in red color and get hard.
- https://www.youtube.com/watch?v=UYbSK\_ZUB-g&feature=youtu.be

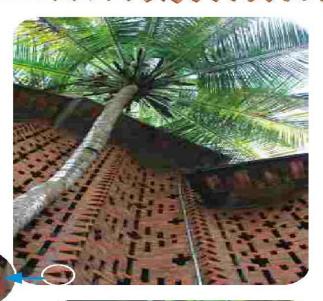






This 'jaali' is from a library building in Kerala.

See how the edge of the bricks is used to make a triangle in the wall.



Have you seen bricks that look like triangles? Look at the bricks around the tree in this photo.





#### Find out Look for other arches a

Look for other arches around you and draw them.

#### A Special Arch

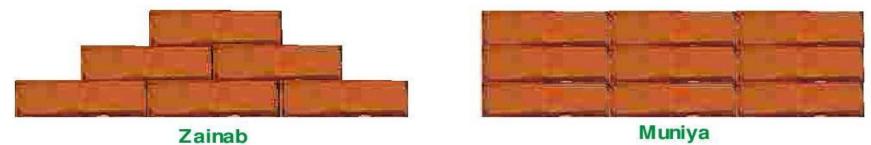
In this photo from Orchha, see how the arch is made. It has a nice name - Ghoonghat Waali Mehraab (the arch with a veil).



#### A wall that will not fall

#### A Wall that will not Fall

One day Muniya and Zainab are playing with bricks and making their walls. Each makes a different wall.



Zainab says her wall will not fall easily. Masons too do not put bricks one on top of the other, as Muniya has done.

What do you think? Which wall will be stronger?

### Mental Math (ability to compute)

Mental Math: Bhajan Buys Bricks

Bhajan went to buy bricks. The price was given for one thousand bricks. The prices were also different for different types of bricks.

#### Prices

Old bricks - Rs 1200 for one thousand bricks.

New bricks from Intapur - Rs 1800 for one thousand bricks.

New bricks from Brickabad - Rs 2000 for one thousand bricks.

Question 1. Bhajan decided to buy the new bricks from Brickabad. He bought

three thousand bricks. How much did he pay?

Question 2. Guess what he will pay if he buys 500 old bricks.