

## SHAPES AND SPATIAL UNDERSTANDING

One day a teacher asked her students to draw pictures of chairs in their homes.

Next day Shalini brought the two pictures that she had drawn.

Rajni looked at one of the pictures and said, "This is not a chair".

Shalini said, "It is a chair."
The teacher asked, "What are you talking about?"


Rajni showed the picture to the teacher.
What do you think? Has Shalini drawn the picture of a chair?


The teacher said, "This is a chair. It is how the chair looks when you look at it from the top."

Pooja and Reena had drawn pictures of chair like this.


Have you looked at a chair from different sides?
Do they look the same or different?

1. Look at the pictures of a house drawn here. Can you say which is drawn from the top, which from the front and which from the side.

2. Identify these objects.
(i) Some pictures of objects are given here. These pictures show their side view. Write the names of the objects in the boxes given below them.

(ii) Some pictures of objects are given here. These pictures show their top view. Write the names of the objects in the boxes given below them.

(iii) Draw the picture of a table to show how it will look like from the top and the side.


## Activity-1

(i) Let us trace some objects.

Take a match-box, put it on a paper and draw as shown here. Observe the shapes formed.

(ii) Take a bangle and trace it. Observe the shape formed.
(iii) Trace the following objects on a paper. Identify the shapes and draw in the table.

| Object | Shape of the object |
| :--- | :--- |
|  |  |
|  |  |

3. Let us see the shapes of some objects.

Take a match-box. Open it as shown in the figure.
See how it looks.

(i) Now see these objects. How will they appear when they are opened up? Tick ( $\checkmark$ ) the correct answer.

(ii) Collect a toothpaste box, a soap wrapper, a chalk box and a biscuit packet wrapper. Open them and draw their shapes.
4. Let us observe the shapes in a Rangoli

Sita and Gita are very interested in making a rangoli. They make rangolis on the day of a festival. Observe this lovely rangoli.


Identify these shapes $\bigcirc, \square, \triangle, \square, \square,(\mathcal{J}$ in the Rangoli.
(i) Fill colour according to shape.

* Black, $\qquad$ Green, $\square$ Red, $\square$ Yellow, Blue

Identify different shapes in the picture and colour as given above.

5. Playing with match-sticks.

Suresh made these shapes using match-sticks.

(i) Make shapes using match-sticks
(A) Make a $\square$ using 8 sticks
(B) Make a $\square$ using 8 sticks
(C) Make a $\triangle$ using 5 sticks
(D) Make a $\square$ using 12 sticks
(E) Make a $\triangle$ using 12 sticks
(F) Make a $\square$ using 12 sticks
(ii) (A) How many different types of shapes can be formed using 8 sticks?
(B) How many different types of shapes can be formed using $\square$ 5 sticks?
(C) How many different types of shapes can be formed using 12 sticks? $\square$
(D) How many different types of shapes can be formed using 6 sticks?
6. See the three types of flooring in different houses. Identify the shapes in it. Draw the shapes in the given blanks.


This floor is formed using $\qquad$ shapes.


This floor is formed using $\qquad$ shapes.


This floor is formed using $\qquad$ shapes.

## Activity-2

Pooja and her brother started arranging some match-boxes on a paper.
Can they arrange them without leaving any gap?

Now they took some bangles and placed them on a white paper. Is it possible to arrange them without any gaps on the paper.


## Activity-3

Take a paper. Fold it as shown in the picture and make a boat.


Take a piece of paper and try making a boat yourself. Then, try making a rocket.

## Do This



1. Some shapes are given below with different colours. Colour the shapes in the picture with the same colour as shown below.
(A)

(B)

(C)

(D)

2. Look at the picture of the peacock and answer the following.
(A) How many $\square$ are there ? $\qquad$
(B) How many $\bigcirc$ are there ?
(C) How many $\qquad$ are there? $\qquad$
(D) How many $\square$ are there ? $\qquad$
3. How many $\square$ are there in each picture? Count and write in the blank.

4. How many $\triangle$ are there in each picture? Count and write in the blank.

5. Count and write.
(A) How many $\square$ are there? $\qquad$
(B) How many $\triangle$ are there? $\qquad$

(C) How many $\square$ are there ? $\quad$
