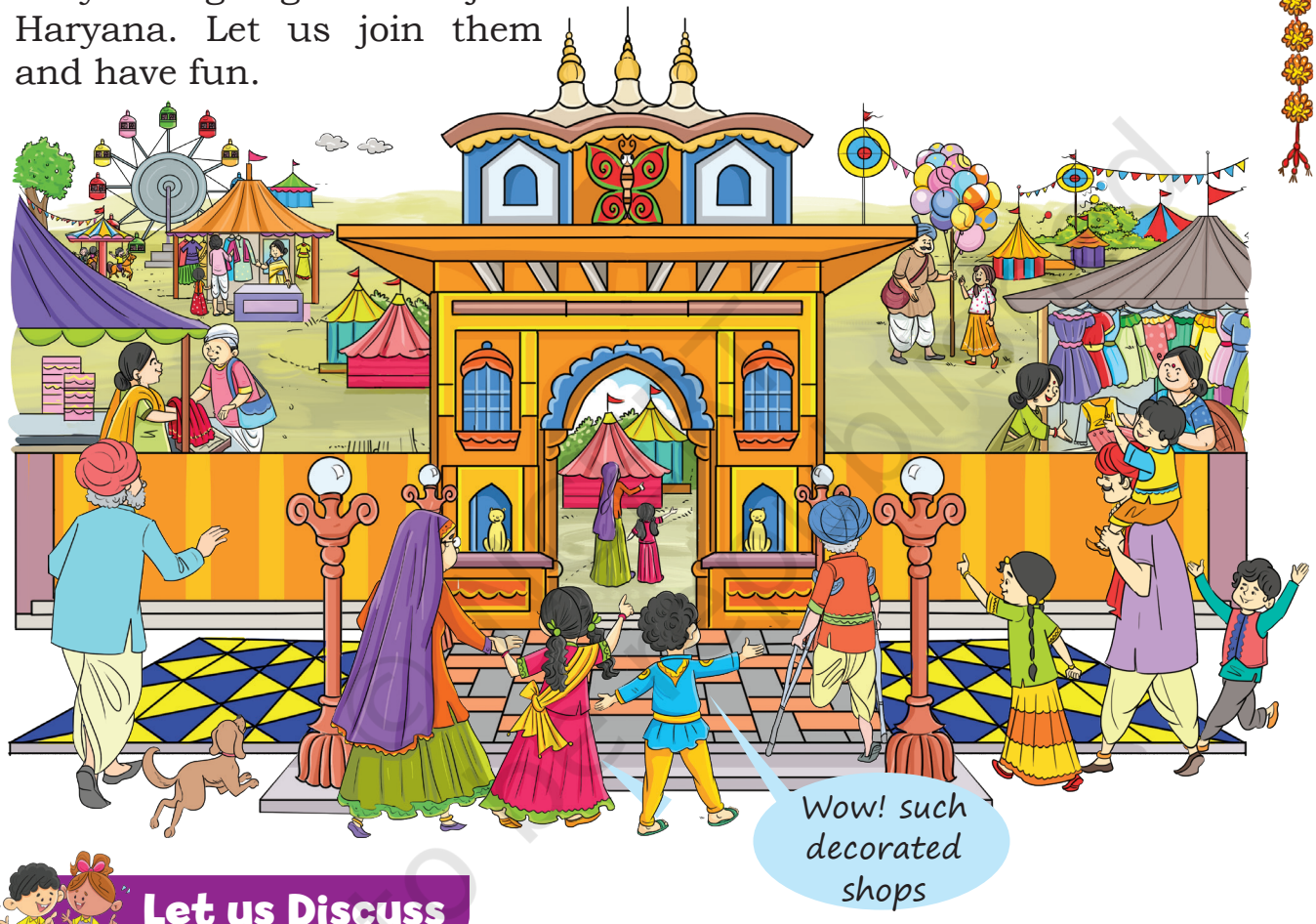
14 The Surajkund Fair

0333CH14

Soni and Avi are going to see a fair with their grandparents. They are going to Surajkund in Faridabad district of Haryana. Let us join them and have fun.



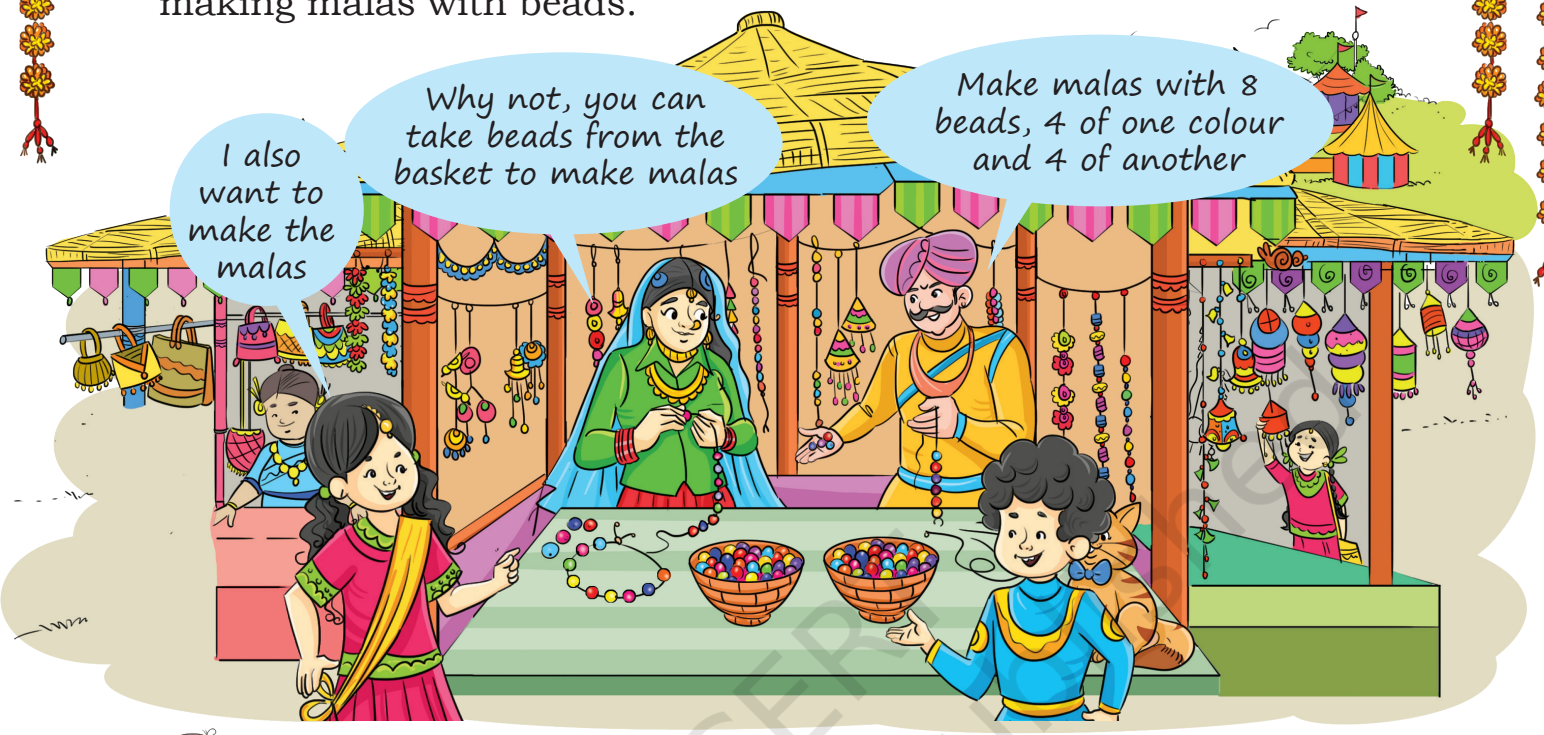
Let us Discuss

- What do you see in the picture?
- Spot things in the picture that look the same from the left and right side.

Teacher's Note: Discuss with children about any local mela they have visited. Encourage them to look at the picture and observe different patterns, like tiling on the floor and the symmetry they see in objects and shapes.

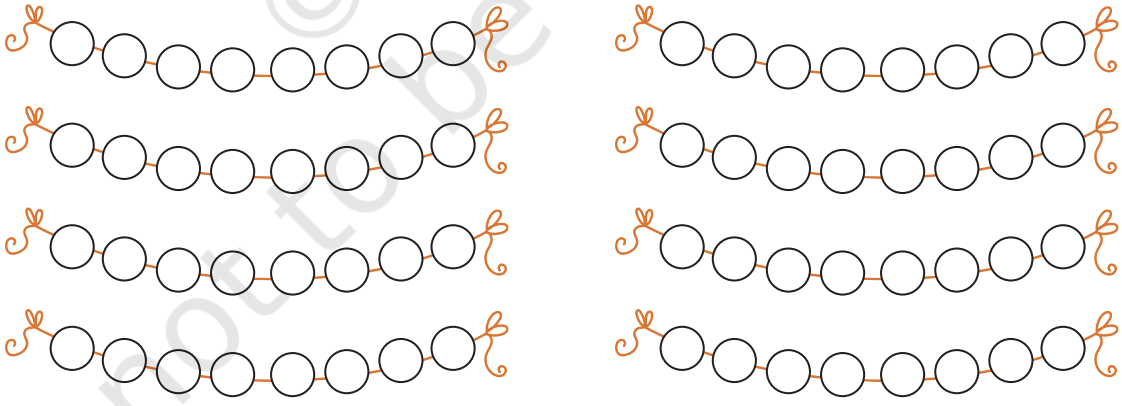
Make *Malas*

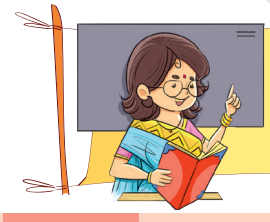
Soni and Avi reach a stall where a man and a woman are making malas with beads.



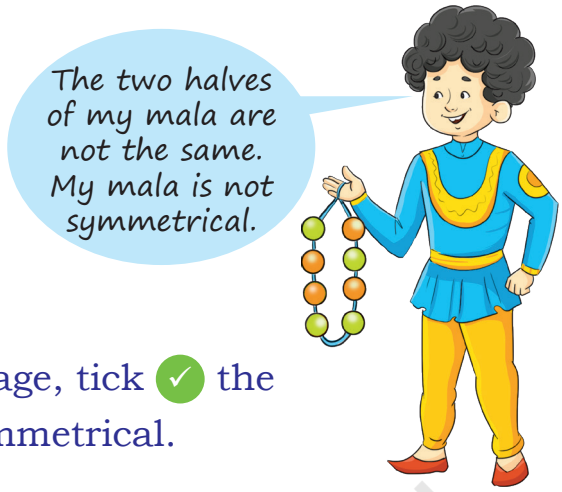
Let us Do

1. Colour the beads in the strings using two colours (🔴🟡) to show the *malas* that you have made.





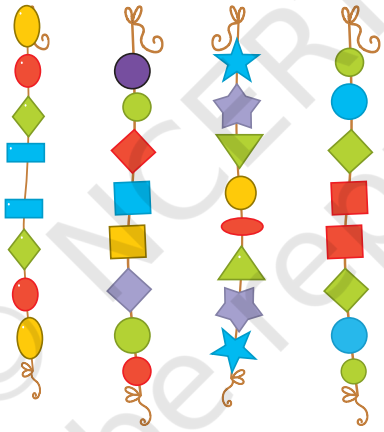
Teacher's Note: You may provide children with a string and 8 beads of two colours from a *ginmala*. They can make a record of their constructions by colouring the *malas* given here.



2. On the previous page, tick ✓ the *malas* that are symmetrical.

3. How many such *malas* can be made? Discuss.

a. Tick ✓ the *malas* that are symmetrical and cross ✗ the one(s) that are not symmetrical.



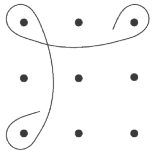
b. Now, use 6 beads of one colour and 2 beads of another colour to make symmetrical *malas*.

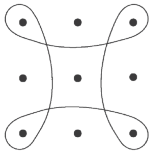
Teacher's Note: Encourage children to see the differences between symmetrical and non-symmetrical objects around them. Provide them opportunities to share their justification and reasons.

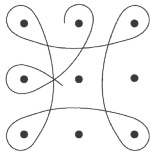
Vanakkam! Rangolis all around!

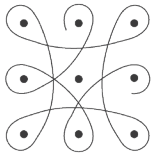
Soni and Avi arrive at the stall of Tamil Nadu. Amma was making *kolam* in front of the hut.

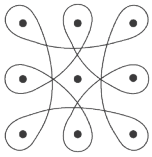
Follow the steps:

1 

2 

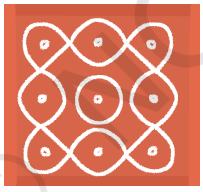
3 

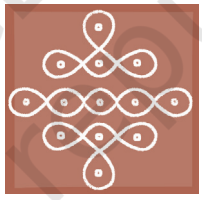
4 

5 

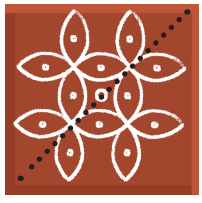
Let us Think

1. Observe the *rangolis* given below. Are all *rangolis* symmetrical?





2. Trace these *rangolis* on a paper. Fold the tracing paper in such a way that one half of the *rangoli* lies exactly on the other half.



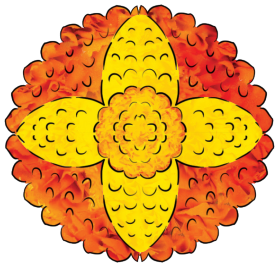
3. Draw lines in the given *rangolis* that divide them into two identical halves.
4. Look for other symmetrical things around you. Discuss.

Teacher's Note: Discuss about *kolam*, and the tradition and the States it belongs to. You can use the dot grid given on page number 192. They may use it for making symmetrical *rangolis*.

Let us Do

Enjoy making *rangolis*

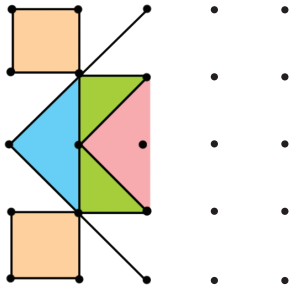
Pookalam, Kerala



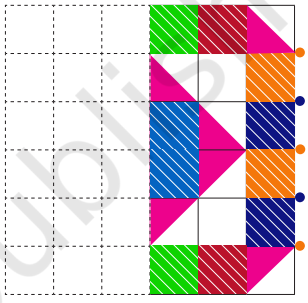
Aipan, Uttrakhand

1. Draw and complete the symmetrical rangolis given below.

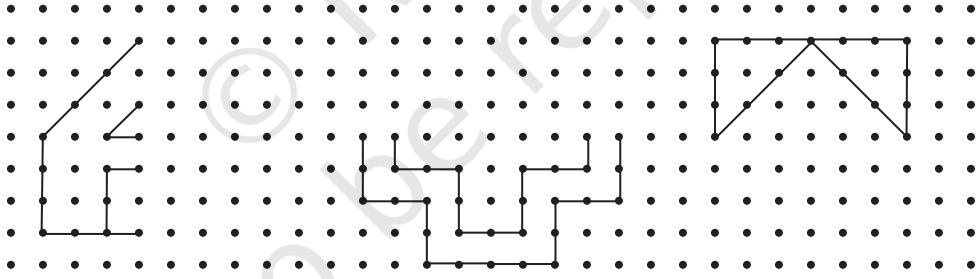
a.



b.



c.



2. Draw some more rangolis in your notebook that are symmetrical.

Teacher's Note: Give additional exercises to complete the half of a given rangoli. Observe and discuss the ways children draw the other half of the rangoli. What do they notice while completing the other half? What strategies do they use?

Ask children to collect rangoli patterns from different parts of the country and share them in the class.

Make Masks!

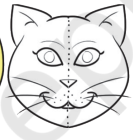
Let us make the mask of a cat...

1. Fold the paper along the middle.

2. On one side draw a cat like this.

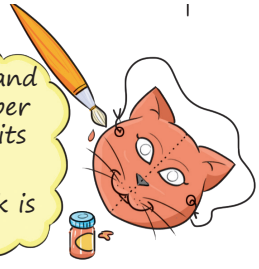
3. Cut it out using a pair of scissors.

4. Now open the fold and make the eyes, nose, etc.



5. Colour it and tie a rubber band on its back.

Your mask is ready.



Soni's mask is symmetrical and Avi's mask is not symmetrical.

Teacher's Note: Discuss with children why Avi was able to see only with one eye. Children should understand that objects that are divided into two exact halves such that one half superimposes onto the other half are symmetrical.

Tit for Tat

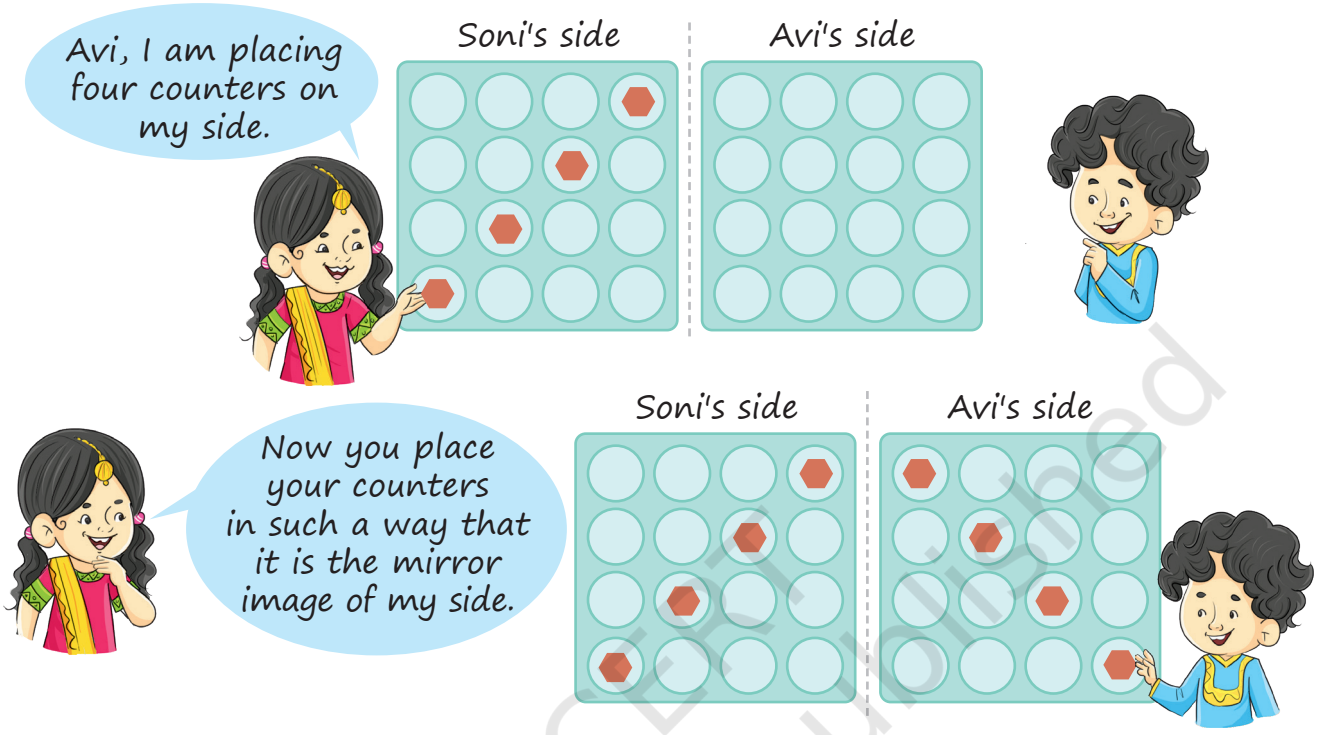
Soni gets her picture made by a painter.

Let us Think

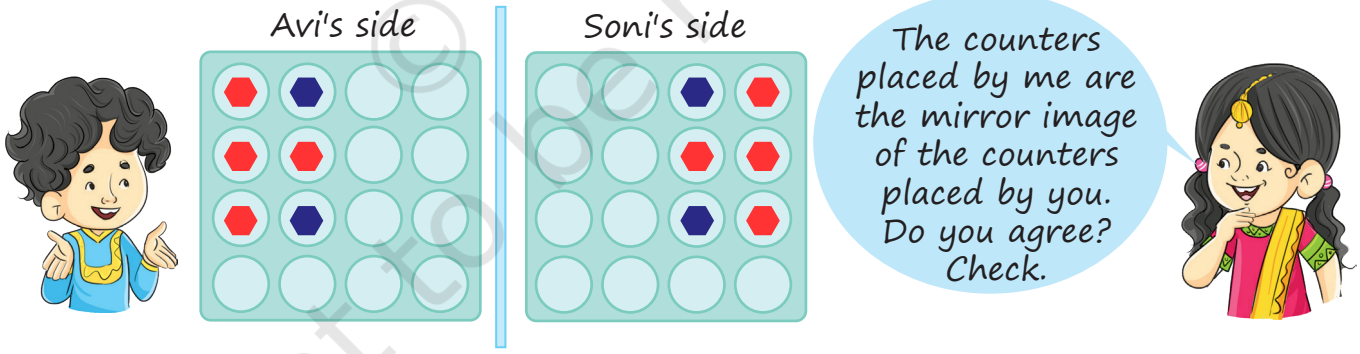
1. What is the trick the painter is playing? Find things for the painter to draw so that he can no longer play the trick. Draw three such things here.

The Mirror Game

Soni and Avi started playing this game. Let us play with them.



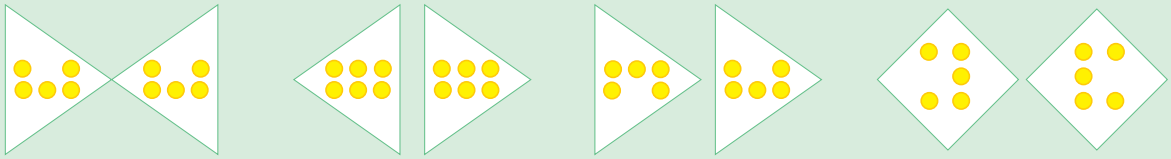
Has Avi placed the counters at the right places? Check it by placing the mirror on the line drawn.



Teacher's Note: As an extension activity, children may use different two-coloured objects such as unit cubes, counters, etc. Once children play this game on the floor. In the game, children may also use more than four objects and challenge their friends.

Let us Explore

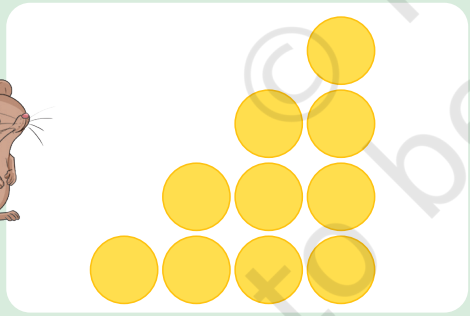
1. Pick the odd one out and give reasons.

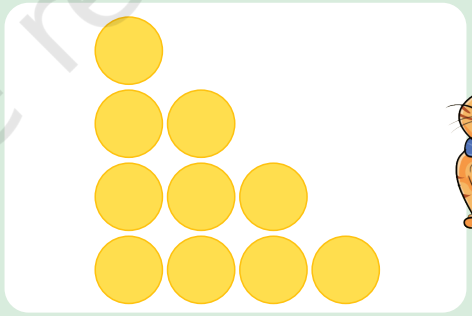


2. Fill 4 boxes with red colour and 3 with blue colour in such a way that one side is the mirror image of the other.

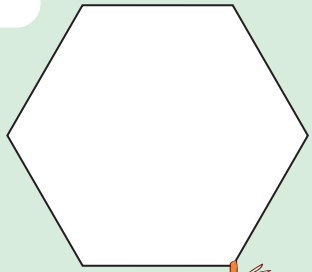
In how many ways can you fill it?
Think, think!

3. Make Micy's side the same as that of Catty's side. You can rearrange only three balls in Micy's side.





4. Which shape cutouts would fit in the given shape without overlapping and without gaps.

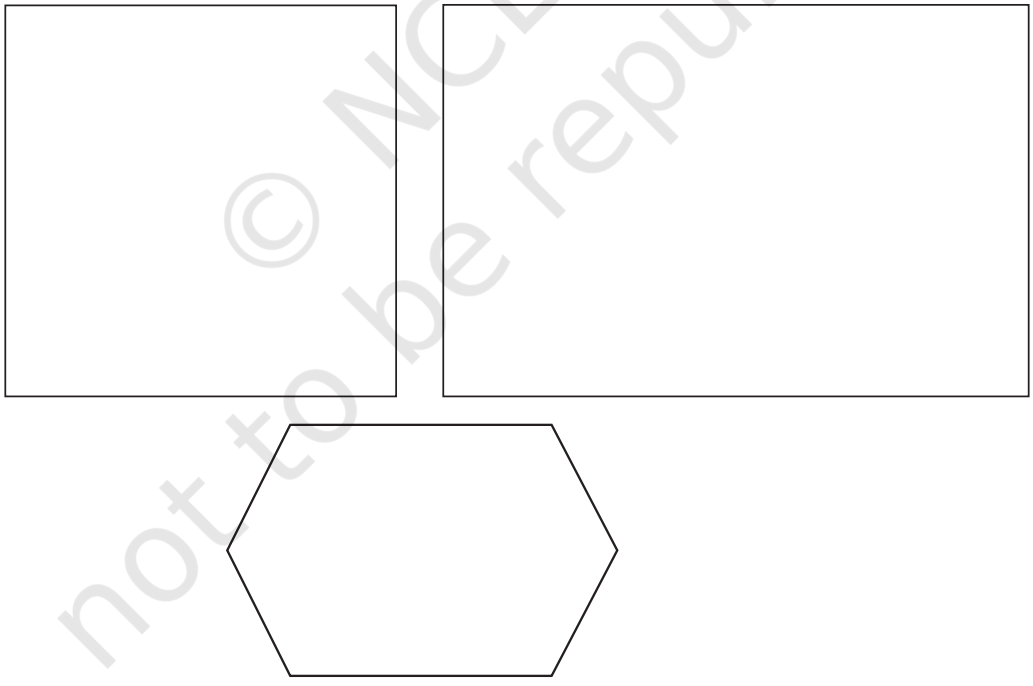


Teacher's Note: In question no 1, each part can be the odd one out. Let the children observe and find the odd one out by giving a logical reason for their answer.

Tiling the paths

Let us Do

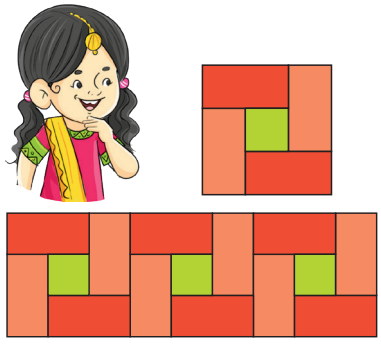
1. Use rangometry shapes to fill the shapes with no gaps and overlaps.



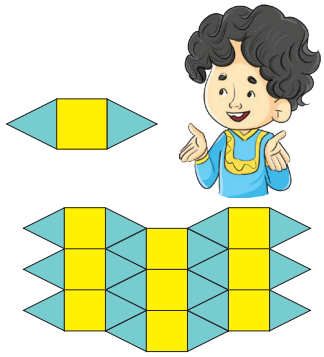
Teacher's Note: Discuss with children different footpaths they see, and encourage them to make paths with tiles with no gaps and overlaps.

Making Tiles, Creating Paths

Soni and Avi have started making their own tiles by joining different shapes.



Soni's tiles



Avi's tiles

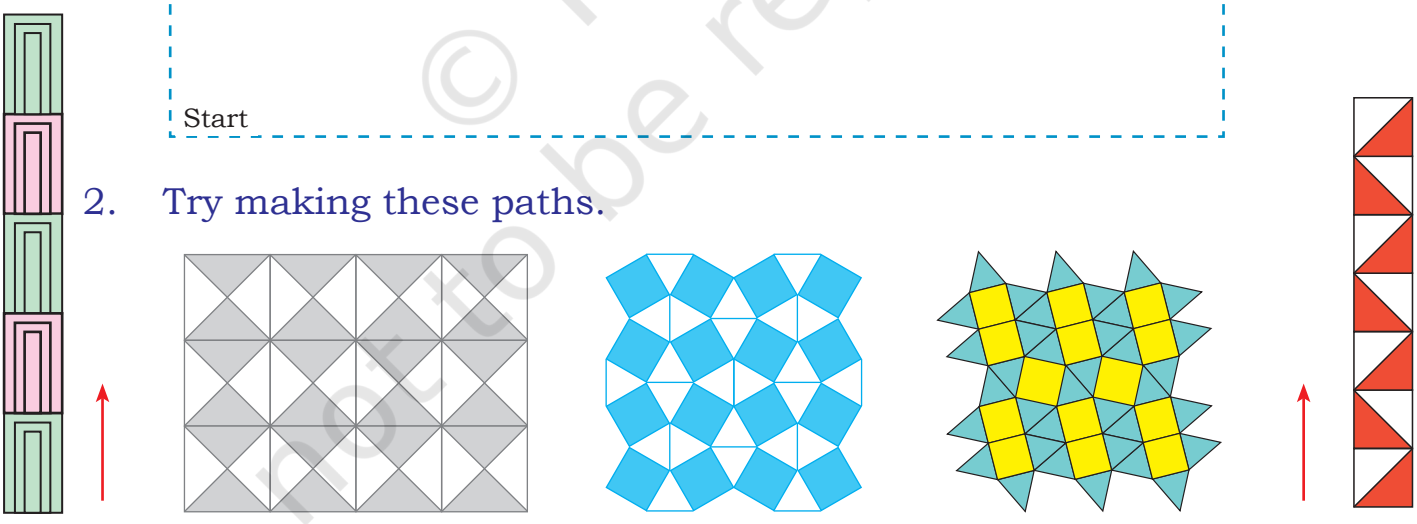
Let us Do

1. Use two or more rangometry shapes to create your tiles. Now trace the tiles to create different paths.

End

Start

2. Try making these paths.



Teacher's Note: Children can create different tessellations on a blank sheet and their work can be displayed in the class. Discuss with them the repeating unit.

Giant Wheel

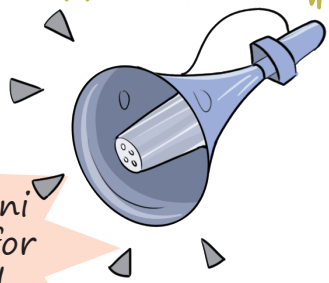
Read the conversation between Soni and Avi and mark the place they are talking about.

Let us Play

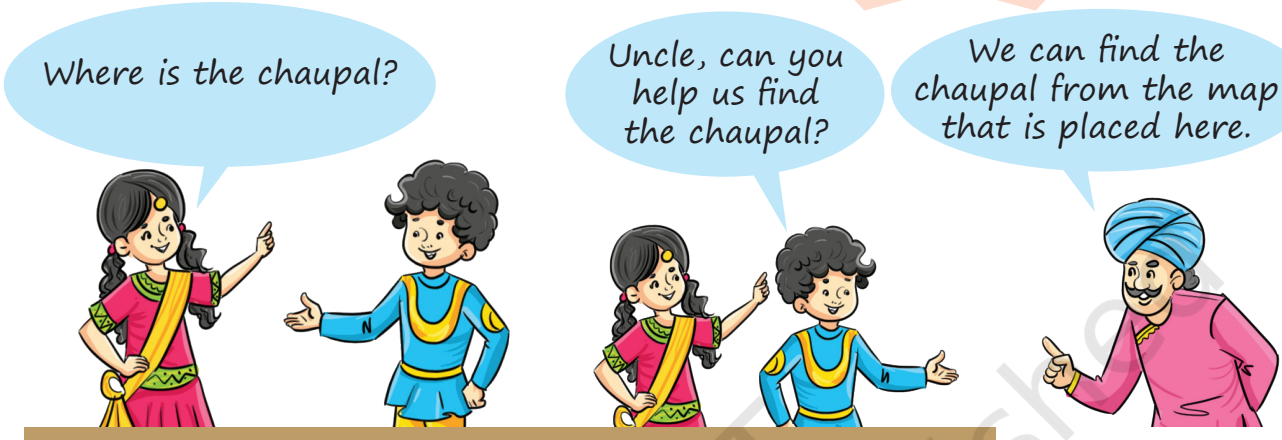
Imagine yourself sitting with Soni and Avi. You think of a place or a stall and challenge your friend to find out which stall you have in your mind. You can help them guess by answering yes or no.

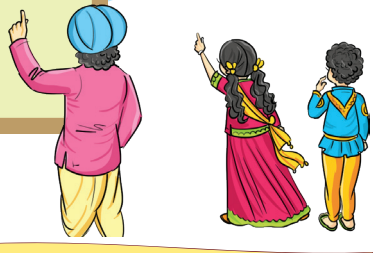
Search for Dada and Dadi

Soni and Avi's Dada and Dadi were missing. They hear their announcement.



Dada and Dadi of Soni and Avi are waiting for them in the chaupal.





Teacher's Note: To make children aware about directions, different games can be played with them where they can follow the directional clues to reach the place where the object has been kept. They can use words like take 2 steps to your right, one step forward, take 5 steps back, 3 steps to your left, etc.

Let us Do

1. Help Soni and Avi read the map and find the following:

   a. Which place does the  sign show?

   .....

   b. Circle the picture in the map that shows the play area?

   .....

   c. Which place does the  sign show?

   .....

   d. How many exit routes are there in the fair?

   .....

2. Follow the path that Avi and Soni are following.

   a. Walk on the blue lane.

   b. Turn right on the green lane.

   c. You will see a restaurant on your right. Don't sit there.

   d. Take a left towards the red lane.

   e. Take the first left turn towards the golden lane. Stalls will be seen on the way.

   f. Pass the stalls to find the *Chaupal* and meet Dada Dadi.

3. An uncle asks Dada ji the way to the ATM. Tell him the way to the ATM from the *chaupal*.

   .....

   .....

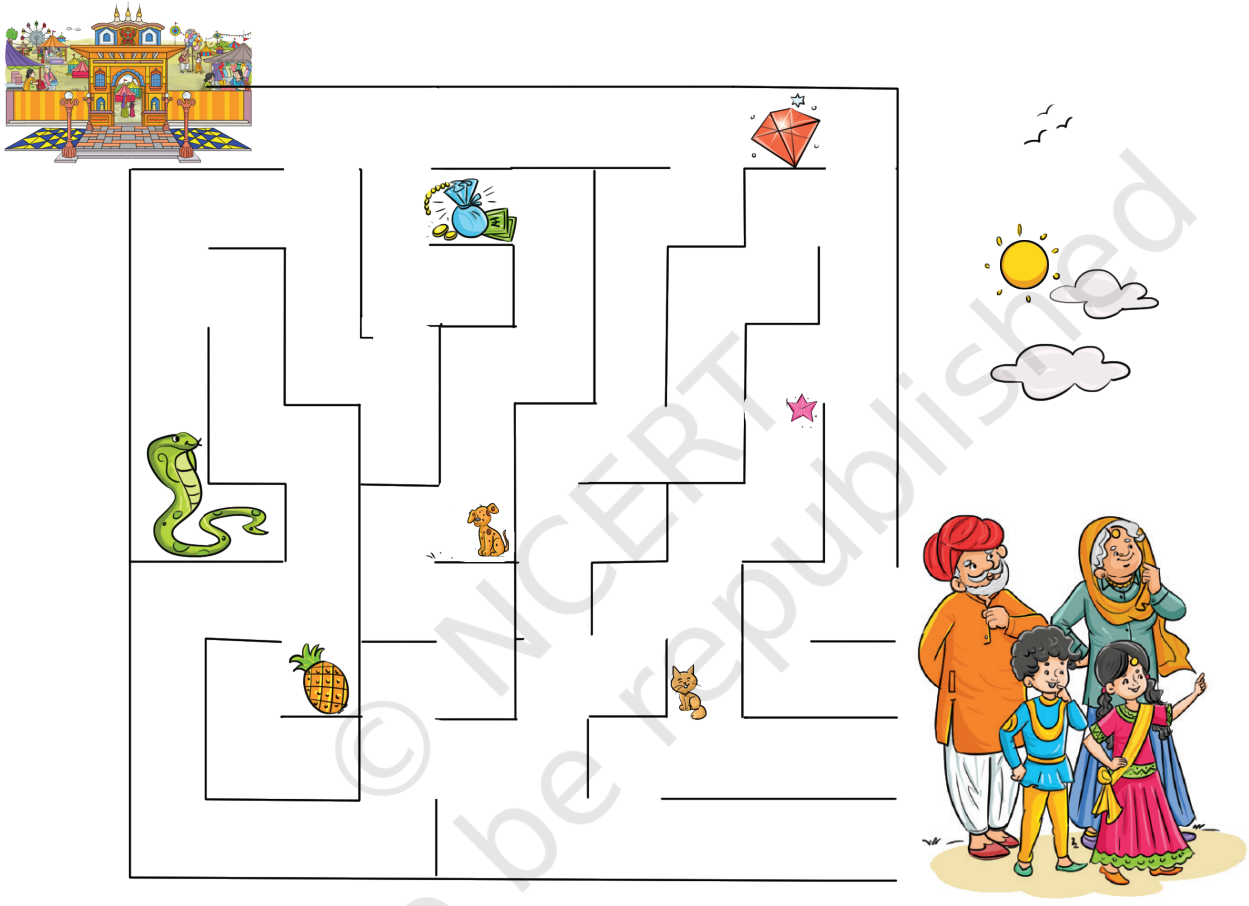
   .....

   .....

Let us Do

1. There are two ways to go out of the Surajkund fair. One seems to be a maze and the other goes straight there.

   Follow the maze with Soni and Avi to exit the fair.



2. Share the way you went through the maze. Write the things you found on the way.

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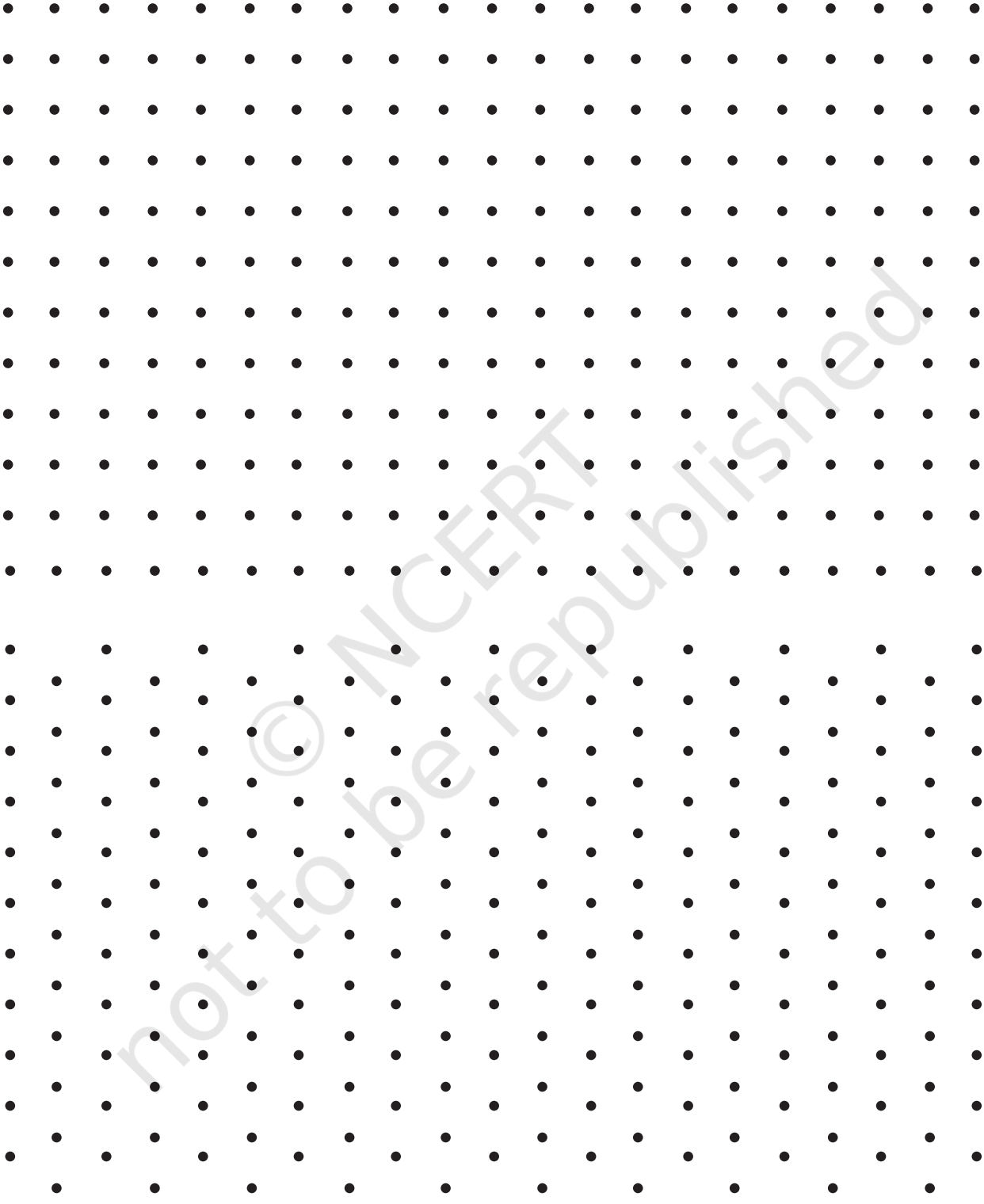
Dot Grids



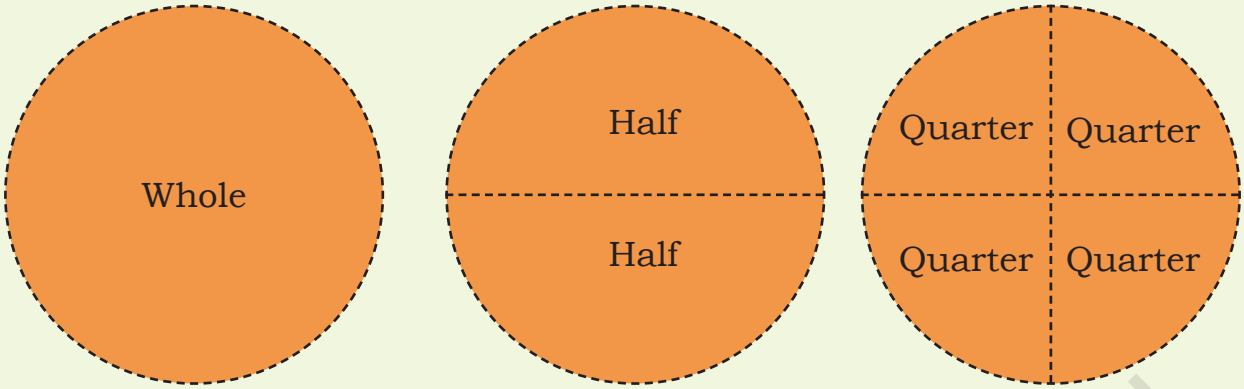
Number Cards

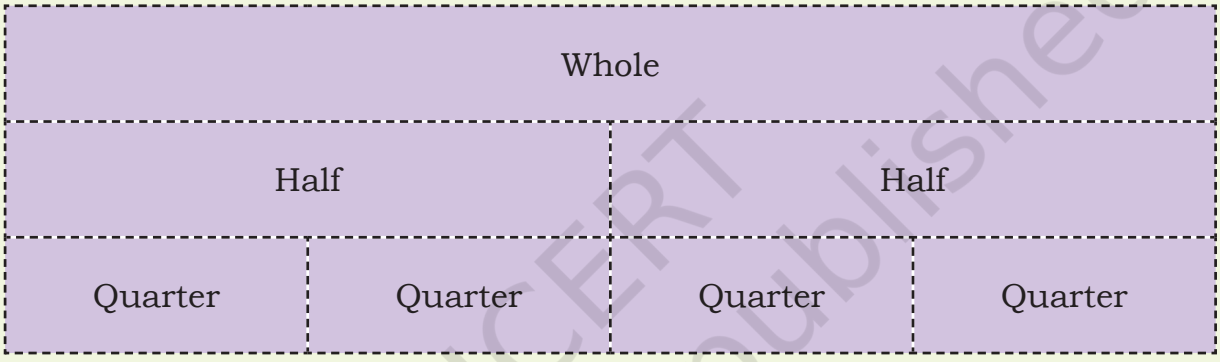
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
30	40	50	60
70	80	90	100
200	300	400	500
600	700	800	900

Number Cards

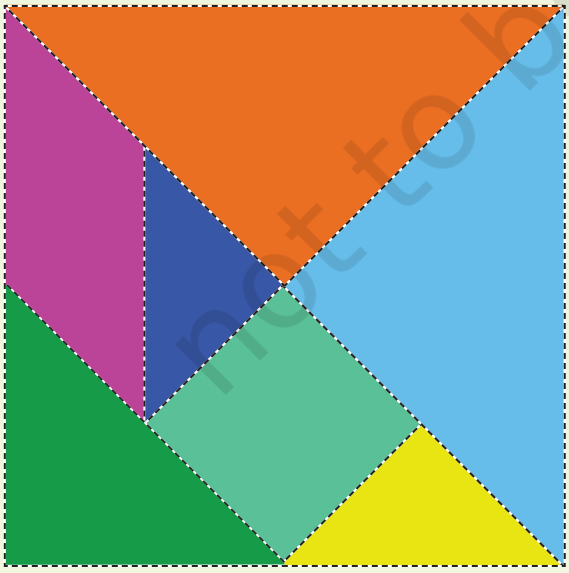
Four	Three	Two	One
Eight	Seven	Six	Five
Twelve	Eleven	Ten	Nine
Sixteen	Fifteen	Fourteen	Thirteen
Twenty	Ninteen	Eighteen	Seventeen
Sixty	Fifty	Forty	Thirty
Hundred	Ninty	Eighty	Seventy
Five Hundred	Four Hundred	Three Hundred	Three Hundred
Nine Hundred	Eight Hundred	Seven Hundred	Six Hundred

Fractions Cards

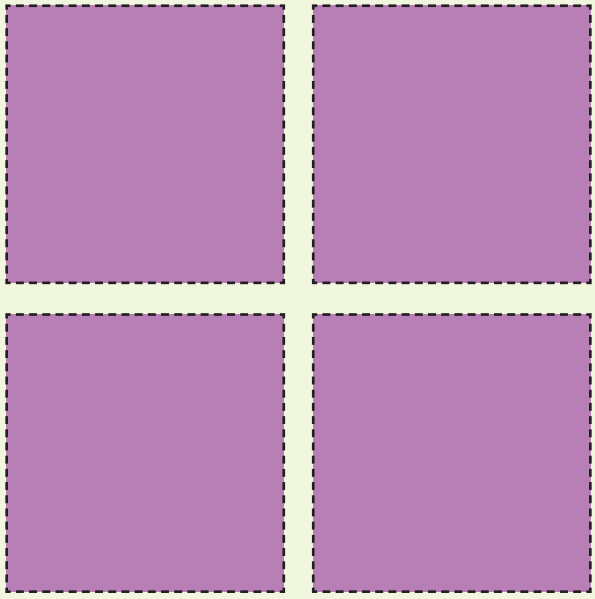




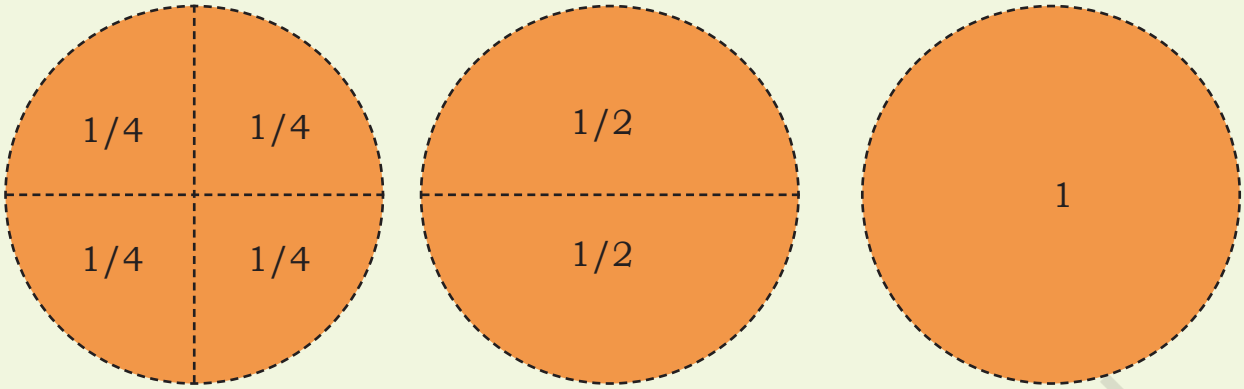
Tangram

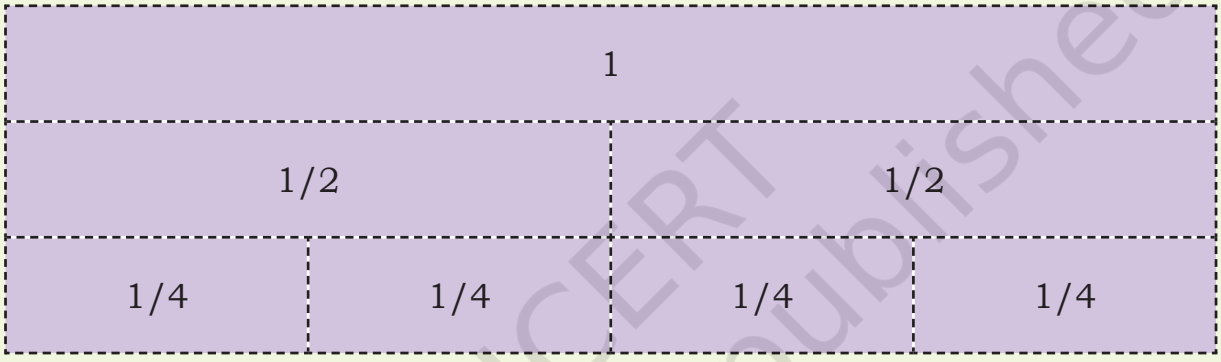


Squares

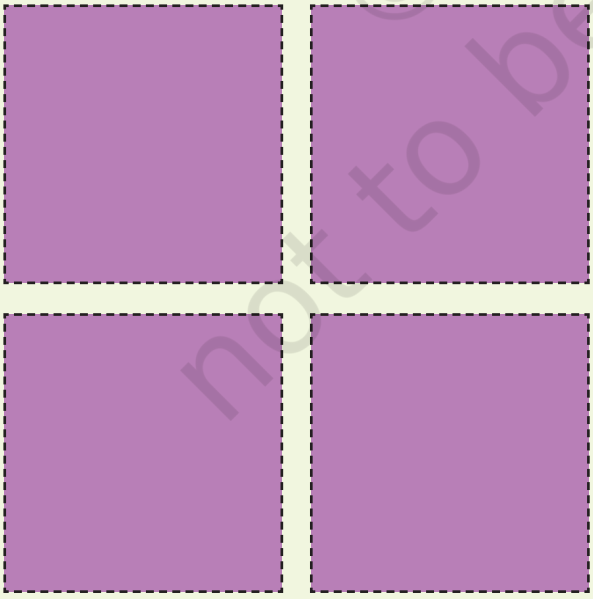


Fractions Cards

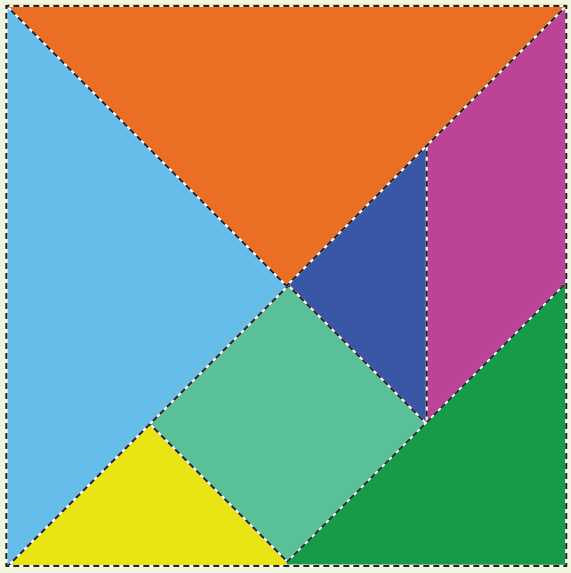




Squares

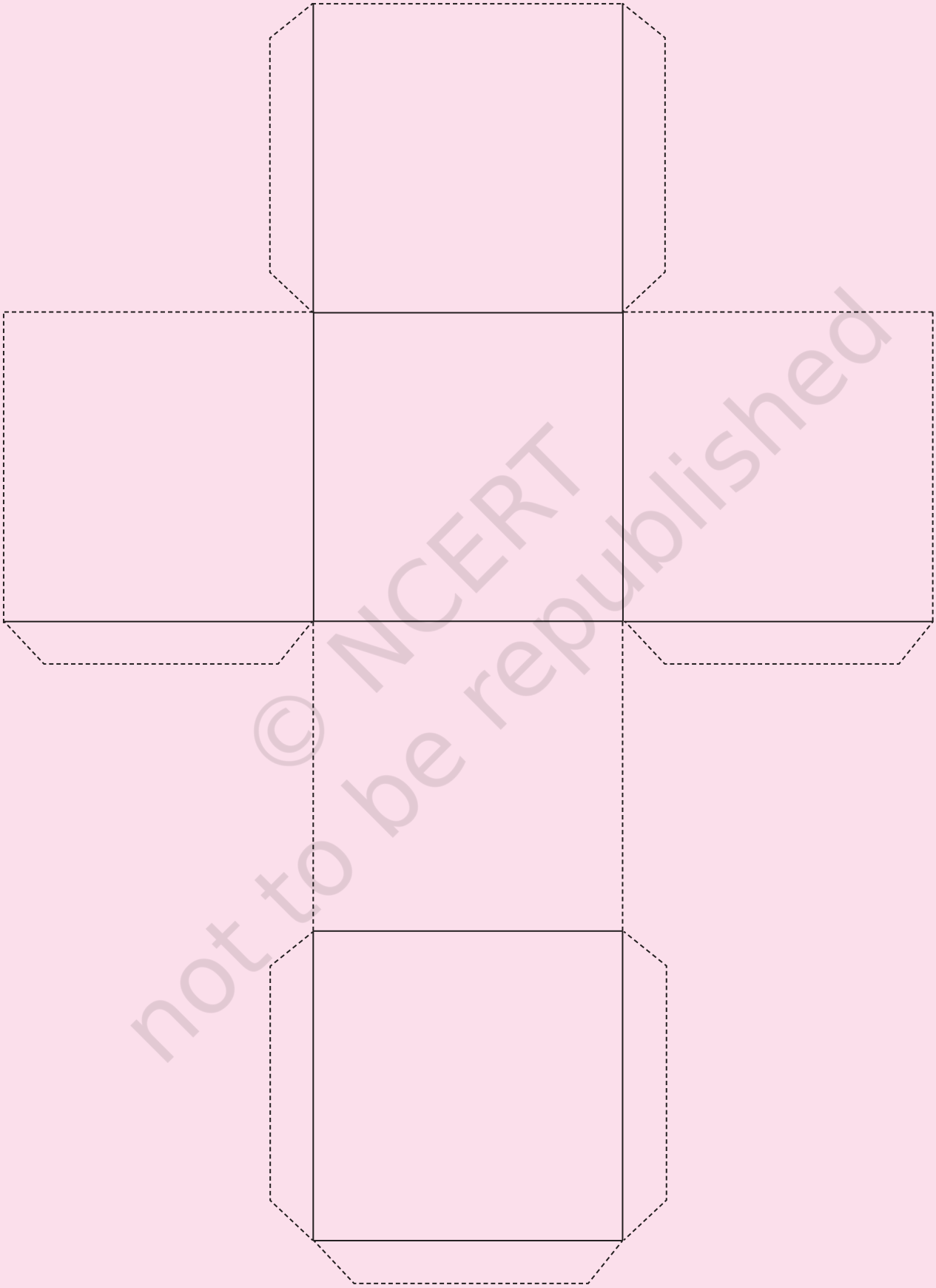


Tangram



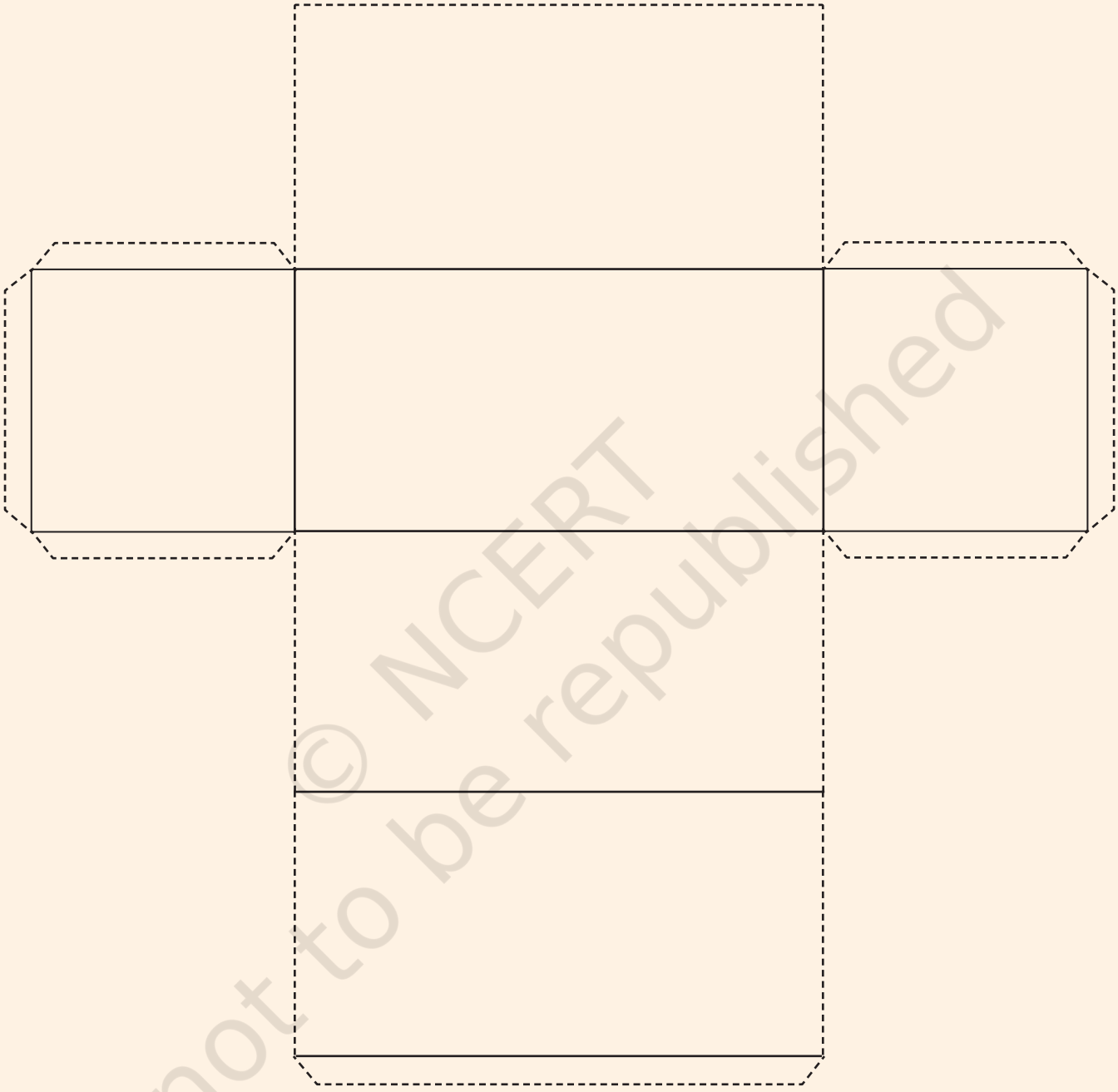
Net of a Cube

Note: Cut along the dotted lines and fold along the dark lines.



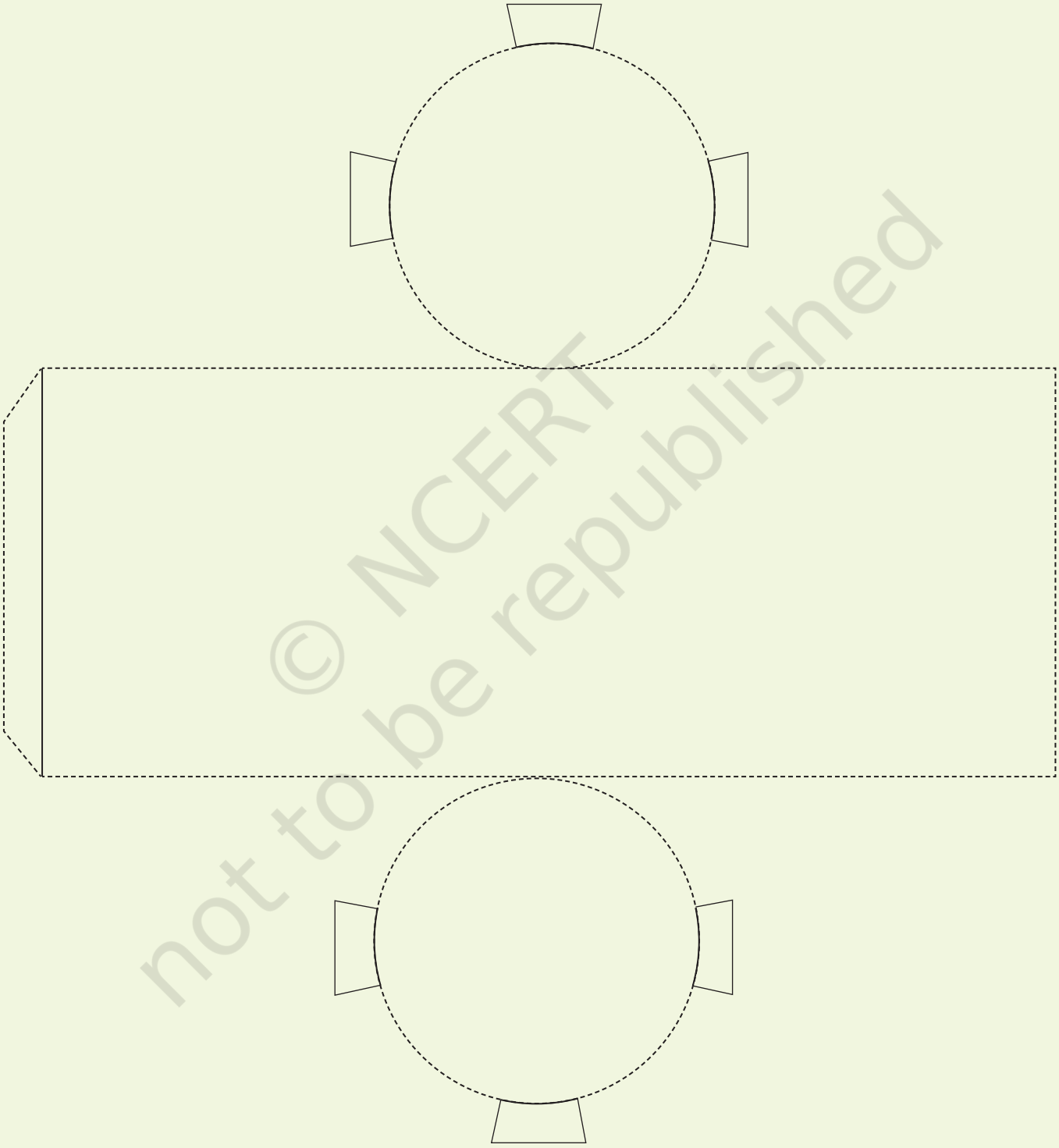
Net of a Cuboid

Note: Cut along the dotted lines and fold along the dark lines.



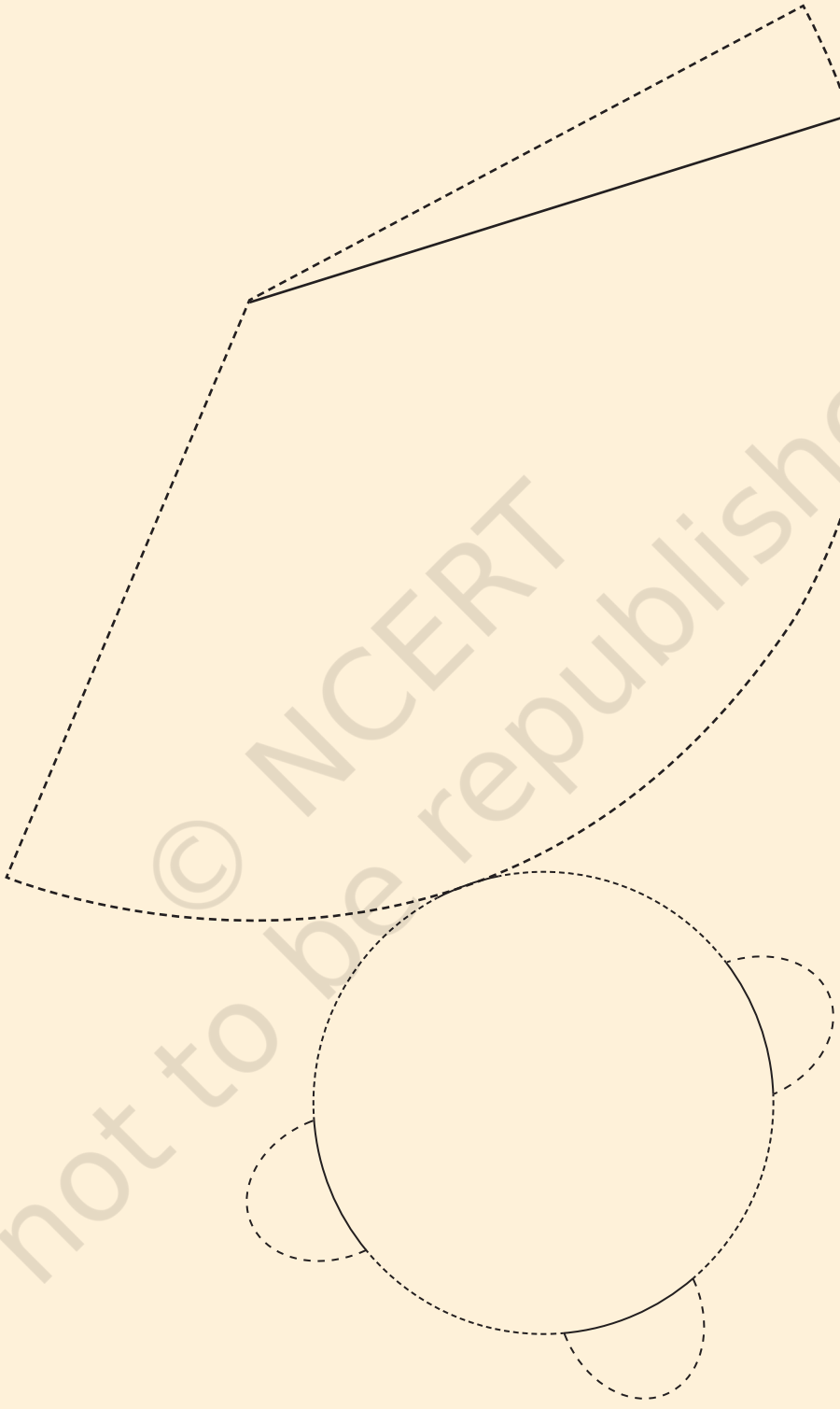
Net of a Cylinder

Note: Cut along the dotted lines and fold along the dark lines.



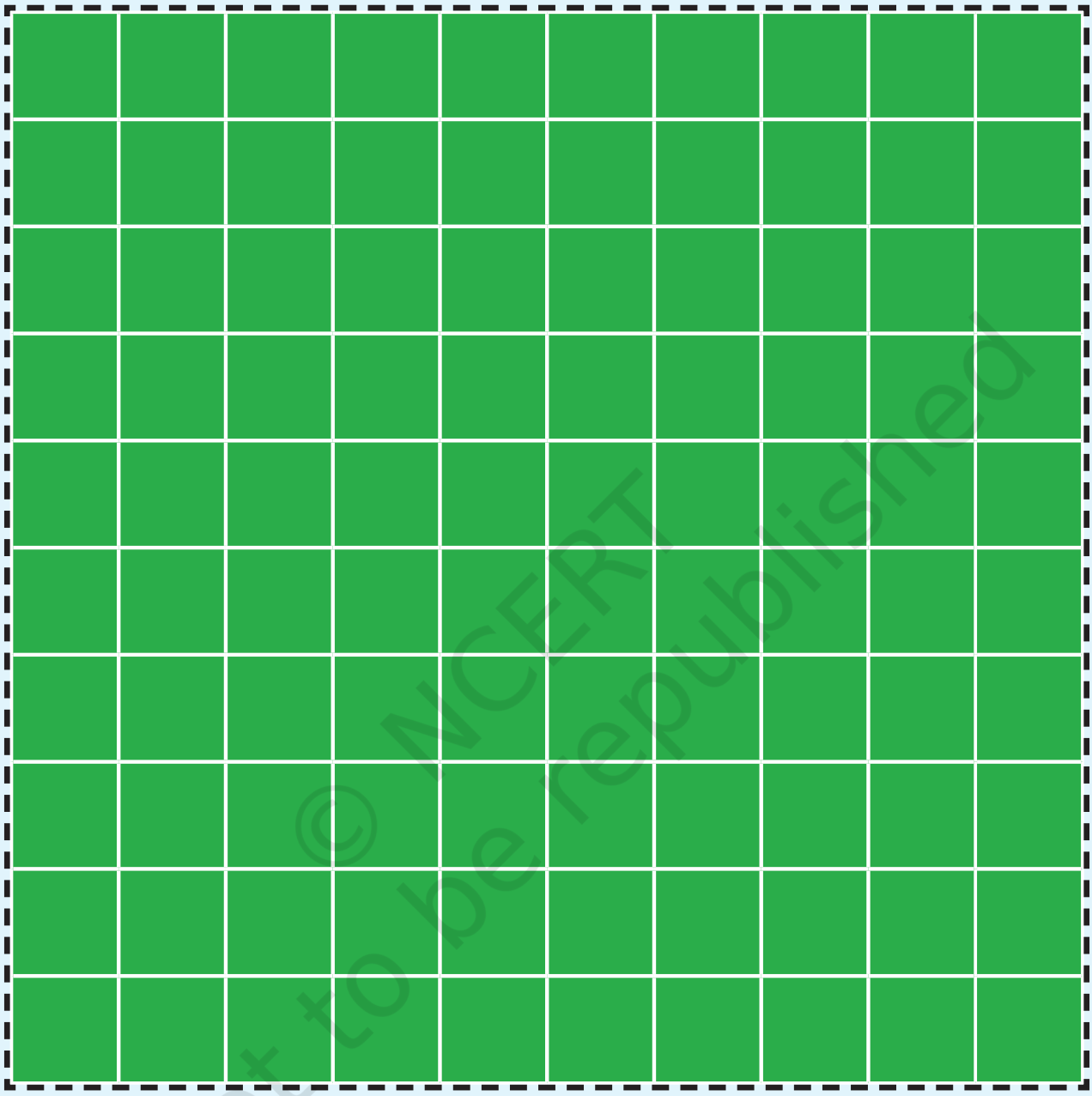
Net of a Cone

Note: Cut along the dotted lines and fold along the dark lines.



Diene's Blocks

Note: Cut along the dotted lines. You can make more such blocks as you need for the activities.



Diene's Blocks

Note: Cut along the dotted lines. You can make more such blocks as you need for the activities.