1. Write the names of the flat shapes you will get on tracing the outline of c in the table. One has been done for you.
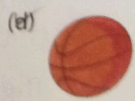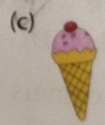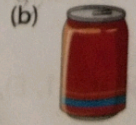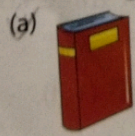
29/1

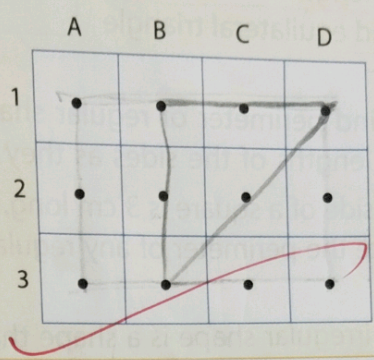| Object		Shape Obtained
(a)		Square
(b)		Circle
(c)		Circle
(d)		Oval

2. Write the position of the vertices of the shapes in the given dot grid.
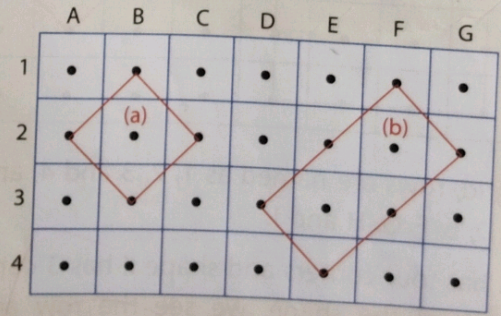
3. Identify the shapes of faces and edges in the following objects. Then write the nu of faces, edges and vertices in each object.

(a)   (b)   (c)   (d)

aw the shape whose vertices are positioned at (1, B), (3, B) and (1, D).

ching Your Surroundings

is very curious to know where she can see the solid shapes given in the chapter. So, her
her asked her to collect some objects such as dictionary, globe, dice and can. She asked
whether these objects are three-dimensional or not. Anu said yes. She then asked Anu to
the edges, faces and corners of each object, and also write their number.

en her teacher asked her to match these objects with their most appropriate solid
apes and to draw the solid shape by joining the dotted lines. Help Anu in completing
ese tasks.
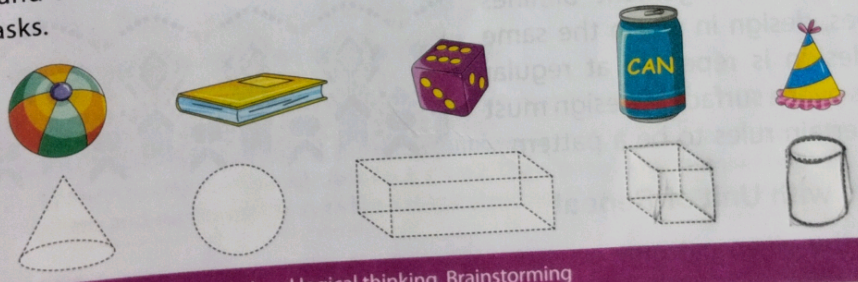
kills Covered: Observation, Critical and logical thinking, Brainstorming

meter and Area

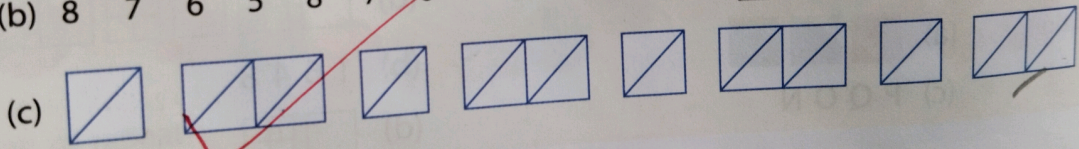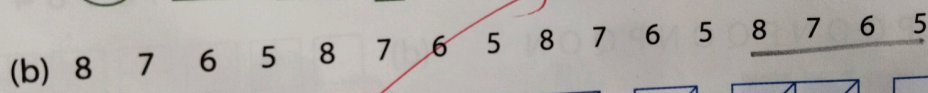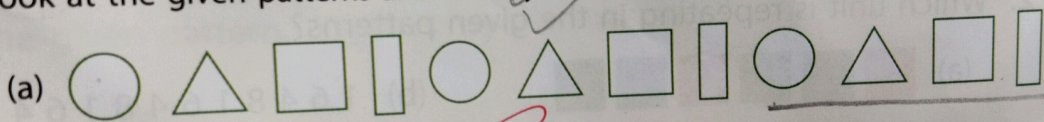neter is the distance around the outside of a shape. It's like tracing the out
your finger.

e are two types of shapes – regular and irregular. Let's learn more about th

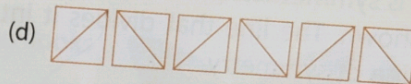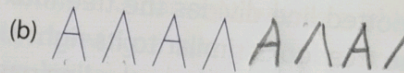Example: Cube of 2 is $2 \times 2 \times 2 = 8$ and cube of 4 is $4 \times 4 \times 4 = 64$

Tryout 2

1. Look at the given patterns and identify the unit of repeat in each pattern.

(a) ○ △ □ | ○ △ □ | ○ △ □ |

(b) 8 7 6 5 8 7 6 5 8 7 6 5 8 7 6 5

(c) ◰ ◰◰ ◰ ◰◰ ◰ ◰◰ ◰ ◰

2. Observe the given patterns and draw the next shape in each pattern.

(a)

(b) A Λ A Λ A Λ A Λ A /

(c)

(d)

3. Look at the given number patterns and write the next 2 numbers for each pattern.

(a) 3, 6, 9, 12, _15_, _18_

(b) 4, 10, 16, 22, _28_, _34_

(c) 10, 15, 20, 25, _30_, _35_

(d) 75, 100, 125, 150, _175_, _200_

(e) 9, 11, 13, 15, 17, 19, 21, 23, _25_, _27_

(f) 12, 16, 20, 24, 28, _32_, _36_

(g) 1, 8, 27, _64_, _125_

4. Calculate the perimeter of a square if its each side is 54 cm long. 2/6

5. Calculate the perimeter of a rectangle if length of opposite sides are 98 cm and 50 cm.

6. Calculate the perimeter of a rectangle whose length is 21 cm and breadth is 20 cm. 82

7. Calculate the cubes of the following numbers.

(a) 5   (b) 7   (c) 9   (d) 12   (e) 4

125

Apply Your Learning

Fabric Patterns

Pihu's mother owns a boutique. Pihu has always seen her mother working on different fabrics. She went to her mother's boutique to find some fabrics. She identified patterns on the fabrics. The fabrics are given alongside.

(a) Can you identify the pattern in these fabrics?

(b) Describe the unit of repeat in any two patterns.
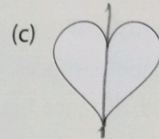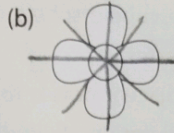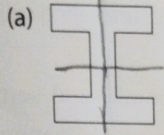
(c) Is there a fabric in which you can see flower pattern?

ymmetry

an object/shape can be divided into equal and similar halves, we call the object as ymmetrical and the line dividing it into symmetrical halves is called line of symmetry.
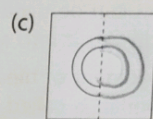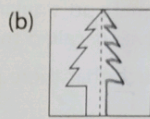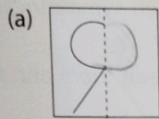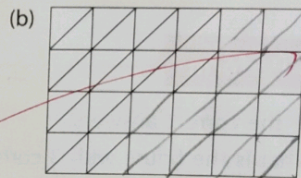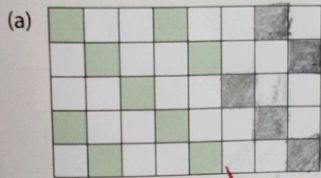
1. How many line(s) of symmetry is/are there in the following figures? Draw the l symmetry.

   (a)
   (b)
   (c)

2. Draw the other half of the following figures so that they are symmetrical about the d line.

   (a)
   (b)
   (c)

3. Draw or colour the tiles in the given figures to make a tiling pattern.

   (a)
   (b)

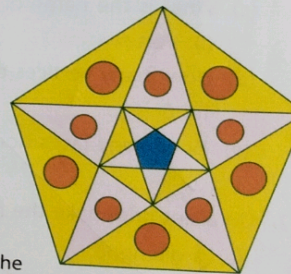4. Make the following letters using tans.

   (a) V
   (b) O
   (c) A

Apply Your Learning

Rangoli

There is wedding in Mohit's house. The whole house is decorated with flowers and lights. Mohit's mother made a big rangoli in front of the house. Look at the image of rangoli made by Mohit's mother and answer the following questions.

(a) Which shapes are used in the rangoli?

(b) How many circles are there in the rangoli?

(c) How many triangles of different colour are there in the rangoli?

(d) Is this rangoli symmetric? If yes, how many lines of symmetry does it have?

(e) Make a rangoli that has two lines of symmetry using flat shapes.

**Skills Covered:** Observation, Critical and logical thinking, Brainstorming, Applicative thinking

Time to Perform

1. Choose the correct answers.

   (a) What is the figure with 3 corners and 3 sides called?

      (i) Square   (ii) Cone   (iii) Cylinder   (iv) Triangle

   (b) How many sides, vertices and diagonals are there in a rectangle?

      (i) 4 sides, 4 vertices, 1 diagonal   (ii) 4 sides, 3 vertices, 4 diagonals

      (iii) 4 sides, 4 vertices, 2 diagonals   (iv) 4 sides, 4 vertices, 4 diagonals

   (c) What is the name of the side where faces of a solid figure meet?

      (i) Vertex   (ii) Edge   (iii) Face   (iv) Centre

   (d) How many vertices does a cube have?

      (i) 6   (ii) 12   (iii) 8   (iv) 4

   (e) How many faces does a sphere have?

      (i) 1   (ii) 2   (iii) 3   (iv) 4
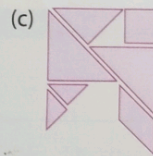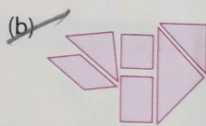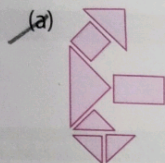
2. On a dot grid make the following figures.

   (a) a diamond   (b) stairs   (c) a can

3. Draw two lines of symmetry for the following figures.
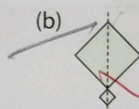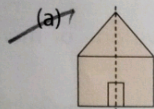
   (a)   (b)   (c)   (d)
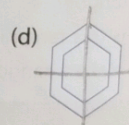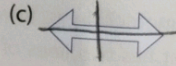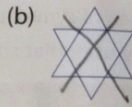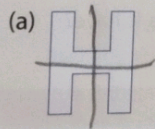
4. Draw and colour the tile which is used to make each of the following tiling pattern.

(a)

(b)
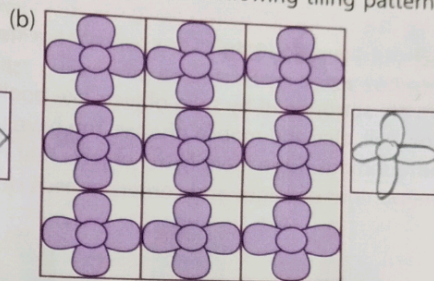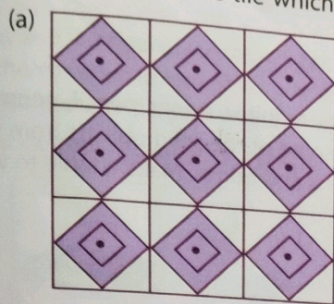
5. Identify in which of the following a wrong piece is used. Which of the following cannot be made using tans?

(a)

(b)

(c)

6. In which of the following the dotted line divides the picture symmetrically into two similar halves?

(a)

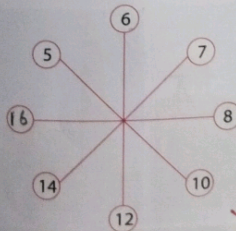(b)

(c)
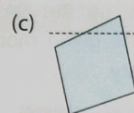
7. Complete the following patterns.

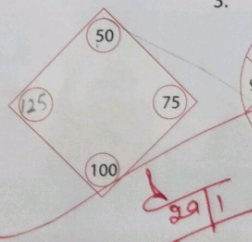(a) 3, 6, 11, 18, 27, 38, _51_, _66_   (b) 11, 22, 33, 44, 55, _66_, _77_

Let's Crack These Problems

Observe the pattern in each figure and then find the missing numbers.

1.
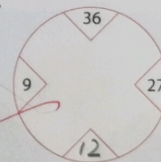
6, 5, 7, 16, 8, 14, 10, 12

2.

50, 125, 75, 100

3.

36, 9, 27, 12

2/1/25

L-10

Shapes, Patterns and symmetr

1. Perimeter of square = 4 × side

2. Perimeter of rectangle = 2 × Lenght + Breadth

3. Area of rectangle = Lenght × Breadth

4. Area of square = Side × Side

5. Area of triangle = $\frac{1}{2}$ × Base × Height

. Calculate the perimeter of a square if its each side is 54 cm long.

Perimeter of square = 4 × sides

ns 216

. Calculate the perimeter of a rectangle if lenght of opposite sides are 98 cm and 50 cm.

Perimeter of rectangle = 2 × Length Breadth

$$= 2 \times 98 \, cm + 50 \, cm$$

$$=$$

$$\begin{array}{r} 9 \ 8 \\ + \ 5 \ 0 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{4} \ 8 \quad 1 \ 4 \ 8 \\ 1 \\ \times \quad 2 \\ \hline 2 \ 9 \ 6 \end{array}$$

8. Calculate the perimeter of a rectangle
whose lenght is 21 cm and breadth is

20 cm.

erimeter of rectangle = 2 X

enght + Breadth

2 X 2 1 cm + 2 0

$$
\begin{array}{r}
2\ 1 \\
+\ 2\ 0 \\
\hline
4\ 1 \\
\end{array}
$$

$$
\begin{array}{r}
4\ 1 \\
\times\ 2 \\
\hline
8\ 2 \\
\end{array}
$$

$= 82$ cm

29/16

✨ **STAR PUBLIC SCHOOL**
Dear Parents

👉 **Learn and Write all given work of Maths in your Notebook and book with neat and clean handwriting.**

👉 **The copies will be checked tomorrow.**

👉 **Learn all synonyms**

2:57 PM