Lesson-8: Shapes and Patterns

8 Periods (40 minutes each)

Learn Better (Main Coursebook), Stay Ahead (Workbook), Book of Holistic Teaching, CRM signs, Poster

Animated Activities, Animation, Dictionary, eBook, Explainer Video, HOTS, I Explain, Infographic, Mental Maths, Quiz, Quick Maths, Slideshow, Test Generator

Confirming better

I exercise to keep my body fit and healthy.

Curricular Goals and Objectives (NCF-FS)

To enable the students:

- to identify and describe plane and solid shapes.
- to recognize shapes in their surroundings.
- to create and complete patterns.
- to apply shapes and patterns in problem-solving.
- to construct and draw shapes.
- to relate shapes and patterns to daily life.

Methodology

Period 1

Teacher: Good morning students. How are you?

SHOULD DO · 5 MIN.

Teacher: Let us begin with a fun game. I will describe an object and you will guess its shape.

Teacher: It has three sides and three corners. What shape is this?

Teacher: Yes, it is a triangle.

Teacher: It has four equal sides. What shape is this?

Teacher: Yes, it is a square.

Teacher: It has no corners and is round. What shape is this?

Teacher: Yes, it is a circle.

Teacher: It has opposite sides equal and four corners. What shape is this?

Teacher: Yes, it is a rectangle.

Teacher: Well done, everyone. Now, let us start our lesson on shapes and patterns.

Confirming better

Confirming *better* I exercise to keep my body fit and healthy. PL 76

Teacher: Today, we will start a new chapter. Open page 76 in your book. Look at 'Confirming better'. Who will read and explain?

SHOULD DO · 5 MIN.

Teacher: Yes, read loudly so everyone can hear.

Teacher: What is the important message in 'Confirming better'?

Teacher: Yes, it says, 'I exercise to keep my body healthy.'

Teacher: Why is exercise important for our body?

Teacher: Yes, it keeps us strong and healthy.

Teacher: What activities do you do to stay fit?

Teacher: Yes, running, jumping, cycling and playing games help us stay active.

Teacher: Very good. Staying active keeps us healthy and full of energy. Let us promise to exercise every day.

Teacher: We will begin a new chapter, Shapes and Patterns. We are going to use a KWL chart to help us organise our thoughts and learning. I have made a KWL format on the blackboard. Please take out your notebooks and draw the same format in your notebooks.

SHOULD DO · 10 MIN.

K	W	L

Teacher: Take a few minutes to think and write. If you have any questions, feel free to ask.

Teacher: You all did an amazing work in this activity. Let us move to Re-KAP activities. We will use Kinaesthetic, Auditory and Pictorial activities today to make our learning exciting. Let us start with the Kinaesthetic activity.

Kinaesthetic

Teacher: Everybody, please open page 76 in your Main Coursebook. Who will read and explain the activity?

MUST DO 10 MIN.

Teacher: Work in pairs. One of you will call out the name of a shape and your partner will create the shape using their hands or objects on their desk.

Teacher: Let us try. Call out a shape and see if your partner can make it.

(Scaffold the students to complete the activity.)

Auditory

Teacher: Now, listen carefully as I read out the question.

Teacher: Ravi found a treasure map that showed shapes instead of directions. The map said, 'Follow the path marked with triangles, turn at the tree with a square sign and dig under the rock shaped like a circle.'

MUST DO 5 MIN.

1. What shapes did Ravi follow to find the treasure?

2. Where did Ravi dig to find the hidden treasure?

You may show the **Dictionary** given on the digital platform.

MUST DO 5 MIN.

Pictorial

Teacher: Open your books to page 76. Look at the picture of different shapes forming a face.

Teacher: Count the number of squares, rectangles, circles and triangles in the figure.

Teacher: Write your answers in the given blanks.

Teacher: Now, colour the figure beautifully.

You may show the **eBook** given on the digital platform.

Teacher: Well done, everyone. You all did a fantastic work today. Keep observing shapes around you. See you in the next class. Let us give ourselves a big round of applause.
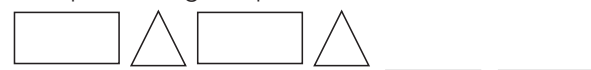
Differentiated Activities

110 km/hr

Draw a picture of a tree using different shapes.

80 km/hr

Complete the given pattern:

40 km/hr

Draw a triangle and a circle in your notebook.

Home Task

Look around your home and find three objects whose faces are of different shapes - a circle, a square and a rectangle. Draw each object in your notebook and label it with its respective shape.

Period 2

Teacher: Good morning students. How are you?

Teacher: Today, we will begin with a fun activity. I will call out the name of a shape and you will make that shape in the air using your fingers.

SHOULD DO 5 MIN.

Teacher: Make a circle in the air.

Teacher: Yes, move your finger round and round.

Teacher: Now, make a triangle in the air.

Teacher: Good. A triangle has three sides.

Teacher: Let us try a square.

Teacher: Yes, make four equal sides with your fingers.

Teacher: Lastly, draw a rectangle in the air.

Teacher: Well done. Now, let us move forward with today's lesson.

Interacting better

Teacher: Open your books and look at the 'Interacting better' section. Who will read the instruction?

MUST DO 5 MIN.

Teacher: Read it loudly so that everyone can hear.

Teacher: Now, think about three real-life objects that look like a triangle, a square and a rectangle.

Teacher: Draw these objects in your notebook and share them with your partner.

Jas loves to spend time with his Daarji.

Daarji, do these tiles look like squares?

Yes, Jas! These tiles are square in shape.

Daarji, this window is in the shape of a rectangle.

Exactly! This window and the door are in the shape of a rectangle.

Can you find any other shapes?

Daarji, the railing is full of rectangles!

Yes, you are right, Jas. But do not play around the railing. You can fall. You need to be safe.

Okay, Daarji! I will be careful.

Teacher's Note: This section aligns with **SDG 3: Good Health and Well-being.** Help them understand the importance of road safety.

You may show the **Animation** given on the digital platform.

MUST DO
10 MIN.

Teacher: Now, let us read a short story. Who would like to start reading?

Teacher: Read the first paragraph.

Teacher: Good. Now, let us continue with the next part.

Teacher: Before we continue, what do you think this story will be about?

Teacher: Yes, it looks like Jas is learning about shapes in his surroundings.

Teacher: What do you think will happen next?

(Read the story with students.)

Teacher: Now that we have read the story, let us discuss some questions.

Teacher: What shapes did Jas and his Daarji find around them?

Teacher: Yes, they found squares in the tiles, rectangles in the window and railing and triangles on the rooftop.

Teacher: Why did Daarji tell Jas to be careful near the railing?

Teacher: Yes, because he could fall and get hurt.

Teacher: What can we learn from this?

Teacher: Yes, safety is important for our good health and well-being. We must be careful in places where we can fall. Our SDG 3 is 'Good Health and Well-being'.

MUST DO
20 MIN.

Flat Shapes

Teacher: Open page 78 in your book.

Today, we will learn about flat shapes. These are also called plane shapes.

FLAT SHAPES

Learning about shapes is fun.

① Count the number of each shape in the picture. Write their names. Colour the shapes according to the code given below.

	Name of the shape	Number
▬		
■		
●		
▲		
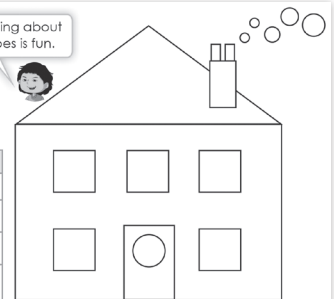
Rectangles, squares, triangles and circles are called **flat shapes**. A flat shape is also called a **plane shape**. All plane shapes, except circles, have sides and corners.

When we draw lines around a ruler, we get a rectangle. When we draw lines around an object, it is called **tracing**. The shapes we get by tracing are flat shapes.

Look at the given shapes. How many corners and sides do these flat shapes have?

shape	corners	sides	remember
rectangle	4	4	opposite sides are equal
square			all 4 sides are equal
triangle			sides may or may not be equal
circle			no sides or corners

Teacher: Look at the picture of the house. What shapes do you see?

Teacher: Yes, the roof is a triangular, the chimney is a rectangular and the doors is rectangular.

Teacher: I will name a shape, and you will quickly point to an object in the classroom that has the similar shape.

• Rectangle
• Square
• Triangle
• Circle

Teacher: Well done. Now, let us complete the first table in your book. Count and write the number of squares, rectangles, triangles and circles in the given picture.

Teacher: Take a ruler and trace a rectangle in your notebook. What do you observe?

Teacher: Yes, it has four sides and opposite sides are equal.

Teacher: Now, trace around a bottle cap. What shape do you get?

Teacher: Yes, a circle. A circle has no sides or corners.

Teacher: Now, complete the table in your book by filling in the number of sides and corners for each shape.

You may show the **I Explain** given on the digital platform.

Teacher: Well done, everyone. You all did a fantastic work today. Keep looking for shapes around you. See you in the next class. Let us give ourselves a big round of applause.

110 km/hr

Draw a picture of a house using at least four different shapes. Label each shape.

80 km/hr

Draw a rectangle, a square and a triangle in your notebook. Write how many sides and corners each shape has.

40 km/hr

Draw a rectangle, a square and a triangle in your notebook. Write how many sides and corners each shape has.

Home Task

Draw a robot using a square for the head, a rectangle for the body and circles for the eyes and buttons.

Period 3

Teacher: Good morning students. How are you?

Teacher: Today, we are going to play a fun guessing game. I have a mystery bag with different objects inside. You will close your eyes, touch the object and describe how it feels.

SHOULD DO — 5 MIN.

Teacher: Who wants to go first? Reach into the bag and feel the object. Does it have flat sides or curved sides?

Teacher: Good. Now, is it smooth or does it have edges?

Teacher: What do you think this object might be?

(Repeat with a few more objects like a small box, ball, water bottle, etc.)

Teacher: Well done. Each of these objects has a shape. Some have flat faces, some have curved faces and some have edges and corners. Today, we will learn about these solid shapes in detail

You may show the **Slideshow** given on the digital platform.

Solid Shapes

SOLID SHAPES
Many objects we see around us look like these shapes. They are called **solid shapes**.

Solid shapes have **faces**, **sides** and **corners**.

	cube	cuboid
faces:	6	6
sides/edges:	12	12
corners/vertices:	8	8

	sphere	cone	cylinder
curved face:	1		
plane face:		1	
plane faces:			2
curved face:		1	1
edges:	0		
curved edge:		1	
curved edges:			1
corners:	0	1	1

79

Teacher: Look around the classroom and find objects that match the solid shapes in your book.

MUST DO — 15 MIN.

Teacher: Can you find something that looks like a cube?

Teacher: Yes, a dice or a gift box is a cube.

Teacher: What about a sphere?

Teacher: Yes, a football or a globe is a sphere.

Teacher: Can you find a cylinder?

Teacher: Yes, a water bottle or a chalk piece is a cylinder.

Teacher: Now, let us sort these objects based on the number of faces, edges and corners.

Teacher: Let us draw some solid shapes in our notebooks.

• Draw a cube. How many faces does it have?

• Draw a cuboid. How many edges does it have?

• Draw a cone. Does it have a curved face?

• Draw a cylinder. How many plane faces does it have?

• Draw a sphere. Does it have any corners?

(Guide students in making the shapes.)

You may show the **Quick Maths** given on the digital platform.

Teacher: Some solid shapes have flat faces, while others have curved faces.

MUST DO — 20 MIN.

Teacher: Look at a cube. Are all its faces flat?

Teacher: Yes, a cube has all flat faces.

Teacher: What about a sphere?

Teacher: Yes, a sphere has only a curved face.

Teacher: Now, look at the cone. Does it have both a curved and a flat face?

Teacher: Yes, it has one of each.

(You may show different shape models to students.)

Teacher: I will name a shape and you will tell me how many curved faces, edges and corners it has. Let us begin.

Teacher: How many curved faces does a sphere have?

Teacher: Yes, it has one curved face. How many edges and corners does it have?

Teacher: Yes, it has zero edges and zero corners.

(Similarly discuss the other solid shapes.)

Teacher: Well done, everyone. You all did a fantastic work today. Let us give ourselves a big round of applause.

Differentiated Activities

110 km/hr

Draw a rocket using at least three different solid shapes and label each shape.

80 km/hr

Find and list three objects that match solid shapes. Write their names and shapes in your notebook.

40 km/hr

Draw a cube, a sphere and a cylinder in your notebook. Write how many faces, edges and corners each shape has. You may take help from your classmates.

Find two real-life objects at home that match solid shapes (e.g., a football, a box or a bottle). Draw and label them in your notebook.

Period 4

Roll or Slide

ROLL OR SLIDE?

Jas sits on the slide.

Jas is sliding.

Lina starts playing with a ball and kicks it. The ball starts rolling.

The ball is rolling.

Objects that have a flat face **slide**. Objects that have a curved face **roll**.

LOTS

2 **Circle the objects that roll. Tick (✓) the objects that slide.**

80

Teacher: Good morning students. How are you?

MUST DO

15 MIN.

Teacher: Now, let us do a fun activity to understand how solid shapes work.

Teacher: Take any small box (like an eraser or chalk box). Try to place one on top of another. Can you do it?

Teacher: Yes, because cubes and cuboids have flat faces.

Teacher: Now, take a ball or a round object like a marble. Try to place it on another object. Does it stay?

Teacher: No, because spheres do not have flat faces. They roll.

Teacher: Now, place a water bottle or chalk piece on a table and give it a gentle push. What happens?

Teacher: It rolls because cylinders have curved edges.

Teacher: Now, take a cone (like a birthday cap or a funnel). Try to place it on its flat face. Does it stay?

Teacher: Yes, because cones have one flat face.

Teacher: Now, try to place the cone on its pointed tip. What happens?

Teacher: It does not stay because the tip is not flat.

Teacher: Great work . Now, let us write down what we observed.

• Which shapes can roll?

• Which shapes can slide?

• Which shapes can be placed on top of another?

You may show the **Explainer Video** given on the digital platform.

Poster

Teacher: Let us look at the poster on the wall.

MUST DO

10 MIN.

Teacher: Which objects in the poster can roll?

Maths Theme 5: We Stay Safe and Healthy

Objects that can roll and slide

40

Rolling Objects

Sliding Objects

5

Teacher: Yes, objects with curved faces like a ball, bottle and wheel can roll.

Teacher: Which objects can slide?

Teacher: Yes, objects with flat faces like a book, ruler and lunchbox can slide.

Teacher: Let us make a list in our notebooks of objects that roll and objects that slide.

You may show the **Infographic** given on the digital platform.

Straight and Curved Lines

STRAIGHT LINES AND CURVED LINES

Lina and Maria are playing with a rope.

They hold the rope tightly. They get a **straight** line.

They hold the rope loosely. They get a **curved** line.

Straight lines are of three kinds.

standing line   sleeping line   slanting line   80

You may show the **Animated Activities** given on the digital platform.

MUST DO

15 MIN.

Teacher: Now, let us learn about straight and curved lines.

Teacher: Take a piece of rope and stretch it tightly between two students. What kind of line does it form?

Teacher: Yes, it is a straight line.

Teacher: Now, loosen the rope and let it bend. What kind of line is this?

Teacher: Yes, it is a curved line.

Teacher: Look at the board. I will draw three types of straight lines.

- A standing line (vertical)
- A sleeping line (horizontal)
- A slanting line (diagonal)

Teacher: Now, let us draw all three types of straight lines and curved lines in our notebooks.

Teacher: Well done, everyone. You all did a fantastic work today. See you in the next class. Let us give ourselves a big round of applause.

Differentiated Activities

110 km/hr

Look around the classroom and list five objects that roll and five objects that slide.

80 km/hr

Draw two objects that can roll and two objects that can slide in your notebook.

40 km/hr

Draw a straight line, a curved line and a slanting line in your notebook.

Home Task

Complete Exercise 2 given on page 80 in the Main Coursebook.

Period 5

Teacher: Good morning students. How are you?

SHOULD DO
5 MIN.

Teacher: Today, we will start by looking at patterns around us. Can you find any patterns in your classroom?

Teacher: Yes, the tiles on the floor have a repeating design.

Teacher: Look at your clothes. Do you see any patterns?

Teacher: Yes, some shirts have checks or stripes.

Teacher: Patterns are all around us. Now, let us learn more about them.

Patterns

PATTERNS

Look at the pictures. Both these pictures have shapes and colours that are repeated in a regular way. These are called **patterns**. We see patterns all around us in nature. We also see patterns in our homes.

81

Teacher: Look at the pictures in your book. What do you notice about these designs?

MUST DO
10 MIN.

Teacher: Yes, they have shapes and colours that are repeated in a regular way.

Teacher: This repetition of shapes and colours creates a pattern. Can you say the word with me?

Teacher: Where do we see patterns in nature?

Teacher: Yes, we see patterns on butterfly wings, honeycombs and zebra stripes.

Teacher: Can you find any patterns in your clothes or in the classroom?

Teacher: Yes, some of your shirts have stripes or check patterns and the floor tiles also have a repeating design.

Teacher: Patterns help make things look beautiful and organised. Can you think of any other places where we find patterns?

Teacher: Yes, in wallpapers, bedsheets and decorations.

Teacher: Now, let us create our own patterns using different shapes and colours. Open your books and complete the pattern exercise.

Teacher: Now, let us practise more patterns. Open Exercise 3 in your book.
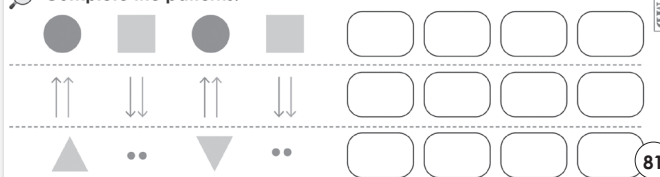
MUST DO
5 MIN.

Teacher: Look at the first row. The pattern is circle, square, circle, square. What should come next?

③ **Complete the patterns.**

PMD

81

Teacher: Yes, a circle.

Teacher: Now, in the second row, what is the pattern?

Teacher: Yes, arrows pointing up and down.

Teacher: Let us complete the rest of the patterns in our books.

Recalling better

Recalling *better*

CING

In this chapter, I have learnt
- about flat shapes.
- about solid shapes.
- to identify objects that roll or slide.
- the concept of straight lines and curved lines.
- to draw patterns.

81

Teacher: Now, let us recall what we have learned in this chapter. I will ask some questions.

MUST DO
10 MIN.

Teacher: What are the two types of shapes we learned about?

Teacher: Yes, flat shapes and solid shapes.

Teacher: Which objects roll?

Teacher: Yes, objects with curved faces like balls and cylinders.

Teacher: Which objects slide?

Teacher: Yes, objects with flat faces like books and lunchboxes.

Teacher: How many types of straight lines are there?

Teacher: Yes, three – standing, sleeping and slanting lines.

Teacher: What do we call shapes or colours that repeat in a regular way?

Teacher: Yes, we call them patterns.

Learning better

Learning better   CBA FuN

Ⓐ How many corners and sides do the flat shapes have?

shape	corners	sides
⬜		
⬤		
▬		
▲		

81

Teacher: Now, let us complete Exercise A. Look at the table. We will count the number of corners and sides for each shape.

MUST DO
10 MIN.

Teacher: The first shape is a square. How many corners does it have?

Teacher: Yes, four. How many sides?

Teacher: Yes, the square has four sides.

(Guide students to complete the exercise in a similar manner.)

Tomorrow, we will do an Origami Fun activity. Please bring one square sheet of coloured paper to school for the activity.

Teacher: Well done, everyone. You all did a fantastic work today. See you in the next class. Let us give ourselves a big round of applause.

Differentiated Activities

110 km/hr

Create your own unique pattern using at least three different shapes.

80 km/hr

Identify and draw a pattern you see around your home or classroom.

40 km/hr

Look around the classroom and find a simple pattern (e.g., stripes on a book, tiles on the floor). Draw it in your notebook with the help of a classmate.

Home Task

Create your own pattern drawing using different shapes. Make it as creative as possible.

Bring square sheets for the 'Creating better' activity in the next class

Period 6

SHOULD DO
5 MIN.

Teacher: Good morning students. How are you?

Teacher: Let us quickly recall what we learned in the last class.

Teacher: What do we call a sequence of shapes or colours that repeat in a regular way?

Teacher: Yes, we call them patterns.

Teacher: Can you give an example of a pattern you see around you?

Teacher: Yes, patterns can be seen on tiles, clothes and wallpapers.

Teacher: Well done. Now, let us continue our lesson.

MUST DO
5 MIN.

Learning better

Ⓑ Circle the objects that can roll. Tick (✓) the objects that can slide.

82

Teacher: Open Exercise B given on page 82 in the Main Coursebook. Look at the objects given.

Teacher: Which objects have curved faces and can roll?

Teacher: Yes, objects like a ball, watermelon and wheel roll.

Teacher: Which objects have flat faces and can slide?

Teacher: Yes, objects like a book, eraser and box slide.

Teacher: Now, complete the exercise by circling the objects that roll and ticking the objects that slide.

📖 You may show the **Toys from Trash** given on the digital platform.
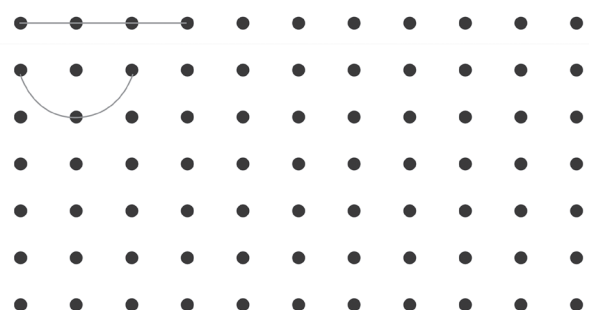
MUST DO
10 MIN.

Ⓒ Join the dots to draw as many standing, sleeping, slanting and curved lines.

82

Teacher: Open Exercise C. You may create your own lines freely or follow the dots to draw standing, sleeping, slanting and curved lines. Be as creative as you like. If needed, I will guide you.

Teacher: Start by making a standing line from one dot to another.

Teacher: Now, make a sleeping line.

Teacher: Next, draw a slanting line from top to bottom.

Teacher: Finally, draw a curved line by connecting the dots smoothly.

Ⓓ **Draw and colour what comes next in the patterns.**

82

Teacher: Open Exercise D in your book. Look at the patterns given. Who can tell me what a pattern is?

Teacher: Yes, a pattern is when something repeats in a sequence.

Teacher: Now, let us complete the first pattern together. What do you see?

Teacher: Yes, it follows the order yellow circle, green circle, yellow circle, green circle. What should come next?

Teacher: Yes, another yellow circle. Now, what comes after that?

Teacher: Yes, a green circle. Great work . Complete the rest of the pattern in your book.

Teacher: Now, look at the second pattern. What shapes do you see?

Teacher: Yes, it is blue square, purple square, blue square, purple square. What should come next?

Teacher: Yes, a blue square, followed by a purple square.

Teacher: Excellent. Now, colour the shapes correctly to complete the pattern. Well done, everyone.

Creating better

🖐 **Creating** *better*

✂ ArtI 21st CS

Origami Fun!
- Take a square sheet of coloured paper.
- Fold the paper in half.
- Fold it diagonally as shown in the picture.
- Fold the triangle along the dotted line as shown.
- With the help of an adult, carefully cut small triangles, as shown.
- Open the folds and you will see beautiful patterns.

(82-83)

Teacher: Now, we will do an exciting paper-folding activity. Open your book to the 'Creating better' section.

(Guide the students to complete the activity with the reference of instructions given on page 82 and 83 in the Main)

Teacher: Well done, everyone. You all did a great work today. Keep exploring patterns and shapes around you. See you in the next class. Let us give ourselves a big round of applause.

Differentiated Activities

110 km/hr

Create a picture using only different types of lines (standing, sleeping, slanting and curved). Label the types of lines used in your drawing.

80 km/hr

Design your own pattern using a mix of lines and shapes. Make sure it repeats in a sequence.

40 km/hr

Use coloured pencils to trace different standing, sleeping, slanting and curved lines. Try arranging them in a creative way.

Home Task

Find any two objects at home that have patterns (e.g., a curtain, floor tiles or a bedsheet). Draw and recreate the pattern in your notebook using different colours.

Bring your Little Book for revising better activity.

Period 7

Teacher: Good morning students. How are you?

Teacher: Today, let us recall some of the things we learned in the last class. Can anyone tell me what a pattern is?

Teacher: Yes, a pattern is when shapes or colours repeat in a regular way. Can you find a pattern around you?

Teacher: Excellent. Let us move on to today's lesson.

Thinking better

💡 **Thinking** *better*

💡 21st CS HOTS

Think and answer in your notebook.
1. How can you make a square using two triangles?
2. What is the difference between a circle and a rectangle?

83

Teacher: Now, please open page 83 in your books. We will begin with the activities given on this page.

Teacher: Let us think about these two questions given in 'Thinking better' section. First, how can you make a square using two triangles?

Teacher: Think about the shapes of a triangle and a square. If you place two triangles together, what will they form?

Teacher: Now, let us discuss the second question. What is the difference between a circle and a rectangle?

Teacher: Think about the shapes carefully. What do you notice about the circle?

Teacher: Yes, a circle is round and has no straight edges. It is completely curved.

Teacher: Now, what about the rectangle?

Teacher: Yes, a rectangle has four sides and four corners, with opposite sides being equal.

Choosing better

Teacher: Let us move to the 'Choosing better' section.

Teacher: Let us now think about Shaurya. He is about to cross the street with his father. What should he do to stay safe?

Teacher: Shaurya has two choices: holding his father's hand or running across the street quickly. Which one do you think is the safer choice?

Teacher: Yes, holding his father's hand is the safest option because it will help him stay close and prevent accidents.

Teacher: Why do you think running across the street quickly is not a good idea?

Teacher: Yes, running can be dangerous, especially when crossing streets. It is better to hold someone's hand and cross safely.

Teacher: Very good. Always remember, safety comes first

MUST DO   10 MIN.

You may show the **Quiz** given on the digital platform.

Revising better

Teacher: Open your books to the Revising better section. Let us draw using flat shapes.

Teacher: Take your Little Book and draw a pattern using at least three flat shapes.

Teacher: You can use squares, circles, triangles and rectangles. Let your creativity flow and try to make the pattern interesting.

Teacher: I will walk around to guide you if needed.

COULD DO   10 MIN.

You may show the **HOTS** given on the digital platform.

Book of Holistic Teaching

Chapter 8: Shapes and Patterns

Theme 5:
We Stay Safe
And Healthy

(A) **English**   FLN HoLL MDA

Fill in the blanks with ss words.

1. A _____ board is made up of squares.
2. This _____ is cylindrical in shape.

(B) **EVS**

Draw a traffic signal pole using rectangle and circle. Colour it.

(13)

(Refer to the Book of Holistic Teaching, page 12 under the title 'Shapes and Patterns.' Complete the questions mentioned in this section and ensure that the students complete them. These activities are designed for students to enhance their holistic understanding and engagement with the topic. Provide any necessary support and materials to help the students successfully finish the activities.)

Meditation

COULD DO   5 MIN.

Teacher: Now, let us relax and take a few minutes for meditation.

Teacher: Sit comfortably, close your eyes and take a few deep breaths. Focus on your breathing and let go of any distractions.

Teacher: Let us do this for 5 minutes to feel calm and centred.

Differentiated Activities

110 km/hr

Create a complex pattern using four different shapes and repeat it at least three times. Draw it in your notebook.

80 km/hr

Draw a pattern using at least three different shapes. Colour it neatly and make sure it repeats in a sequence.

40 km/hr

Draw a simple pattern using two shapes (like circle and square) and colour it.

Home Task

Create a decorative border using flat shapes like squares, triangles or circles. Colour it creatively and bring it to school.

Period 8

SHOULD DO   5 MIN.

Teacher: Good morning students. How are you?

Teacher: Today, let us start by discussing your border drawing homework.

Teacher: Can anyone share what shapes they used in their borders?

MUST DO   15 MIN.

Teacher: Yes, some of you used triangles, squares and circles. The borders look beautiful with these shapes.

Worksheet 1

Theme 5: We Stay Safe and Healthy
8. Shapes and Patterns
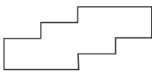
A. Complete the table by writing the number of sides or edges for each shape.

	Shape	Sides	Edges
1.	Square		
2.	Circle		
3.	Cone		
4.	Triangle		
5.	Cube		

B. Colour the shapes having straight lines with a green crayon. Colour the shapes having curved lines with a yellow crayon.

C. Colour the objects that can roll, with a red crayon. Colour the objects that can slide, with a blue crayon.

Teacher's Signature: _____   (32)   Remarks: _____

Worksheet 2

A. Complete the table by writing the number of corners for each shape.

	Shape	Corners
1.	Cube	
2.	Rectangle	
3.	Cone	
4.	Triangle	
5.	Cylinder	

B. Tick (✓) the curved lines and cross out (✗) the straight lines.

C. Draw the shapes to complete the pattern.

1.				
2.				
3.				
4.				
5.				

Teacher's Signature: _____   (33)   Remarks: _____

Teacher: Open your workbook to page 32. Let us solve the Worksheet 1. Who will explain Exercise A?

Teacher: . Let us complete the table by writing the number of sides and edges for each shape.

Teacher: How many sides and edges does a square have?

Teacher: Yes, 4 sides and 4 edges.

Teacher: How many sides and edges does a circle have?

Teacher: Yes, no sides or edges.

Teacher: Now, complete the table for the other shapes.

Teacher: In Exercise B, use a green crayon to colour shapes made from straight lines and a yellow crayon for shapes made from curved lines.

Teacher: Let us colour the first shape. Does it have straight or curved lines?

Teacher: Yes, it has straight lines, so colour it with green.

Teacher: In Exercise C, colour the objects that can roll with a red crayon and the objects that can slide with a blue crayon.

Teacher: The first object is a ball. Can it roll?

Teacher: Yes, colour it with red.

Teacher: Now complete the rest of the objects.

You may generate additional practice worksheets using the **Test Generator** given on digital platform.

Teacher: Open Worksheet 2 who will read and explain Exercise A?

MUST DO
15 MIN.

Teacher: Complete the table by writing the number of corners for each shape.

Teacher: How many corners does a cube have?

Teacher: Yes, it has 8 corners.

Teacher: How many corners does a rectangle have?

Teacher: Yes, it has 4 corners.

Teacher: Now complete the rest of the table for the remaining shapes.

Teacher: In Exercise B, you need to tick (√) the curved lines and cross out (×) the straight lines.

Teacher: Let us start with the first line. Is it curved or straight?

Teacher: Yes, it is curved, so we will tick it.

Teacher: The second line is straight, so we will cross it out.

Teacher: Now, continue with the rest of the lines.

Teacher: In Exercise C, draw the shapes to complete the pattern.

Teacher: Look at the first pattern. What comes after the circle and square?

Teacher: Yes, another circle should come next.

Teacher: Now, complete the rest of the patterns by drawing the missing shapes.

Teacher: Well done students. Let us have a huge round of applause.

📖 You may show the **Mental Maths** given on the digital platform.

Teacher: Now, let us fill in the last column of the KWL chart.

Teacher: In this column we will write what we have learned in this chapter.

Teacher: Think about the topics, have we learnt and write them in the 'L' column of the chart.

(Wait for students to fill in the chart.)

Teacher: Let us all give a huge round of applause to everyone for their hard work and creativity. Great work, everyone. See you in the next class. Have a wonderful day ahead.

Differentiated Activities

110 km/hr

Draw and label a solid shape with different sides, edges and corners.

80 km/hr

Draw a flat shape and write the number of sides and corners for it.

40 km/hr

Count and draw shape with 3 corners and shapes with 4 corners.

Home Task

Practise the questions discussed in this chapter.

Learning Outcomes

The students will:

Domain	Learning Outcome
Physical Development	• develop fine motor skills by drawing, folding and arranging shapes.
Socio-Emotional and Ethical Development	• collaborate in group activities, taking turns and respecting peers while creating patterns.
Cognitive Development	• identify, classify and compare shapes and patterns, demonstrating logical reasoning.
Language and Literacy Development	• describe shapes and patterns using mathematical vocabulary in discussions and activities.
Aesthetic and Cultural Development	• recognize and appreciate patterns in nature, art and cultural symbols through observation.
Positive Learning Habits	• observe and identify shapes and patterns in daily life, apply learning beyond the classroom.

Starry Knights

How did the learners respond to the activities in this lesson? Tell us how it could be made more interesting?

_____
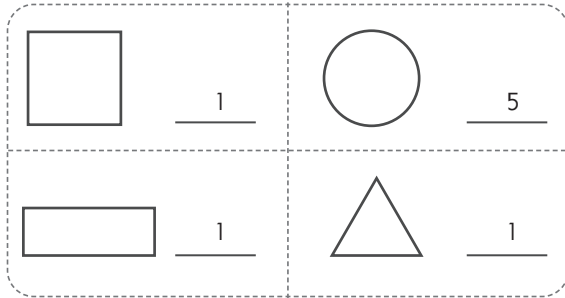
Appreciable.. Give yourself a STAR

Theme 5: We Stay Safe and Healthy
Chapter-8: Shapes and Patterns

Main Coursebook

Auditory

1. triangle, square and circle
2. under the circle shaped rock

Pictorial

square — 1   circle — 5   rectangle — 1   triangle — 1

1.

	Name of the shape	Number
	rectangle	5
	square	5
	circle	6
	triangle	1

shape	corners	sides	remember
rectangle	4	4	opposite sides are equal
square	4	4	all 4 sides are equal
triangle	3	3	sides may or may not be equal
circle	0	0	no sides or corners

2.

3. Accept all relevant responses.

A. square: corners – 4; sides – 4 circle: corners – 0; sides – 0 rectangle: corners – 4; sides – 4 triangle: corners – 3; sides – 3

B.

C. Accept all relevant responses.

D. Accept all relevant responses.

Thinking better

1. Accept all relevant responses.
2. Accept all relevant responses.

Choosing better

• Hold his father's hand. ✓

Worksheets

Worksheet 1

A. 1. Square – Sides 4, Edges 4
   2. Circle – Sides 0, Edges 0
   3. Cone – Sides 2, Edges 1
   4. Triangle – Sides 3, Edges 3
   5. Cube – Sides 12, Edges 12

B. Accept all relevant responses.

C. Accept all relevant responses.

Worksheet 2

A. 1. Cube – Corners 8
   2. Rectangle – Corners 4
   3. Cone – Corners 1
   4. Triangle – Corners 3
   5. Cylinder – Corners 0

B.

C. 1. circle   2. triangle   3. rectangle
   4. parallelogram   5. star
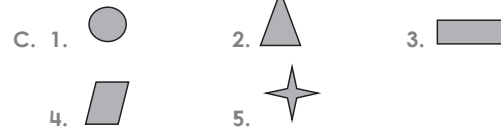
Book of Holistic Teaching

A. 1. chess   2. glass

B. Accept all relevant responses.