

Lesson Plan

Grade: Five

Subject: Math

Term: 3rd

Time: 40mins

Teacher's Name: _____

Week: 4

Day: 1

Unit 7: Geometry

Topic: Symmetry

Student Learning Outcomes:

At the end of this period, the students will be able to:

- Recognize reflective symmetry in 2-D figures.
- Identify lines of symmetry for given 2-D figures.

Resource Material:

Chalk / Marker, White /Blackboard, Math Textbook

Warm-up Activities:

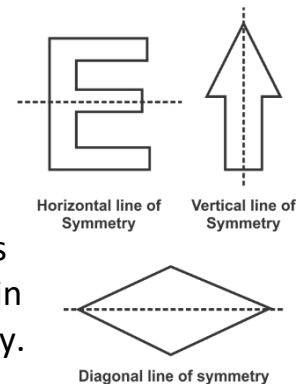
5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask students: how we can draw a square and rectangle with the help of protractor and ruler. Take their responses and appreciate them for their correct answer.

Teaching & Learning Activities:

25mins

- Tell them that today they are going to learn about symmetric figures.
- Tell students, symmetrical objects are those, which can be cut into equal halves in such a way that both parts are exactly similar.
- Whereas the line, which divides the shape in identical parts are called line of symmetry.
- Draw a butterfly on the paper. Ask the students to look at the butterfly. When it folds its wings, we can see that both sides match. Explain to the students that lines of symmetry divide each figure into equal halves. Explain to the students that the butterfly shows line a symmetry. The line of symmetry is vertical.
- Draw different figures and show horizontal, vertical and diagonal line of symmetry.
- Now ask the students to draw figures and show different lines of symmetry.



Review:

3mins

Revise the lesson by telling, when a symmetrical shape is folded along the line of symmetry both halves complete by overlapping each other.

Evaluation:

5mins

To evaluate the students learning, ask them to solve Q1 (i – iv) of Exercise 7.6 in their textbooks.

Homework:

2mins

Solve Q1 (v – viii) of Exercise 7.6 in their textbooks.

Lesson Plan

Grade: Five

Subject: Math

Term: 3rd

Time: 40mins

Teacher's Name: _____

Week: 4

Day: 2

Unit 7: Geometry

Topic: Symmetry and its types

Student Learning Outcomes:

At the end of this period, the students will be able to:

- Recognize reflective symmetry in 2-D figures.
- Identify lines of symmetry for given 2-D figures.

Resource Material:

Chalk/Marker, White/Blackboard, Wallchart of alphabets that show symmetry, Worksheet, Math Textbook


Warm-up Activities:

5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Draw some symmetric shapes on the board and ask them to draw their line of symmetry call them one by one and take their responses and appreciate them for their correct response.

Teaching & Learning Activities:

25mins

- Tell them that today they are going to learn how to draw a line of symmetry.
- Show flash cards of some shapes like alphabet, rose,  geometry shapes etc.
- Ask the students that which flashcards are symmetric along the vertical line and which flashcards are symmetric along the horizontal line? Appreciate if anyone gives the right answer.
- Now draw the lines and explain to the students that which pictures are symmetric along the vertical line and which pictures are symmetric along the horizontal line. Tell them these are all type of reflective symmetry because one half of the figure is exactly the same as the other half.
- Tell them reflective symmetry is also known as mirror symmetry.

Review:

3mins

Revise the lesson by telling students that letters have also line of symmetry that divides them into equal halves such that they look like mirror of each other.

Evaluation:

5mins

To assess the students learning, ask them to draw square, rectangle and triangle and show their line of symmetry.

Homework:

2mins

Solve the given worksheet.

Worksheet

Name: _____

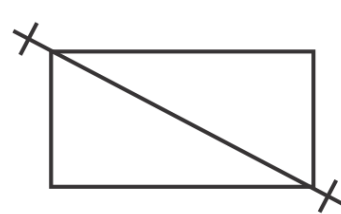
Date: _____

Q1. Is the dotted line on the given shape is reflective symmetry? Write yes or no.

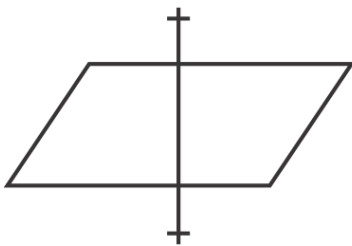
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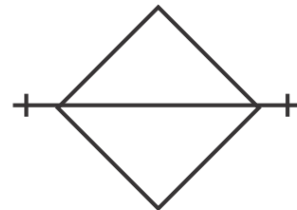
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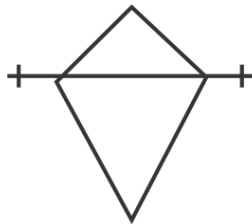
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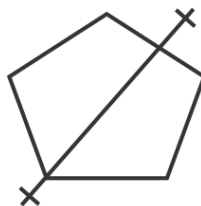
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6)



7)



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Lesson Plan

Grade: Five

Subject: Math

Term: 3rd

Time: 40mins

Teacher's Name: _____

Week: 4

Day: 3

Unit 7: Geometry

Topic: Symmetry and its types

Student Learning Outcomes:

At the end of this period, the students will be able to:

- Recognize rotational symmetry in 2-D figures.
- Find point of rotation and order of rotational symmetry of given 2-D figures.

Resource Material:

Chalk/Marker, White/Blackboard, Math Textbook

Warm-up Activities:

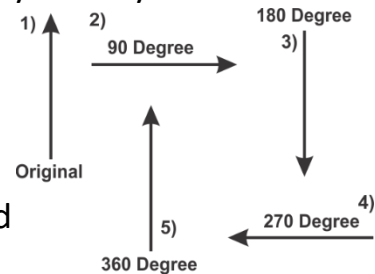
5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask students what is reflective symmetry. Take their responses and ask them to draw two shapes that shows reflective symmetry and two that is not a symmetry. Take their responses and appreciate them for their correct work.

Teaching & Learning Activities:

25mins

- Tell students today we will learn about rotational symmetry.
- Tell them the rotational symmetry of a shape explains that when an object is rotated on its own axis, the shape of the object looks the same.
- Now draw an arrow on the board. Now turn it quarter (90°) and observe it. Now turn it to second quarter (180°) and look it again then to the third quarter (270°) and then turn again fourth quarter (360°) and it looks same as original.
- Tell students an arrow shape will look like to its original only when it rotates (360°) degree.



Review:

3mins

Revise the lesson by explaining to students about rotational symmetry.

Evaluation:

5mins

To evaluate the students, ask them to solve Q2 of Exercise 7.6 in their textbooks.

Homework:

2mins

Revise the classwork.

Lesson Plan

Grade: Five

Subject: Math

Term: 3rd

Time: 40mins

Teacher's Name: _____

Week: 4

Day: 4

Unit 7: Geometry

Topic: Symmetry and its types

Student Learning Outcomes:

At the end of this period, the students will be able to:

- Recognize rotational symmetry in 2-D figures.
- Find point of rotation and order of rotational symmetry of given 2-D figures.

Resource Material:

Chalk/Marker, White/Blackboard, Math Textbook

Warm-up Activities:

5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask them to tell what is the difference between the reflective and rotational symmetry? Take their responses.

Teaching & Learning Activities:

25mins

- Tell students today we will learn about the rotational symmetry.
- Call a student to the front of the class and ask them to draw a star on the board and then turn quarterly and find its order of rotational symmetry.
- Ask the rest of the class to check and tell if he/she does correctly.
- Appreciate them for their correct response. Now call another student and ask them to draw a square and then find it has a rotational symmetry and if have, then find the order of rotational symmetry.
- Repeat this activity to some other students and appreciate them for their correct working.



Review:

3mins

Revise the lesson by explaining to students a figure has rotational symmetry if it coincides with original shape at least twice in a complete rotation.

Evaluation:

5mins

To evaluate the students, ask them to solve Q3 (i, ii) of Exercise 7.6 in their textbooks.

Homework:

2mins

Solve Q3 (iii – iv) of Exercise 7.6 in their textbooks.

Lesson Plan

Grade: Five

Subject: Math

Term: 3rd

Time: 40mins

Teacher's Name: _____

Week: 4

Day: 5

Unit 7: Geometry

Topic: Nets of 3-D Shapes

Student Learning Outcomes:

At the end of this period, the students will be able to:

- Identify cubes, from their nets.

Resource Material:

Chalk/Marker, White/Blackboard, Math Textbook, Wallchart of cube shaped objects, cube shaped boxes

Warm-up Activities:

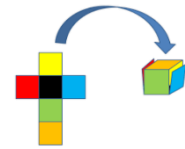
5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask students: Do you know about square? How many sides a square has? What is cube and cube shaped objects? Take their responses and appreciate them for their correct response.

Teaching & Learning Activities:

25mins

- Tell students today we will learn about nets of cube shape.
- Tell students, objects having length, breadth and height are called three dimensional objects. Show them flash cards of cube, cuboid, cone and pyramid and tell these are 3-D objects.
- Explain to them, 3-D shapes consist of face, edges and vertices, explain these terms one by one.
- Draw cube shape on the board and point out towards its edges and tell them that when the square faces of a cube are unfolded from the edges and laid out flat, they make a 3-D figure. That 3-D figure is called the net of the cube. Now place a cube box on the table and start to unfold it from the edges and then show when it is unfolded its shape looks like a 3-D shape and it is the net of the 3-D shape. Make four groups of students and give each student a cube shape box. Ask them to unfold the box and find the net of the box. Instruct each group to start unfolding by using different ways. Roam around the class and check their work and guide them if needed.



Review:

3mins

Sum up the lesson by explaining a geometric net is a two-dimensional pattern of a 3-D figure that can be folded in a specific pattern to create 3-D shape.

Evaluation:

5mins

To assess the students, ask them to solve Q1 (i, ii) of Exercise 7.7 in their textbooks.

Homework:

2mins

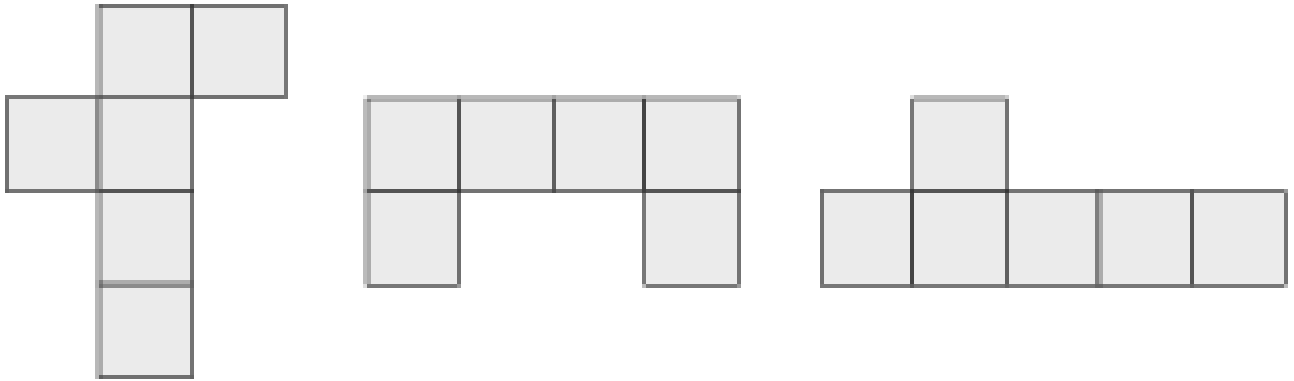
Solve the given worksheet.

Worksheet

Name: _____

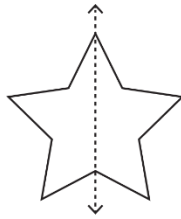
Date: _____

Q1. Draw a net of cube.

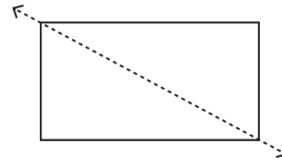


Q2. Is a dotted line on each shape a line of symmetry? Write yes or no.

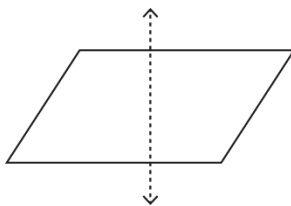
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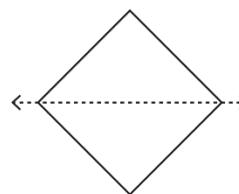
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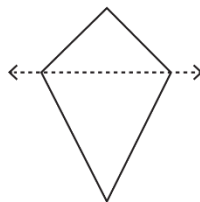
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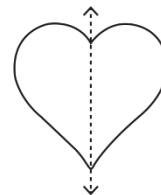
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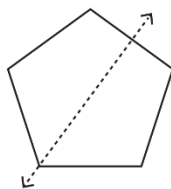
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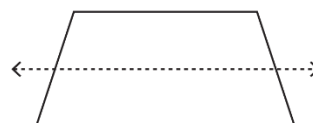
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Lesson Plan

Grade: Five

Subject: Math

Term: 3rd

Time: 40mins

Teacher's Name: _____

Week: 4

Day: 6

Unit 7: Geometry

Topic: Nets of 3-D Shapes

Student Learning Outcomes:

At the end of this period, the students will be able to:

- Identify cuboids, from their nets.

Resource Material:

Chalk/Marker, White/Blackboard, Math Textbook, Wallchart of cuboid shaped objects, cuboid shaped boxes objects, cube shaped boxes

Warm-up Activities:

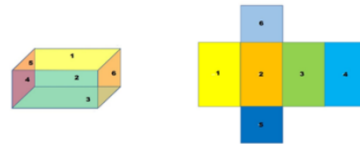
5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask students: Do you know about rectangle? How many sides a rectangle has? What is cuboid and cuboid shaped objects? Take their responses and appreciate them for their correct response.

Teaching & Learning Activities:

25mins

- Tell students today we will learn about nets of cuboid shape. Ask students: Do you know about cuboid shaped objects.
- Take their responses and appreciate them if someone gives the right answer.
- Draw cuboid shape on the board and point out towards its edges and tell them that when the rectangular faces of a cuboid are unfolded from the edges and laid out flat, they make a 3-D figure. That 3-D figure is called the net of the cuboid.
- Now place a cuboid box on the table and start to unfold it from the edges and then show them the fully unfolded 3-D shape and tell them that its look like 3-D shape and this is the net of the 3-D shape. Tell them that a cuboid has 11 types of nets.



Review:

3mins

Sum up the lesson by explaining in a cuboid 6 faces contain at least 4 rectangular faces.

Evaluation:

5mins

To check the students, ask them to solve Q1 (iii, v) of Exercise 7.7 in their textbooks.

Homework:

2mins

Solve Q1 (vi – vii) of Exercise 7.7 in their textbooks.