

# PERIMETER OF A RECTANGLE

**Overview** 

# **Subject**

Mathematics

This lesson plan covers teaching content for;

# **Prepared By**

[Instructor Name]

# **Grade Level**

5

1. Properties of a rectangle 2. Perimeter of a rectangle

### **Objectives**

- 1. Explain the properties of a rectangle.
- 2. Find the perimeter of a rectangle.

# **Activity Starter/Instruction**

Students should be able to; 1. The perimeter of an object is the sum of Day 1/ Lesson 1: 20mins all of its sides.



- 3. Given the rectangle in the diagram, what is the perimeter of the rectangle?
- 4. The perimeter of a rectangle is found by adding up the length of all four sides.
- 5. Since the two long sides are 12 cm, and the two shorter sides are 7 cm the perimeter can be found by:
- 6.12 + 12 + 7 + 7 = 38
- 7. The perimeter is 38cm.

# **Teacher Guide**

- 1. In a rectangle, the four angles are all right angles. Also, a rectangle's opposite sides are congruent, and when we say congruent, we mean they're of equal size. The lengths are equal to each other, so as the width.
- 2. The perimeter of a rectangle is equal to the sum of all the sides. However, since a rectangle's opposite sides are congruent, we only need to know the length and width.
- 3. We can write this in an equation this way:

$$P = I + w + I + w$$

4. Where P is the perimeter, I is the length of the rectangle and w is its width. But instead of writing the I and w twice, we can simplify the equation like this:

$$P = 2I + 2w$$

- 5. If a rectangle has a length of 6 inches and a width of 3 inches. We can calculate the rectangle's perimeter because we know that the other two sides also measure three and six inches, respectively.
- 6. So, we plug in 6 for I and 3 for w in our equation, and we have

$$P = 2(6) + 2(3) = 18$$

7. The rectangle's perimeter is 18 inches.

# Materials Required

- White board
- Marker
- Die
- Square Tile

## Additional Resources

- https://www.cpalms.org/Public/PreviewResourceLess
- https://www.cpalms.org/Public/PreviewResourceLess
- https://learnzillion.com/lesson\_plans/849-find-perime by-applying-the-standard-formula/?card=33177
- https://www.homeschoolmath.net/teaching/g/perim
- https://www.wikihow.com/Find-the-Perimeter-of-a-R

### Additional Notes

### **Guided Practice**

## Day 2/ Lesson 2: 15 Mins

- 1. Sammy was late to football practice, so his coach is making him run around the entire field three times. The field, including the end zones and the practice area behind the end zones is 160 yards long and 53 yards wide. What's the total distance Sammy has to run?
- 2. Well, since Sammy is running along all sides of the rectangular field, we're dealing with perimeter here.
- 3. This rectangle has a length of 160 yards and a width of 53 yards. We have the information we need to plug into our perimeter formula.

$$P = 2I + 2w$$

4. Plugging in 160 for I and 53 for w, we have:

$$P = 2(160) + 2(53)$$

5. Multiplying 2 times 160 gives us 320, and multiplying 2 times 53 gives us 106, so we now have:

$$P = 320 + 106 = 426$$

- 6. The field perimeter is 426yards.
- Since Sammy has to run round the field three times. We need to multiply the perimeter by 3.

$$426 \times 3 = 1,278$$

8. Sammy has to run 1,278 yards.

# **Guided Practice**

## Day 3/ Lesson 3: 20mins

- 1. Students will roll the die and take that number of tiles.
- 2. Arrange the tiles to make a rectangle.
- 3. Students find perimeter. Tell students not to take apart the shape because they will be adding to th figure.
- area behind the end zones is 160 yards 4. Continue rolling. After each new roll, add the tiles to long and 53 yards wide. What's the total your current shape and find the new perimeter.
  - 5. If students roll a number that will take them above 48, they should remove that number of tiles in their shape.
  - 6. The first person with a perimeter of exactly 48 wins.

| Summary   | Assessment Activity   | Assessment Activity                            |
|---|---|--|
| 1. Randomly pick students,  | 1. Students should understand the   | Assess if students can;                        |
| and give them problems to solve.  2. Make sure students have a clear understanding. | properties of a rectangle and know the formula to calculate for perimeter of a rectangle. | 1.Find the perimeter of a rectangle correctly. |
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