

# AREA & PERIMETER MISSING SIDES

**CREATE YOUR MANSION**

Bedroom, Bedroom 2, Kitchen, Bathrooms #1 and #2, Game Room, Closet, Jacuzzi, Movie Theater, Pool

**Dog Board**

Image	Area	Perimeter
Dog 3	24	
Bone		
Dog 9	63	
Bone		
Dog 11	88	
Bone		
Dog 4		20
Bone		
Dog 6		12
Bone		
Dog 2		24
Bone		
Dog 10		
Dog 5		12
Bone		
Dog 12		28
Bone		
Dog 1		
Bone		
Dog 9		
Bone		

**Missing Side Given Perimeter**

Find the length of the missing side given the perimeter in each problem. Name: **Rain**

1. Perimeter: 40 m	$8+8=16$ $40-16=24$ $24\div 2=12$ 9 m	6. Perimeter: 24 ft	$9+9=18$ $24-18=6$ $6\div 2=3$ 3 ft
2. Perimeter: 30 in	$5+5=10$ $30-10=20$ $20\div 2=10$ 10 in	7. Perimeter: 26 m	$10+10=20$ $26-20=6$ $6\div 2=3$ 3 m
3. Perimeter: 28 ft	$12+12=24$ $28-24=4$ 4 ft	8. Perimeter: 20 cm	$8+8=16$ $20-16=4$ $4\div 2=2$ 2 cm
4. Perimeter: 10 mm	$3+3=6$ $10-6=4$ $4\div 2=2$ 2 mm	9. Perimeter: 18 km	$4+4=8$ $18-8=10$ $10\div 2=5$ 5 km
5. Perimeter: 14 cm	$14-6=8$ $8\div 2=4$ 4 cm	10. Perimeter: 26	$14-6=8$ $26-8=18$ $18\div 2=9$ 9 in

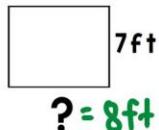
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- GAMES
- ACTIVITIES
- WORKSHEETS

# 2 MINI LESSONS

## Let's Learn: Area & Perimeter Missing Sides

### Area is Given

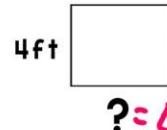


$$? = 8 \text{ ft}$$

Area: 56 square feet

$$56 \div 7 = 8$$

$$7 \times 8 = 56$$



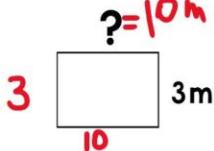
$$? = 5 \text{ ft}$$

Area: 20 square feet

$$20 \div 4 = 5$$

$$4 \times 5 = 20$$

### Perimeter is Given



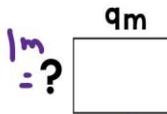
$$? = 10 \text{ m}$$

Perimeter: 26 meters

$$3+3=6$$

$$26-6=20$$

$$20 \div 2=10$$



$$1 = ?$$

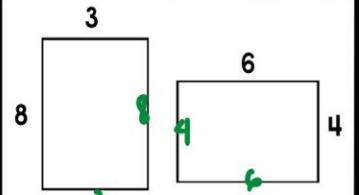
$$9$$

$$9+9=18$$

$$20-18=2$$

$$2 \div 2=1$$

## Let's Learn: Comparing Area & Perimeter



$$A: 8 \times 3 = 24$$

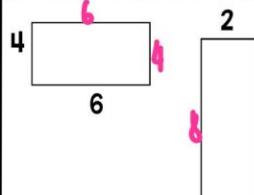
$$A: 6 \times 4 = 24$$

$$P: 8+8+3+3 = 22$$

$$P: 6+6+6+6 = 24$$

Same Area

Same Perimeter



$$A: 6 \times 4 = 24$$

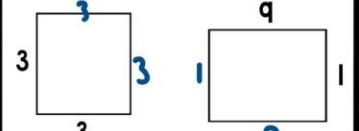
$$A: 8 \times 2 = 16$$

$$P: 4+4+6+6 = 20$$

$$P: 8+8+4+4 = 24$$

Same Area

Same Perimeter



$$A: 3 \times 3 = 9$$

$$A: 9 \times 1 = 9$$

$$P: 3+3+3+3 = 12$$

$$P: 9+9+1+1 = 20$$

Same Area

Same Perimeter



$$A: 7 \times 4 = 28$$

$$A: 3 \times 8 = 24$$

$$P: 7+7+4+4 = 22$$

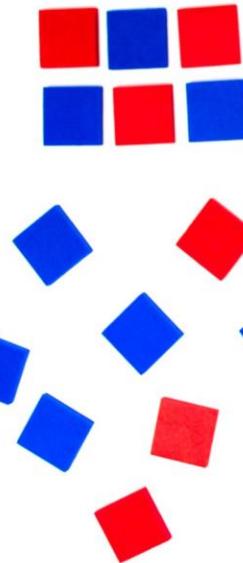
$$P: 3+3+4+4 = 22$$

Same Area

Same Perimeter

## 2 Mini-Lessons:

- A & P Missing Sides
- Comparing A & P



# 10 WORKSHEETS

**Missing Sides in the City!**  
Name: KC

Find the length of the missing side in each problem.

1. Area:  $24 \text{ m}^2$   $24 \div 2 = 12$  ft

2. Perimeter:  $28 \text{ ft}$   $4x = 14$   
 $28 - 14 = 14$   
 $14 \div 2 = 7$  ft

3. Perimeter:  $30 \text{ m}$   $11 + 11 = 22$   
 $30 - 22 = 8$   
 $8 \div 2 = 4$  m

4. Area:  $54 \text{ cm}^2$   $54 \div 6 = 9$  cm

5. Perimeter:  $26 \text{ m}$   $10 + 10 = 20$   
 $26 - 20 = 6$   
 $6 \div 2 = 3$  m

6. Perimeter:  $28 \text{ in}$   $8 + 8 = 16$   
 $28 - 16 = 12$   
 $12 \div 2 = 6$  in

7. Perimeter:  $20 \text{ cm}$   $8 + 8 = 16$   
 $20 - 16 = 4$   
 $4 \div 2 = 2$  cm

8. Perimeter:  $18 \text{ km}$   $4 + 4 = 8$   
 $18 - 8 = 10$   
 $10 \div 2 = 5$  km

9. Perimeter:  $16 \text{ cm}$   $4x = 16$   
 $16 \div 4 = 4$  cm

10. Perimeter:  $26 \text{ in}$   $5 + 5 = 10$   
 $26 - 10 = 16$   
 $16 \div 2 = 8$  in

**Missing Side Given Area or Perimeter**  
Find the length of the missing side in each problem.

Name: Sandy

1. Area:  $24 \text{ m}^2$   $24 \div 2 = 12$  m

2. Perimeter:  $30 \text{ m}$   $11 + 11 = 22$   
 $30 - 22 = 8$   
 $8 \div 2 = 4$  m

3. Perimeter:  $54 \text{ cm}^2$   $54 \div 6 = 9$  cm

4. Area:  $16 \text{ cm}^2$   $16 \div 4 = 4$  cm

5. Perimeter:  $32 \text{ in}$   $8 + 8 = 16$   
 $32 - 16 = 16$   
 $16 \div 2 = 8$  in

**Missing Side Given Perimeter**  
Find the length of the missing side given the perimeter in each problem.

Name: Rain

1. Perimeter:  $40 \text{ m}$   $8 + 8 = 16$   
 $40 - 16 = 24$   
 $24 \div 2 = 12$  m

2. Perimeter:  $30 \text{ in}$   $5 + 5 = 10$   
 $30 - 10 = 20$   
 $20 \div 2 = 10$  in

3. Perimeter:  $28 \text{ ft}$   $12 + 12 = 24$   
 $28 - 24 = 4$   
 $4 \div 2 = 2$  ft

4. Perimeter:  $20 \text{ cm}$   $8 + 8 = 16$   
 $20 - 16 = 4$   
 $4 \div 2 = 2$  cm

5. Perimeter:  $10 \text{ mm}$   $2 + 2 = 4$   
 $10 - 4 = 6$   
 $6 \div 2 = 3$  mm

6. Perimeter:  $18 \text{ km}$   $4 + 4 = 8$   
 $18 - 8 = 10$   
 $10 \div 2 = 5$  km

7. Perimeter:  $26 \text{ m}$   $10 + 10 = 20$   
 $26 - 20 = 6$   
 $6 \div 2 = 3$  m

8. Perimeter:  $28 \text{ in}$   $8 + 8 = 16$   
 $28 - 16 = 12$   
 $12 \div 2 = 6$  in

9. Perimeter:  $16 \text{ cm}$   $4x = 16$   
 $16 \div 4 = 4$  cm

10. Perimeter:  $20 \text{ cm}$   $8 + 8 = 16$   
 $20 - 16 = 4$   
 $4 \div 2 = 2$  cm

**It's the Same #!**  
Find the length of the missing side in each problem.

1. Area:  $3 \text{ m}^2$   $3 \div 3 = 1$  m

2. Perimeter:  $12 \text{ m}$   $3 + 3 = 6$   
 $12 - 6 = 6$   
 $6 \div 2 = 3$  m

3. Area:  $12 \text{ cm}^2$   $12 \div 4 = 3$  cm

4. Perimeter:  $16 \text{ cm}$   $4 + 4 = 8$   
 $16 - 8 = 8$   
 $8 \div 2 = 4$  cm

5. Perimeter:  $16 \text{ in}$   $4 + 4 = 8$   
 $16 - 8 = 8$   
 $8 \div 2 = 4$  in

**Same Area**  
Find the length of the missing side in each problem.

1. Area:  $12 \text{ cm}^2$   $12 \div 3 = 4$  cm

2. Perimeter:  $16 \text{ in}$   $4 + 4 = 8$   
 $16 - 8 = 8$   
 $8 \div 2 = 4$  in

**Same Perimeter**  
Find the length of the missing side in each problem.

1. Perimeter:  $12 \text{ m}$   $3 + 3 + 3 + 3 = 12$  m

2. Perimeter:  $16 \text{ cm}$   $4 + 4 + 4 + 4 = 16$  cm

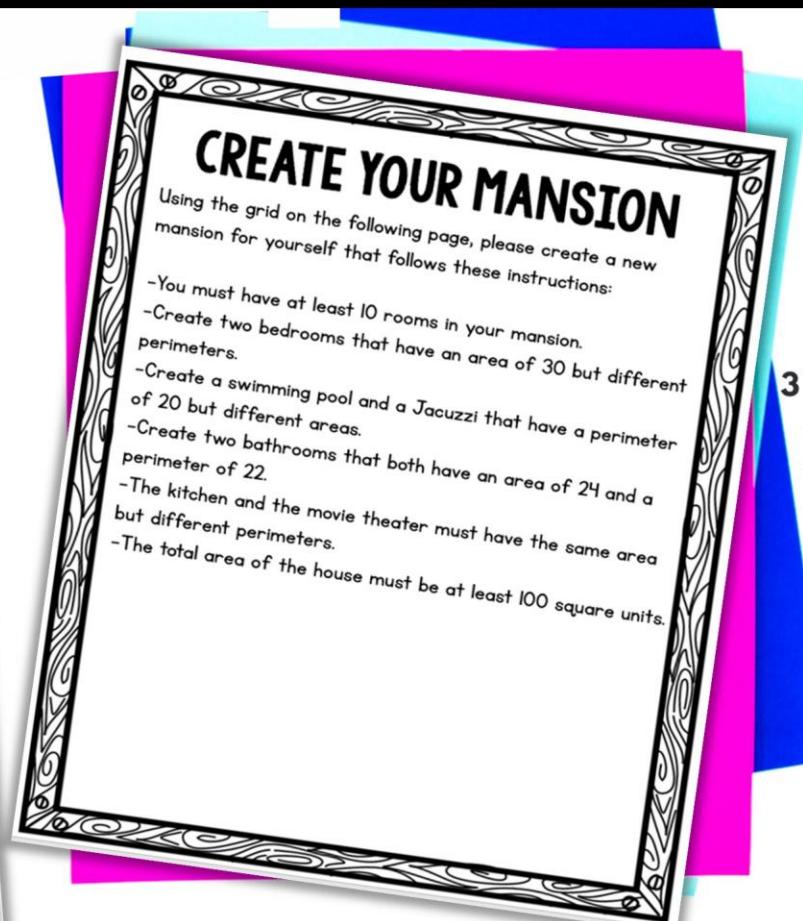
3. Perimeter:  $20 \text{ in}$   $5 + 5 + 5 + 5 = 20$  in

4. Perimeter:  $16 \text{ in}$   $4 + 4 + 4 + 4 = 16$  in

5. Perimeter:  $12 \text{ in}$   $3 + 3 + 3 + 3 = 12$  in

**WIDE RULED**  
1 SUBJECT  
10 SHEETS  
10.5 in x 8.5 in x 0.3 cm  
10.5 in x 8.5 in x 0.3 cm

# CREATE YOUR OWN MANSION



**3 Versions:**

- Easy Numbers
- Hard Numbers
- Creative Version

Students use their knowledge of area and perimeter to create their own mansion.

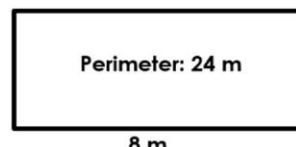
# ERROR ANALYSIS

Students decide if each kid solved the problem correctly or incorrectly. They explain their thinking at the bottom.

**4 PAGES**

Directions: Read the problem below and look at the work the student did. Decide if the work is correct or not.

Find the length of the missing side given the area or perimeter.



Perimeter: 24 m      ?  
8 m

The student says:  
The answer is 3 because  $8 \times 3 = 24$ .

Explain if they are right or wrong. Put a check or X on their work.  
The student accidentally found the missing side if given the area. The answer when given the perimeter is  $8+8=16$ . Then  $24-16=8$ . Then,  $8/2=4$ . © The Lifetime Learner

# GAME #1

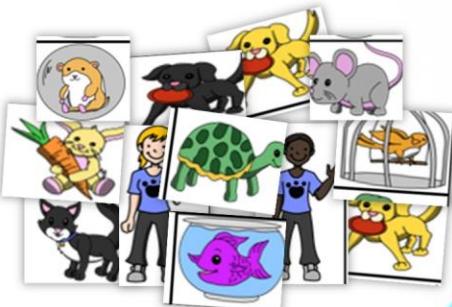


## HOW TO PLAY:

- Students pair up in teams.
- Students race to line up their cards in order before the other team.

# GAME #2

# FOR 2-4 PLAYERS



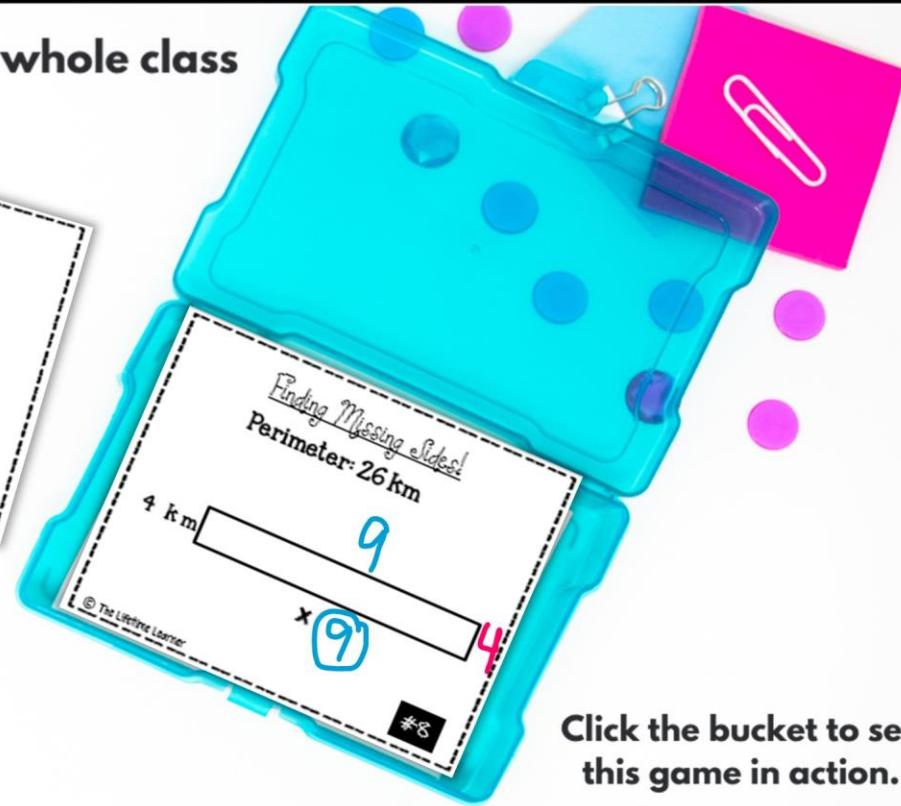
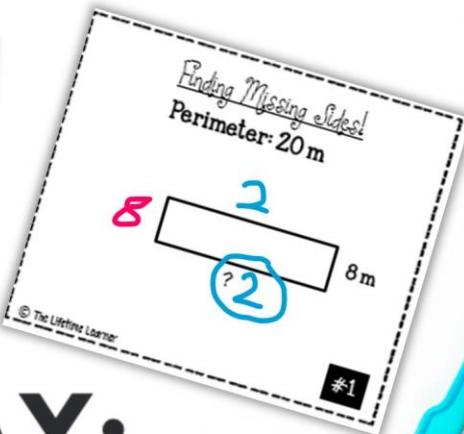
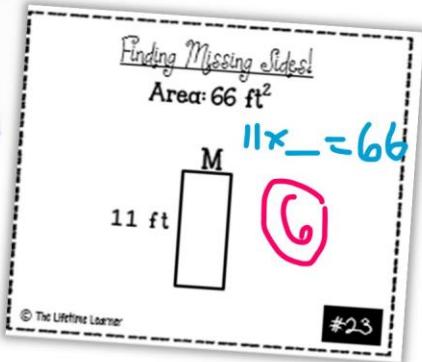
## HOW TO PLAY:

1. All players receive a game mat.
2. Students answer a question card.
3. If they are correct, they earn an item.
4. The first person to earn 10 items wins.
5. Chance cards included to spice up gameplay.



# GAME #3

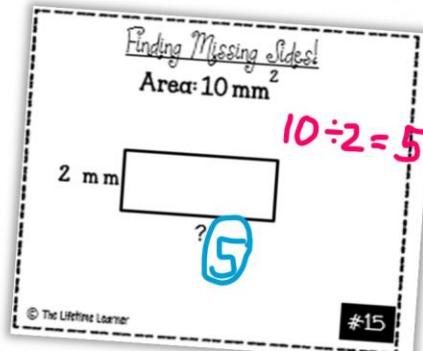
the perfect game to play with the whole class



Click the bucket to see  
this game in action.

## HOW TO PLAY:

1. Students answer task cards.
2. If they get it right, they drop it in the bucket.
3. Students play for a set amount of time.
4. At the end of gameplay, the teacher draws task cards out of the bucket.
5. Any student whose task card gets pulled out gets a small prize.

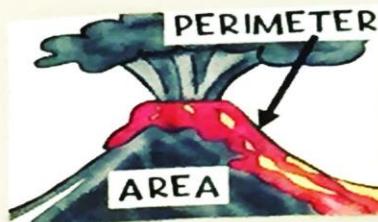
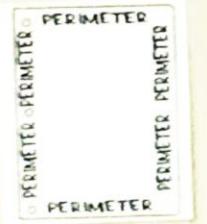
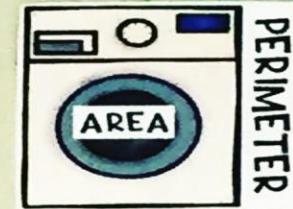
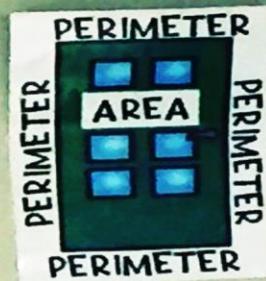
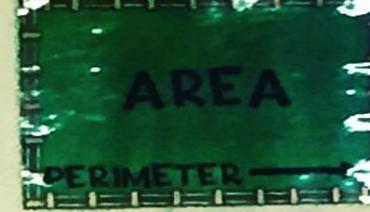
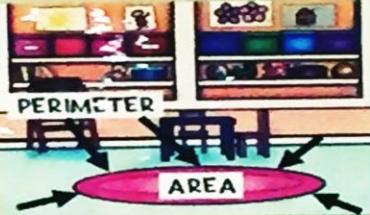




# 21 POSTERS

Froggy

Put these posters up on the walls for students to reference during your unit.



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**My Castle**

To win, you must have 10 items in your castle.

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**The Beach**

Name: **Lindsay**

Write the number of the matching word problem on each bucket to show which sandcastle goes with each word problem.

<b>A</b>	<b>#5</b>	<b>B</b>	<b>#5</b>	<b>C</b>	<b>#2</b>
<b>D</b>	<b>#4</b>	<b>E</b>	<b>#1</b>	<b>F</b>	<b>#3</b>

1. There are 2 sharks. Each one has 5 teeth. How many teeth do the teeth have combined?  $2 \times 5 = 10$

2. There are 54 fish in the water. They are split between 6 small pools equally. How many fish are in each pool of water?  $54 \div 6 = 9$

3. There are 36 umbrellas for sale on the beach. 6 umbrellas are sold each hour. How many hours did it take to sell all of the umbrellas?  $36 \div 6 = 6$

4. There are 3 fences facing the beach. There are four seagulls sitting on each one. How many seagulls are there total?  $3 \times 4 = 12$

5. There are 12 surfers out in the water. They are chatting in groups of 4. How many groups are chatting?  $12 \div 4 = 3$

6. There are 50 seals out in the ocean. They are sitting in groups of 10. How many groups of seals are there?  $50 \div 10 = 5$

# YOU MAY ALSO LIKE:

**AFRICAN safari**   
area & perimeter   
3.MD.5-8

**EDITABLE**  
**ROOM TRANSFORMATION**

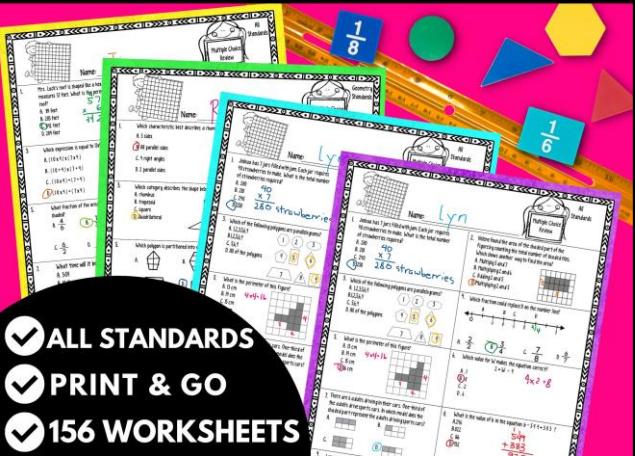
**REALTOR day**   
area & perimeter   
3.MD.5-8

**EDITABLE**  
**ROOM TRANSFORMATION**

**SURGERY day**   
rectilinear area   
3.MD.7

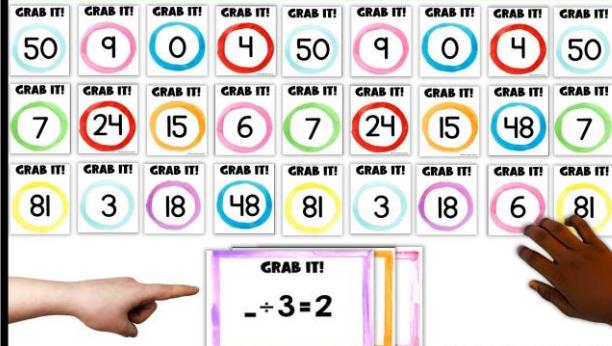
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