



Makes Maths Fun

Level 3 PERIMETER & AREA

Bloomsmath is a comprehensive mathematics program which provides a fun way for every student to be learning to the best of their ability.

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Perimeter & Area

Level 3 is designed for students in their third year at school often called Year 2. The Area strand allows students to estimate, measure, compare and record perimeters and areas using informal units.

Knowledge: Students will use lolly wrappers to understand smaller and larger areas and the comparison available between the two sized areas.



Students who demonstrate proficiency in this activity move on to Comprehension.



Students stop here as they require additional teacher support to master this activity.

Comprehension: Students will use their sweet wrappers to predict, measure and explore the connections between perimeter and area.



Students who demonstrate proficiency in this activity move on to Application.



Students stop here if time has run out or they require additional support with this activity.

Application: Students will count the number of squares to compare shapes of varying sizes and perimeters and order these according to these attributes.



Students who demonstrate proficiency in this activity move on to Analysis.



Students stop here if time has run out or they require additional support with this activity.

Analysis: Students will calculate the area of rectangles using the dimensions provided. Grids can be drawn by students to check their answers if desired.



Students who demonstrate proficiency in this activity move on to Synthesis.



Students stop here if time has run out or they require additional support with this activity.

Synthesis: Students will create shapes using the dimensions given by the die.

Evaluation: Suggested questions provide a starting point for discussions related to Perimeter and Area.



Students may complete more or fewer activities for each learning outcome depending on the time allocated and their strength in the area being covered.



All students should participate in the Evaluation discussion to encourage the use of mathematical language, logical reasoning and reflection on that which they have completed.

Name: _____

A Sweet Area

Use 2 different lolly wrappers of different sizes such as a fun size mars bar and a tootsie roll to complete the activities below.

Unwrap the sweets and trace the wrappers below.

1. What shape are both the wrappers? _____
 2. Which wrapper is the longest? _____
 3. Which wrapper is the widest? _____
 4. Which wrapper is biggest overall and has the largest area? _____
 5. How many of the smaller wrapper will fit onto the bigger wrapper? _____
 6. Which sweet was biggest? _____
- * Keep your wrappers for the next activity.



Let's Try This Again



Progress To Comprehension

Name: _____

Playing With Lollies

Use the lolly wrappers from "A Sweet Area" to predict and then measure each item below.

Perimeter & Area - Level 3 - Students will estimate, measure, compare & record perimeters & areas.

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

	Prediction	Answer
1. Place your smaller wrapper in the top corner. How many wrappers will it take to cover the top length of this piece of paper.	<input type="text"/>	<input type="text"/>
2. How many smaller wrappers will it take to cover the long side of this piece of paper.	<input type="text"/>	<input type="text"/>
3. How many smaller sweet wrappers will it take to cover this page?	<input type="text"/>	<input type="text"/>
4. Place your larger wrapper in the top corner. How many wrappers will it take to cover the top length of this piece of paper.	<input type="text"/>	<input type="text"/>
5. How many larger wrappers will it take to cover the long side of this piece of paper.	<input type="text"/>	<input type="text"/>
6. How many larger sweet wrappers will it take to cover this page?	<input type="text"/>	<input type="text"/>

<u>Smaller Sweet Wrapper</u>	<u>Larger Sweet Wrapper</u>
Actual wrappers along the top: ___	Actual wrappers along the top: ___
Actual wrappers down the side: ___	Actual wrappers down the side: ___
Actual wrappers to cover the page: ___	Actual wrappers to cover the page: ___

Can you see a connection between the wrappers along the top, the wrappers along the side and the wrappers needed to cover the whole page?



Let's Try This Again



Progress To Application



Name: _____

Counting Squares

Find the perimeter (outside) and area (inside) of each shape below.

	Shape	Top Row of Squares	Side Row of Squares	Total Squares
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				

10. What is the relationship between the 2 sides and the area. _____

Perimeter & Area - Level 3 - Students will estimate, measure, compare & record perimeters & areas.

Knowledge
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Let's Try This Again

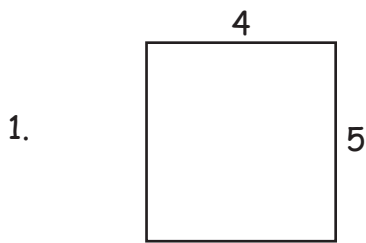


Progress To Analysis

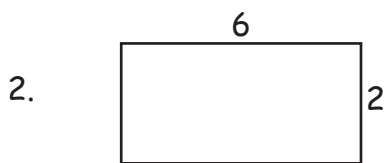
Name: _____

Finding Relationships

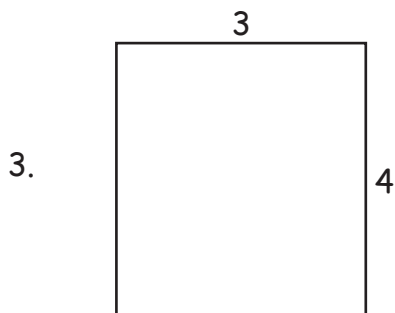
Find the perimeter and area of each shape below.



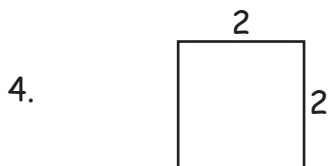
Side 1: _____ Side 2: _____
2 x Side 1: _____ 2 x Side 2: _____
2 x Side 1: _____ + 2 x Side 2: _____ = _____ (Perimeter)
Side 1: _____ x Side 2: _____ = _____ (Area)
Side 1: _____ Side 2: _____



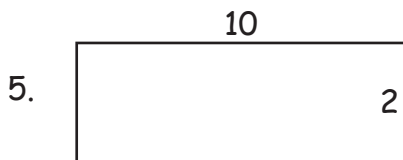
2 x Side 1: _____ 2 x Side 2: _____
2 x Side 1: _____ + 2 x Side 2: _____ = _____ (Perimeter)
Side 1: _____ x Side 2: _____ = _____ (Area)
Side 1: _____ Side 2: _____



2 x Side 1: _____ 2 x Side 2: _____
2 x Side 1: _____ + 2 x Side 2: _____ = _____ (Perimeter)
Side 1: _____ x Side 2: _____ = _____ (Area)
Side 1: _____ Side 2: _____



2 x Side 1: _____ 2 x Side 2: _____
2 x Side 1: _____ + 2 x Side 2: _____ = _____ (Perimeter)
Side 1: _____ x Side 2: _____ = _____ (Area)
Side 1: _____ Side 2: _____



2 x Side 1: _____ 2 x Side 2: _____
2 x Side 1: _____ + 2 x Side 2: _____ = _____ (Perimeter)
Side 1: _____ x Side 2: _____ = _____ (Area)

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Knowledge

Comprehension

Application

Analysis

Synthesis

Evaluation



Let's Try This Again



Progress To Synthesis

Perimeter and Area Discussion

The following questions and activities are provided as a starting point for fun discussions related to Perimeter and Area. During these conversations students will have an opportunity to use appropriate mathematical language in its correct context, to engage in reflection on the Perimeter and Area activities they have completed and to use logical reasoning to tie their in-class mathematics to its everyday context.



Students estimate and then measure how many people can fit in a given space such as a hula hoop without anybody falling over or feeling squashed. Students could suggest ways in which they could measure this without actually having the people stand in a hoop such as measuring their feet and the hoop.



Discuss why sweet wrappers are rectangular even if the sweets are circular.



Discuss the relationship between area and perimeter and the fact that 2 shapes may be a different perimeter ie ($2 + 2 + 10 + 10 = 24$) and ($4 + 4 + 5 + 5 + 18$) yet the same area of 20 squares.



Discuss why the perimeter for the game Colour Your Rectangle can not exceed 6×6 .



Split the class into teams to play the game Colour Your Rectangle but this time play using the rolled numbers multiplied together as the area rather than the perimeter. Discuss how this changes the game.

