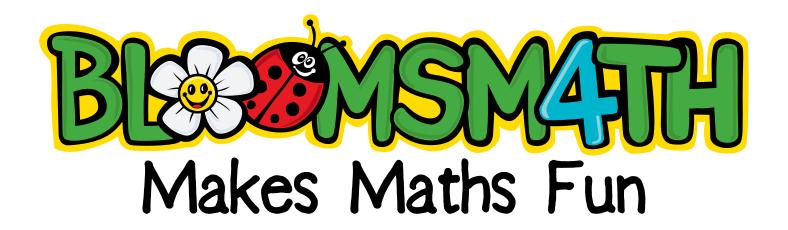


## Level 1 Area

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

By Rachel McCann (B. Teach; B. Ed Hons; M. ED (Special Ed.)



## Also Available in the Level 1 Program

Whole Number Addition Subtraction Multiplication & Division Fractions & Decimals Probability Patterns & Algebra Data Length Volume Mass Time 3D Shape 2D shape **Position** 



## Area

Level 1 is designed for teachers of students in their first year at school. The Area strand allows students to describe and compare areas using direct comparisons.

Knowledge: Students identify closed and open shapes and colour the closed shapes red as a shape must be closed to able to measure its area



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 use direct comparison to identify and circle the shape with the larger 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 are presented with items which are pictorially the same size but have actual sizes which differ greatly and must use indirect comparison to identify the shapes which usually have a larger area.



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 count the number of squares in each of the rectangles provided to use 1 to 1 counting to calculate the area of regular shapes.



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 again use 1 to 1 counting to calculate area but this time they must count the number of squares and thus the area of irregular shapes.

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



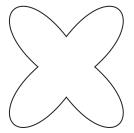
All students should participate in the Evaluation discussion to encourage the use of mathematical language, logical reasoning and reflection on that which they have completed.

## HIMSNESSE

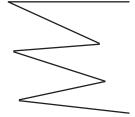
## Closed And Open Shapes

Colour the closed shapes red.

1.



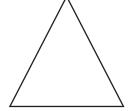
6.



2.



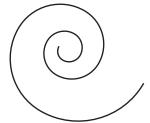
7.



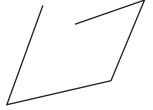
3.



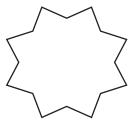
8.



4.



9.

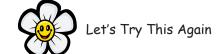


5.



10.







Progress To Comprehension

## Direct Comparison Of Area

Circle the shape with the larger area.



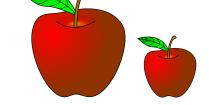








2.



7.



3.



8.





1



9.



5.



10.







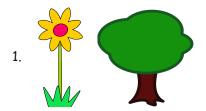


Comprehensi

## HIMSNESSE

## Indirect Comparison Of Area

Circle the shape which usually has a larger area.







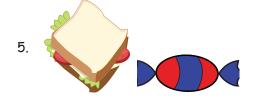




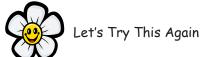














## Simple Area

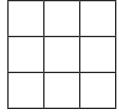
Use the squares to count the area of each shape.

1.

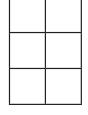
Name: \_



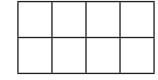
6.



2.

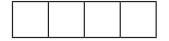


7.

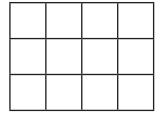


3.

4.

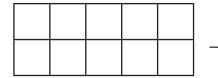


8.





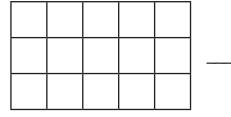
9.



5.



10.

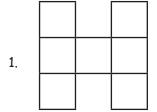




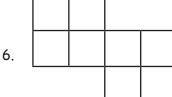


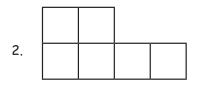
Uncommon Areas

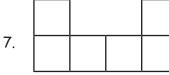
Use the squares to count the area of each shape.

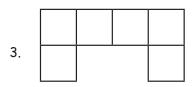


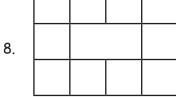
Name: \_

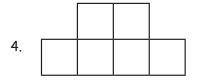


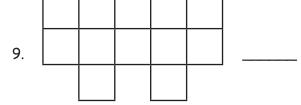


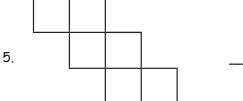


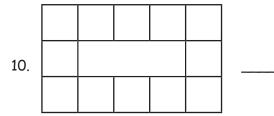
















## Area Discussion

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



Why can't the area of an open shape be measured while the area of a closed shape can be measured?



Discuss area as the surface of an object and find items with a large and small surface area.



Use comparisons between items around the classroom such as lunch boxes, books or pencils to find those with larger and smaller areas.



Trace, cut out and paste various areas together to create equal sized shapes ie. 18 erasers = 1 pencil case or 50 sharpeners = 1 desk.



Using the comparative size and equal size shape construction discussions have students suggest why a standardised measure for area is needed.



