

Book Title: The Rabbit Problem by Emily Gravett



Grade Levels: 3 - 7

Learning Outcomes:

Grade 3

A2: Represent and describe numbers to 1000 concretely, pictorially and symbolically.

B1: Demonstrate an understanding of increasing patterns by:

(a) describing (b) extending (c) comparing (d) creating
patterns using manipulatives, diagrams, sound and actions (numbers to 1000).

Grade4

A1: Represent and describe numbers to 10 000.

B3: Represent and describe patterns and relationships using charts and tables to solve problems.

Grade5

A1: Represent and describe whole numbers to 1 000 000.

B1: Determine the pattern rule to make predictions about subsequent elements (*with and without concrete materials*).

Grade6

A2: Solve problems involving large numbers

B2: Represent and describe patterns and relationships using graphs and tables.

Grade 7

B3: Demonstrate an understanding of Equality

Materials:

- Book: The Rabbit Problem by Emily Gravett
- Scanned copy of the book
- Calculators
- Coloured tiles
- Problem sheets for students
- 5 by 5 grids

Lesson Ideas:

Day 1

1. Warm-up students for partitioning
 - Share learning intention, using the language: partitioning, equation, addend
 - First Steps – Partitions of 100 p.43 – adjust to 25 ‘Game’ recognizing the parts that make 25
2. With the children, discuss the cover of the book and explain to the children that they need to watch and listen for the problem in the book.
3. If we decide the field is full in June and our solution is to open additional fields for them – how could we partition them? Discuss ways to partition 16. Model solutions with different numbers of fields. Distribute tiles – teachers record the partitions (equation, # of addends etc.)
4. Students to work on ‘Rabbit Problem – Partitioning Sheet’
5. Pull together at the end – note strategies, Ah has and self assess on the language introduced, comfort with partitioning, solving the problems as presented

Day 2

1. Warm-up students for patterning
 - Share learning intention, using the language: table, increasing pattern vs repeating pattern
 - Physical line up – Guess My Pattern? Compare repeating pattern (boy girl girl, boy girl girl compared to bgbgbbbgbbb) Use a table to show results
2. With the children, discuss the cover of the book and explain to the children that they need to watch and listen for the pattern.
3. Read the story until April – STOP – discuss any patterns noted and begin to organize into a table such as

Month	# of pairs of rabbits

4. Partners or small groups – share out of strategies for the table(s)
5. Predict the next month – repeat month to month as the book is checked
6. For the students struggling – provide tiles and build the pairs of rabbits to record, provide calculators. Stop the class and discuss the strategies being used.
7. Debrief with a recap of the strategies demonstrated and shared in the class, adding to the chart if needed.
8. Problem sheet
9. Sharing of strategies – revisit learning intentions (self ratings – show of fingers of comfort with increasing pattern, use of tables, strategies for the problems)