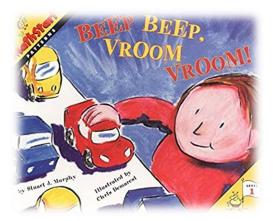


Patterns with Beep Beep, Vroom Vroom



Summary:

The picture story book Beep Beep, Vroom Vroom by Stuart J, Murphy is a brilliant introduction to a rich mathematical investigation into patterns and early stages of algebra.

In this lesson, the students will make different mathematical patterns from the book as well as build their own creative patterns.

Year Level:

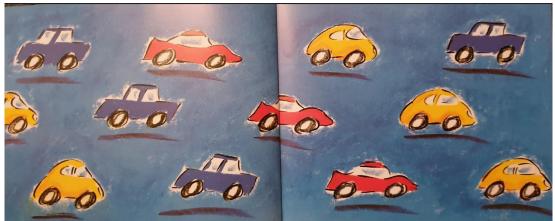
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Resources:

Beep Beep, Vroom Vroom By Stuart J. Murphy A variety of concrete materials available

Lesson

Warm up:



What do you notice? How many?



Introduction/Launch:

Read the Story 'Beep Bepp, Vroom Vroom' by Stuart J Murphy

Or if you do not have a copy listen to the story here: https://vimeo.com/405687126

Throughout the book, briefly talk to the students about the different ways Molly lines her brother's cars up.

- What do you notice about these cars?
- How are they different?

Part I:

Molly's brother and she made the following patterns with the cars







Using any equipment in the room, can you create all three patterns?

Give students time to explore and create the patterns Molly had made in the story.

Encourage students to record (draw or write) these patterns into their books.

Have students share and explain their patterns to some of their peers — you might like to come back together as a group and discuss.

PART 2:

Ask the students to turn and talk - Are there any other ways Molly could have lined up her brother's cars?

Discuss.



Send students off to explore, make and investigate using materials (or draw), other ways that Molly could have lined the three different coloured cars up.

Have them record this in their scrap book, share with peers and then bring the students back for more reflection

PART 3:

What if Molly combined one of her cars with her brother's set?

Now they have four red cars, four blues cars, four yellow cars and four green cars.

Discuss and come to a decision as to how many cars there are altogether (16).

You might want to display this on the board for our visual learners.

Give students some more time to head off and work on their own or in small groups to make, record and discuss the different ways Molly and her brother could line up the cars now.

A further extension could be to ad in the purple car, bringing in five colours and 20 cars.





Skills and Concepts:

Number — Counting strategies, Patterns ξ Algebra. Problem Solving

Curriculum Links:

ACMNA005

ACMNA018

ACMNA035

This lesson book would also go really well with the maths 300 lesson — Cars in the Garage