

Grade 4 Numeracy Learning at Home

ISSUE 2

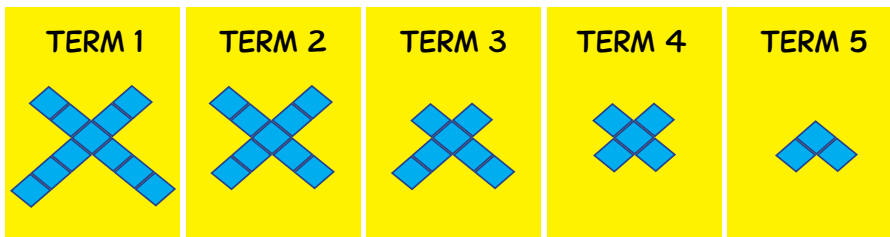
Keep the learning going!

The following activities support learning at home and connect to the mathematics that Grade 4 students have been learning. Choose activities that are interesting and challenging. Have fun!

Patterns and Relations: Mathematics is about recognizing, describing, and working with numerical and non-numerical patterns.

DECREASING PATTERNS: A decreasing pattern has elements that shrink. The pattern is described by a rule in relation to how each term shrinks. You can determine missing elements or numbers of a pattern by determining the pattern rule. The rule describes how the pattern starts and continues.

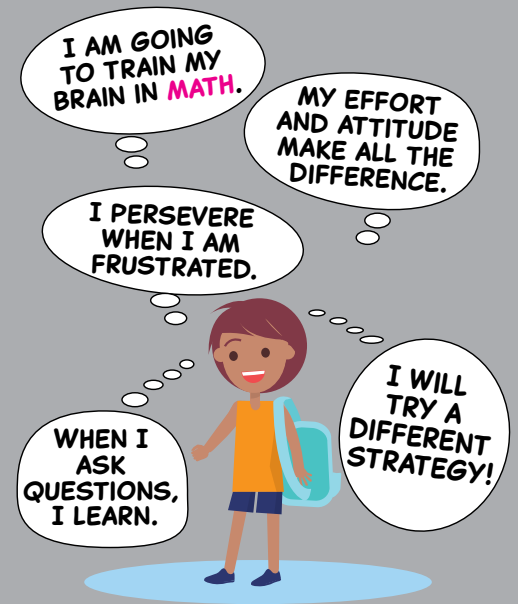
- Describe the decreasing pattern below.
- Explain the pattern rule.
- Look at the table below the pattern and explain how the table matches the pattern.
- What is the missing number in the table? Use the pattern rule to help you.



Term	1	2	3	4	5
Number of Shapes	11	9	?	5	3



Math Mindset



LAUGH OF THE DAY

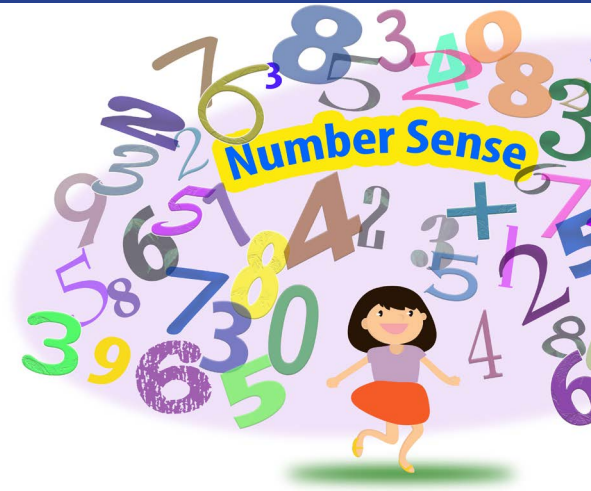
Q: How do you make time fly?

A: Throw a clock out the window!



Building Number Sense

Number sense is an awareness and understanding of numbers. Number sense involves knowing different ways of representing numbers, understanding the relationships among numbers, and using numbers flexibly to reason, estimate, and compute.



Mental Math Strategies

Mental math strategies foster flexible thinking about numbers and operations, and can help you determine the relationships between numbers. Learning about mental math strategies helps build an awareness of the numbers and makes you question if an answer does not “look” or “sound” right. Developing good mental math strategies is important because mental math is a valuable life skill.

Using manipulatives and pictures supports how we can think about strategies.

Addition Strategy : Breaking up Numbers Using Place Value

(Split Strategy)

Using place value helps with adding up numbers. Break up the numbers according to place value, thousands, hundreds, tens, and ones. Combine all the numbers and add them up.

$$\begin{aligned} &1382 + 126 = \\ &= (1000 + 300 + 80 + 2) + (100 + 20 + 6) \\ &= 1000 + (400 + 100 + 8) \\ &= 1000 + (500 + 8) \\ &= 1000 + 508 \\ &= 1508 \end{aligned}$$

Use the breaking up numbers strategy to find the sums.

$$742 + 153 =$$

$$1563 + 467 =$$

Splat!

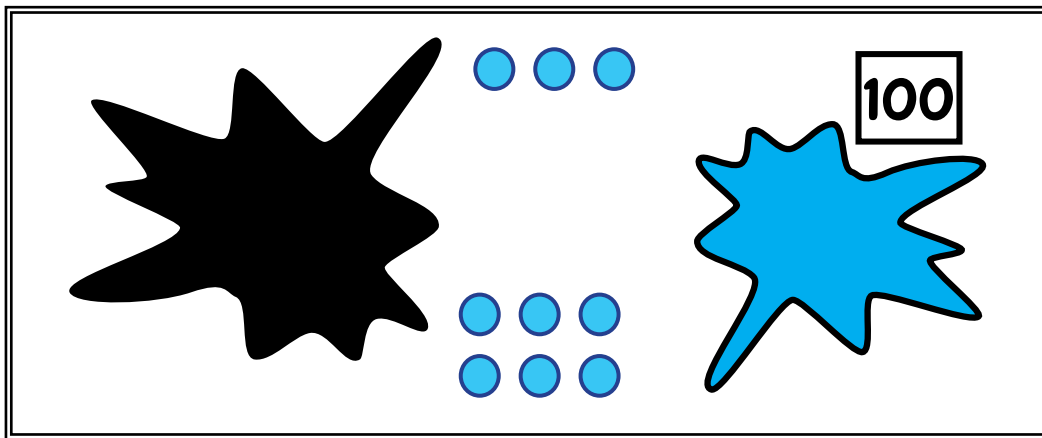
Splat is a thinking game. Some ink has spilled onto the picture. Look at the ink splats below and reason out how many dots are hidden beneath each one.

- The number on top represents the number of dots in the entire picture.
- How many dots do you see?
- When splats are different colours, they are covering different amounts of dots.
- How many dots have been covered by the ink splats?
- Explain how you know? Is there more than one way?



For example:

I see 9 dots, so there are 91 dots hidden under the ink splats. There could be 50 dots under one splat and 41 dots under the other splat. Describe some other possibilities.



Number Detective?

Use the clues to find the number.

I am an odd 3-digit number.

My first digit is double my second digit.

I can get to my number by counting by 25s.

When you add my 3 digits together, you get 11.

What number am I?

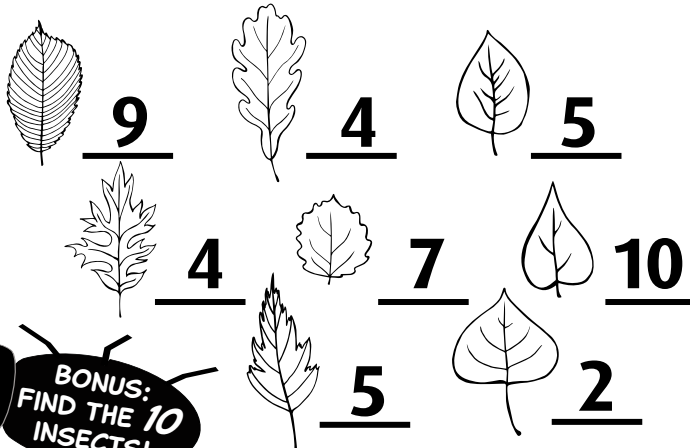


It's your turn now.
Make up riddles of your own.

I Spy Leaves



CAN YOU FIND THE FOLLOWING LEAVES IN THE PICTURE ABOVE?



CAN YOU FIND TREES WITH LEAVES LIKE THESE IN YOUR COMMUNITY?

LOOK VERY CAREFULLY AT THE SIZE AND SHAPE OF EACH LEAF. KEEP TRACK OF THE SAME LEAVES BY COLOURING THEM.

