

# Grade 3 Numeracy Learning at Home

ISSUE 2

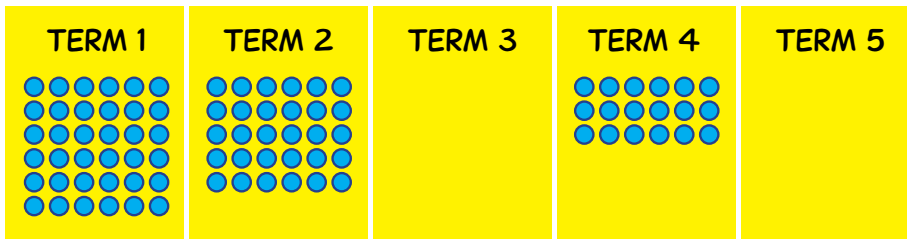
## Keep the learning going!

The following activities support learning at home and connect to the mathematics that you 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.
- Fill in the missing terms. Use the pattern rule to help you



**TRY IT YOURSELF:** Create your own decreasing pattern.

ASK A FAMILY MEMBER TO DESCRIBE THE PATTERN RULE.



## Math Mindset



## LAUGH OF THE DAY

**Q:** Why was the math book sad?

**A:** Because it had too many problems.



Manitoba 

# 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, hundreds, tens, and ones. Combine all the numbers and add them up.

$$\begin{aligned} 382 + 26 &= \\ &= (300 + 80 + 2) + (20 + 6) \\ &= (300 + 80 + 20) + 8 \\ &= 400 + 8 \\ &= 408 \end{aligned}$$

Use the breaking up numbers strategy to find the sums.

$$417 + 82 =$$

$$465 + 128 =$$



## Splat!

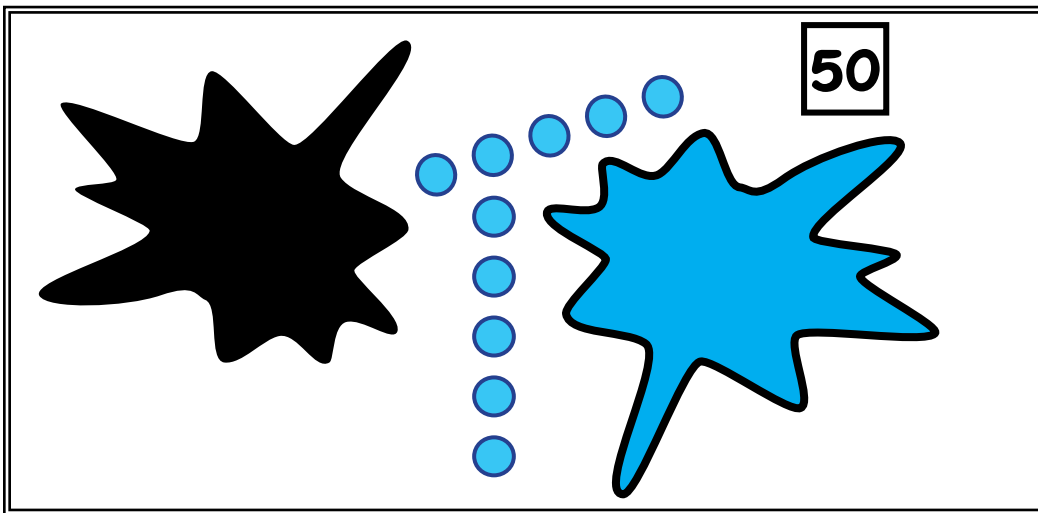
Splat is a thinking game. Some ink has spilled onto the picture. Look at the ink splats below and reason out how many dots are hidden beneath each one.

- 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 10 dots, so there are 40 dots hidden under the ink splats. There could be 18 dots under one splat and 22 dots under the other splat. Describe some other possibilities.



## Number Detective?

Use the clues to find the number.

I am a 3-digit number.

I can get to my number by counting by 2s.

The sum of my digits is 6.

The digits are all the same.

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

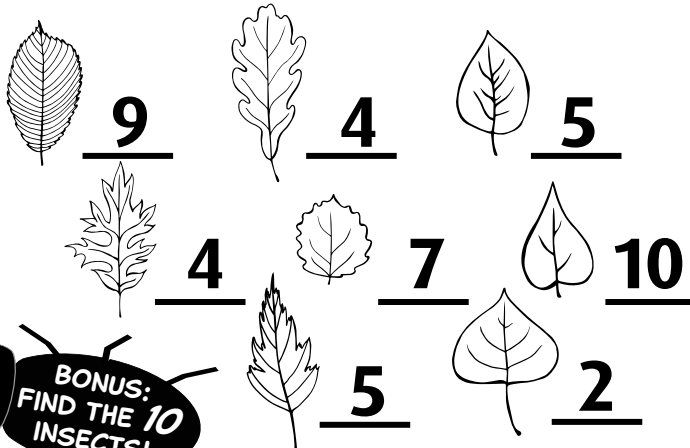


(What Number Am I Answer Is 222.)

# 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.

