

# Grade 4 Numeracy Learning at Home

## 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.

**INCREASING PATTERNS:** Below is an example of an increasing pattern. An increasing pattern is a growing pattern. The pattern can be described according to how each element grows. What can you describe about the pattern? How would you extend this pattern? Draw the next term.



Term 1

Term 2

Term 3

Term 4

**CREATE YOUR OWN INCREASING PATTERN:** Create an increasing pattern. Describe how it increases to another family member.

**Which One Doesn't Belong?** Look at what is in each box.

Find a reason why each one doesn't belong. Explain why.

$2 \times 6$	$6 + 6$
$4 \times 3$	$6 \times 2$

There are no wrong answers as long as each answer includes an explanation about why it doesn't belong.

For example,  $4 \times 3$  does not belong because it is the only box with the number 4.



## Math Mindset

I KEEP TRYING WHEN I GET FRUSTRATED.

I LIKE TO CHALLENGE MYSELF.

MISTAKES HELP ME LEARN!

BELIEVE IN YOURSELF!

STRONG BRAINS GROW WITH EFFORT.



## LAUGH OF THE DAY

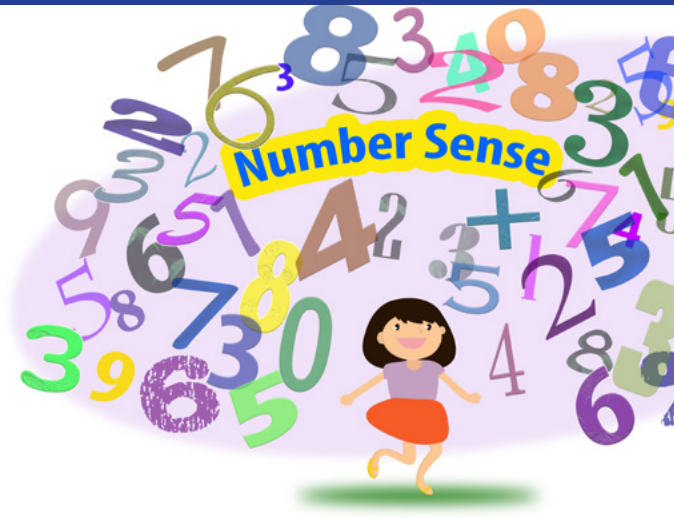
**Q:** Why did the student do multiplication problems on the floor?



**A:** The teacher told him not to use tables.

# 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.

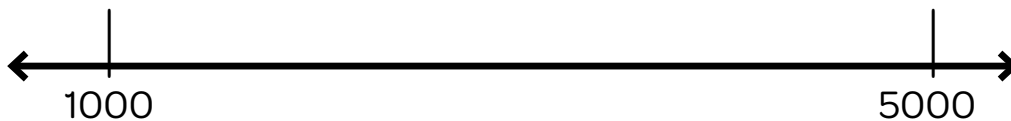


## Number Line

Number lines foster number sense. The number line helps develop greater flexibility in mental mathematics and construct meaning with number relationships. Use the number line to represent, compare, and order numbers to 10 000.

## Number Line Activity

Pick a number between 1000 and 5000 and mark it on the number line. Explain the answer. For example, 3000 would go in the middle of 1000 and 5000 because it is halfway between the two numbers.



Find groups of numbers to match the sum. Draw a loop around one group of numbers to match the sum.

Example:

Sum = 16	Sum = 15	Sum = 28	Sum = 32	Sum = 32
3	4	8	8	3
5	3	5	9	8
7	6	9	9	8
4	2	6	6	8
2	7	4	4	4
		7	4	4



## Graphing

Bar graphs reveal information at a glance.

Kit recorded how many hours she slept each night for one week.

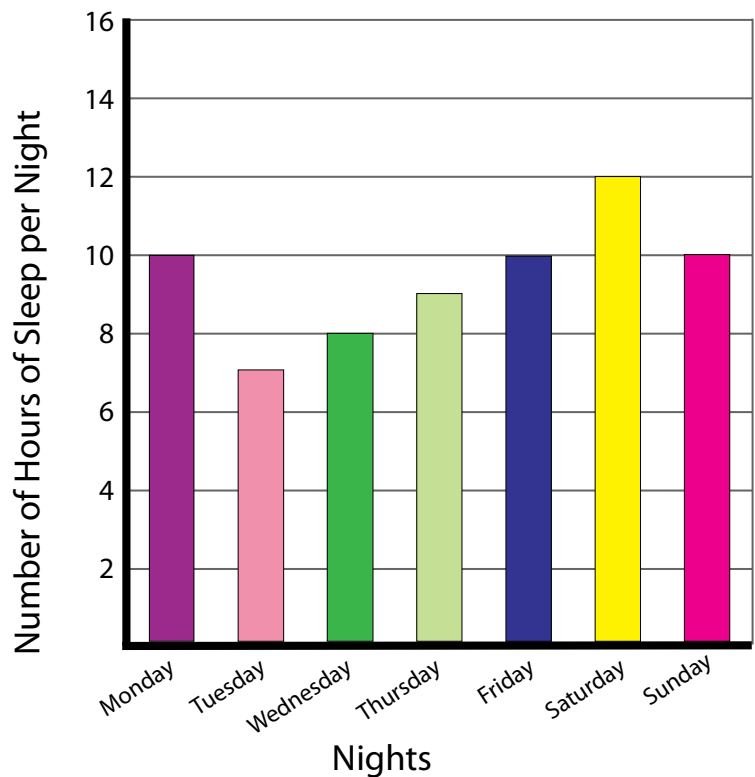
## Bar Graph

How Many Hours Kit Slept in One Week

- What does the bar graph show?  
How do you know?
- How many hours did Kit sleep on Monday?
- How many hours did Kit sleep on Thursday?
- How many total hours did Kit sleep on Monday, Tuesday, and Wednesday?
- How many total hours did Kit sleep during the week?



How Many Hours Kit Slept in One Week



Make up your own graph. Below are several possible ideas for your graph.

- How many animals have you seen in a week in your community, on television, or in books?
- How many windows/rooms/doors are in your home?
- How many letters are in your family members' first names?
- How many books, toys, or games do you have?

Remember to label your graph!