# Chapter 2

Add and Subtract Whole Numbers

Adding and Subtracting
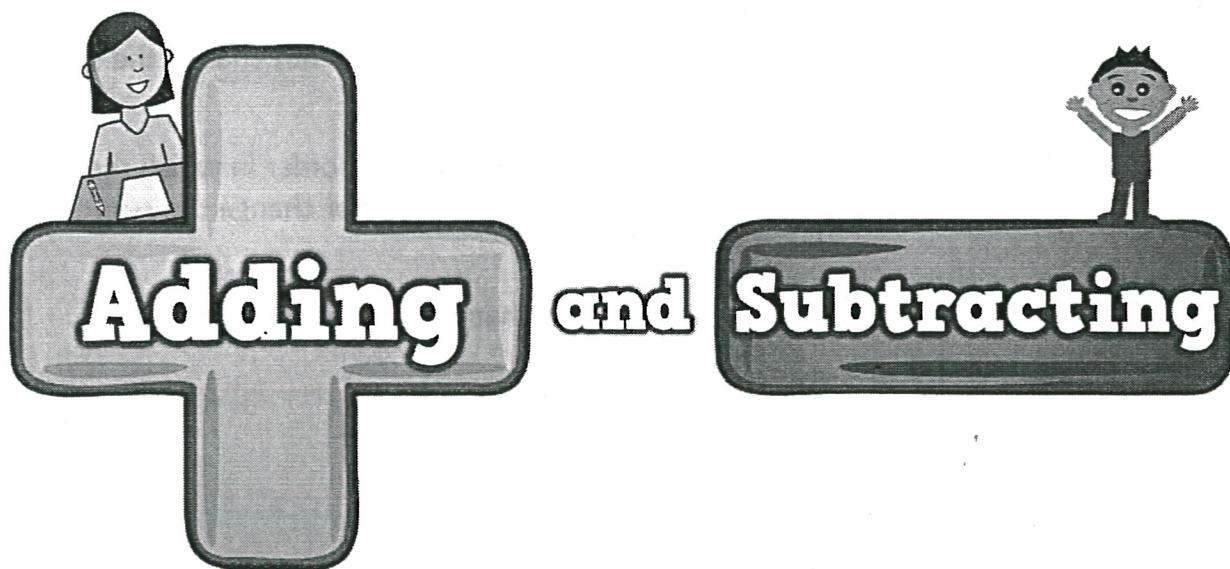
Study Buddy

Dear Family,

Today my class started the **Add and Subtract Whole Numbers** chapter. I will learning how to add and subtract whole numbers, estimate sums and differences, and solve multi-step word problems. Here are my vocabulary words that I will be using during my lessons.

Love, _____

p.s. Look on the back of this letter to find some quick practice tips that we can do together in the car, along with an activity and books for us to read at home.

Vocabulary

Associative Property of Addition: this property states that the way in which numbers are grouped when added does not change the sum
(5 + 8) + 2 = 5 + (8 + 2)

Commutative Property of Addition: this property states that the order in which the numbers are added does not change the sum
6 + 1 = 1 + 6

Identity Property of Addition: this property states that the sum of any number and zero is the number
8 + 0 = 8

difference: the answer to a subtraction problem
The difference of 8 − 2 is 6.

sum: the answer when you add numbers
The sum of 4 + 5 is 9.

estimate: a number close to an exact value; an estimate indicates *about* how much
47 + 22 is about 50 + 20 or 70

round: to change the value of a number to one that is easier to work with; to find the nearest value of a number based on a given place value
6,897 rounded to the nearest thousand is 7,000

MATH at HOME

At Home Activity

Materials: number cube, paper, pencil

- Draw 2 rows of 4 lines on a piece of paper.
- Roll the number cube and fill in one of the lines with the digit.
- Continue rolling until all the lines are filled.
- Round each number to the nearest thousand.
- If the greater number is in the top row, subtract the numbers.
- If the greater number is in the bottom row, add the numbers.
- Continue creating addition and subtraction problems with 4 and 5 digits.
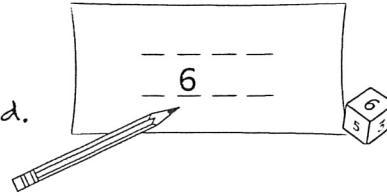
Travel Talk

Use objects around you to create addition and subtraction problems. For example: There are 3 red cars and 2 blue cars in the parking lot. How many cars are there altogether? There are 10 girls on the soccer team. There are 7 boys. How many more girls than boys are on the soccer team?

Books to Read

Subtraction Action
by Loreen Leedy

The Warlord's Beads
by Virginia Walton Pilegard

A Grain of Rice
by Helena Clare Pittman

Game Time

Roll It Again!

Ready

8 number cubes
Pencil and paper
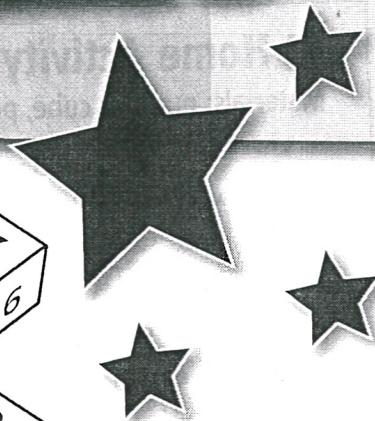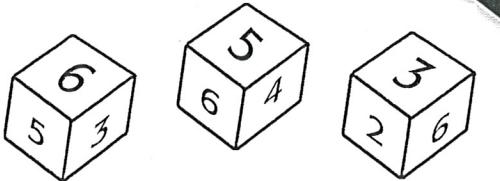
Set

Make a chart on the paper
with a column for each person.
Roll individual number cubes to
make numbers.
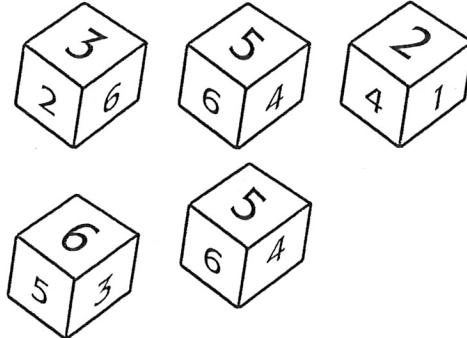
Go!

1 Have Player 1 toss 4 of the number cubes. Arrange the numbers
to make the greatest number possible.

2 Toss the other 4 number cubes in order to create a second number.

3 Have Player 1 arrange the number cubes into his or her second
number. Add the numbers. Follow steps 1–3 for each remaining player.

4 Award 3 points to the player with the greatest sum. The player
with the second greatest sum receives 1 point for the round.

5 Add each round's points together. The game ends when one or
more players reach a total score of 20 or more.

6 Play the game again, but this time use the number cubes to form
subtraction problems with the lowest difference.

Get a Clue...
Word Problems

Addition	Subtraction	Multiplication	Division
in all	fewer	product	quotient
sum	left	times	half
total	less than	twice	dividend
more than	take away	each	divided
plus	minus	factor	shared
altogether	difference	altogether	equally
increased by	remain	in all	same
add	decreased	multiply	grouped
	how many more	total	separated

Commutative Property

$$2 + 3 = 3 + 2$$

$$10 + 12 = 12 + 10$$

"Switcheroo" Property

$$16 + 11 = 11 + 16$$

$$9 + 4 = 4 + 9$$

No matter what order you add the numbers, the answer is the same.

Associative Property

$$7 + (9+2) = (7+9) + 2$$

$$1 + (2+3) = (1+2) + 3$$

"Friendship" Property

$$6 + (4+3) = (6+4) + 3$$

$$8 + (5+4) = (8+5) + 4$$

No matter how you group the numbers, the answer (sum) is the same.

Identity Property

$4 + 0 = 4$

$26 + 0 = 26$

"All About Me" Property

$13 + 0 = 13$

$9 + 0 = 9$

When you add 0 to any number the sum is the same.
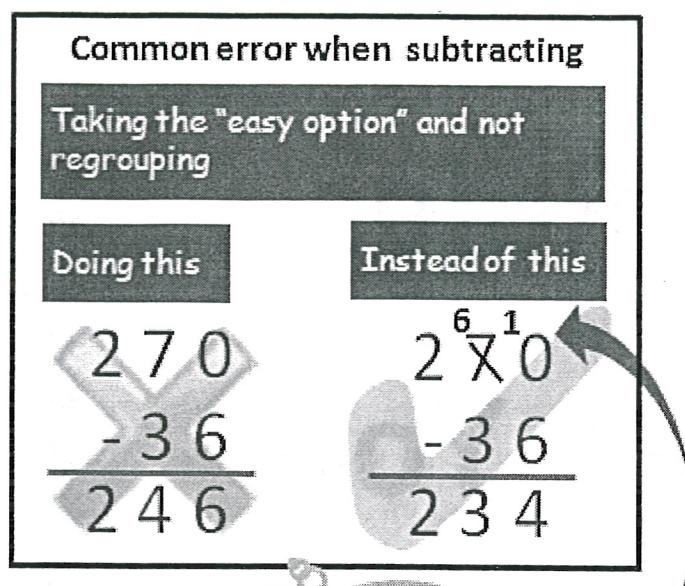
Rounding Rules

5 or greater: You add one more!

4 or less: You let it rest! (it stays the same)

Place Value

Millions Period			Thousands Period			Ones Period		
Hundred Millions	Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	One
1	3	2	4	3	7	8	2	5