

# HOME LINK



## SELF CHECK

I know how to...

- add within 1000 with and without regrouping.
- subtract within 1000 with and without regrouping.
- explain the method used to add or subtract.
- determine an error in a calculation and show the correct answer.



## GRADE 3 | CHAPTER 2: ADDITION AND SUBTRACTION WITHIN 1000

### WHAT WE'RE LEARNING TO:

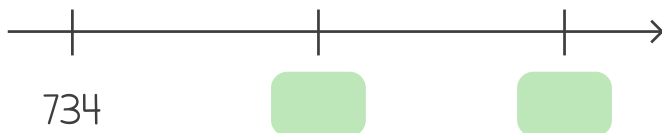
- add and subtract 3-digit numbers with and without regrouping
- use counting, break-apart and reasoning strategies to add and subtract

### MATHEMATICAL LANGUAGE

#### Addition and Subtraction Strategies

- **Counting Strategies** - A number line is used as a visual model to support addition. Eventually students visualize the number line and solve some problems mentally.

Add 734 and 20.

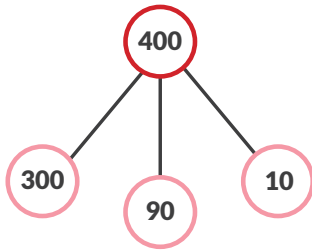


- **Break-Apart Strategies** - A number bond can be used to show how a student choose to break apart a number in a problem.

$$\begin{array}{r}
 8 + 236 \\
 \begin{array}{l} \diagdown \quad \diagup \\ \textcircled{4} \quad \textcircled{4} \end{array} \\
 = 4 + 240 \\
 = 244
 \end{array}$$

$$\begin{array}{r}
 8 + 236 \\
 \begin{array}{l} \diagdown \quad \diagup \\ \textcircled{6} \quad \textcircled{230} \end{array} \\
 = 14 + 230 \\
 = 4 + 240 \\
 = \text{ }
 \end{array}$$

- The standard column method is also a break-apart strategy. The student arranges the numbers by place value and records in a vertical method.



Hundreds	Tens	Ones
<del><sup>3</sup>4</del>	<del><sup>9</sup>0</del>	<del><sup>10</sup>0</del>
-	1	8
-	8	7
<span style="background-color: #c8e6c9; border-radius: 10px; width: 30px; height: 15px; display: inline-block;"></span>	<span style="background-color: #c8e6c9; border-radius: 10px; width: 30px; height: 15px; display: inline-block;"></span>	<span style="background-color: #c8e6c9; border-radius: 10px; width: 30px; height: 15px; display: inline-block;"></span>

- Reasoning Strategies** - Students manipulate the problem to make it easier to calculate, adjusting when need be.

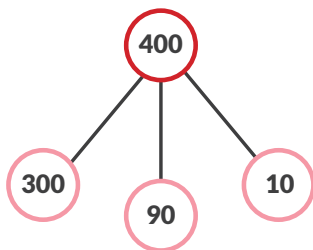
$$678 - 399 = \text{[Green Box]}$$



- Regrouping and Renaming**

Regrouping and Renaming in place of “borrowing”.

For example  $400 - 187$ , We rename the 400 into  $300 + 90 + 10$ .



Hundreds	Tens	Ones
<del><sup>3</sup>4</del>	<del><sup>9</sup>0</del>	<del><sup>10</sup>0</del>
-	1	8
-	8	7
<span style="background-color: #c8e6c9; border-radius: 10px; width: 30px; height: 15px; display: inline-block;"></span>	<span style="background-color: #c8e6c9; border-radius: 10px; width: 30px; height: 15px; display: inline-block;"></span>	<span style="background-color: #c8e6c9; border-radius: 10px; width: 30px; height: 15px; display: inline-block;"></span>

## DO-ANYTIME ACTIVITIES

### Activity 1: Problem Puzzler

- Player 1 creates an addition or subtraction problem and solves it.
- Player 1 presents the problem with the missing digits only revealing the sum or difference.
- Player 2 asks questions to determine the placement of each digit. "Is there a 2 in the ones digit?"
- Player 1 can answer yes or no.
- If Player 2 does not figure out the problem within 10 guesses, they exchange roles.

**Purpose:** Identify the digits in the mystery problem within 10 guesses.

**Materials:** Game Board

### Activity 2: Knock

- Flip two cards and create a target number.
- Deal four cards to each player.
- Place the deck face down turning the top card.
- Player 1 can take the top card or pick from the deck and discard a card.
- Players take turns, until one player is satisfied with the cards and feels they are close enough to the target number. This player will "knock" on the table and other players get a final turn before revealing their hands.
- The player with the value closest to the target number without going over wins a point.

**Purpose:** Obtain a hand of four cards that add or subtract to the target number.

**Materials:** Deck of cards. Face cards count as 10 and Ace counts as an 11

### Activity 3: Oh No! 99

- Each player receives 4 cards.
- Place the remaining deck face down.
- Player 1 places a card stating the value and collects a new card from the deck.
- Player 2 plays a card and states the new total.
- Play continues adding on to the accumulating score until a player cannot play a card without going over 99.
- The last player to play a card without going over is the winner.

**Purpose:** Mentally add and subtract numbers.

**Materials:**

Deck of cards

-Jack/Queen-add 10 points

-Ace- add 1 point

-King- add 0

-10-subtract 10 points

- Cards (2-9) add face value

# Problem Puzzler

$$\begin{array}{|c|c|c|} \hline & & \\ \hline & & \\ \hline + & & \\ \hline & & \\ \hline \end{array}$$

---

$$\begin{array}{|c|c|c|} \hline & & \\ \hline & & \\ \hline - & & \\ \hline & & \\ \hline \end{array}$$

---

$$\begin{array}{|c|c|c|} \hline & & \\ \hline & & \\ \hline + & & \\ \hline & & \\ \hline \end{array}$$

---

$$\begin{array}{|c|c|c|} \hline & & \\ \hline & & \\ \hline - & & \\ \hline & & \\ \hline \end{array}$$

---

$$\begin{array}{|c|c|} \hline & \\ \hline & \\ \hline + & \\ \hline & \\ \hline \end{array}$$

---

$$\begin{array}{|c|c|} \hline & \\ \hline & \\ \hline - & \\ \hline & \\ \hline \end{array}$$

---