

## Strategies for Learning Addition Combinations to 10 + 10:

Students will have Addition Fact Cards for practicing these combinations.



- **The Doubles**—from  $3 + 3$  to  $10 + 10$ . Students learn most of the doubles readily and can use the doubles they know to help with the harder doubles. “I know that  $6 + 6$  is 12, so  $7 + 7$  is 2 more, that’s 14.”
- **The Near Doubles**— $3 + 4$ ,  $4 + 5$ ,  $5 + 6$ ,  $6 + 7$ ,  $7 + 8$ ,  $8 + 9$ , and  $9 + 10$ . These are one more than the doubles. Students can use the doubles they know to learn these. “I know  $5 + 5$  is 10, so  $5 + 6$  is 1 more which is 11.”
- **Sums that Make 10**— $1 + 9$ ,  $2 + 8$ ,  $3 + 7$ ,  $4 + 6$ ,  $5 + 5$ ,  $6 + 4$ ,  $7 + 3$ ,  $8 + 2$ , and  $9 + 1$ . Students need many experiences building all the ways there are to make 10 with manipulatives until they recognize these combinations.
- **The 10+ Combinations** – from  $10 + 3$  to  $10 + 10$ . Because these combinations follow a structural pattern, students learn them readily once they have built them repeatedly with cubes or counted them out on the 100 chart.
- **The 9+ Combinations** – from  $9 + 3$  to  $9 + 10$ . Students can think of these combinations this way: To solve  $9 + 6$ , take one from the 6 and add it to the 9 to make 10. The 5 that is left is added to the 10,  $10 + 5 = 15$ . Or, if we used  $10 + 6$  the answer would be 16, but because we added 1 extra when we take it away we get the answer 15.

**Addition Fact Cards:** Students work on addition combinations they are trying to learn better. They write a clue or strategy for each one. If the student does not have the combinations for 10 at recall there are games that can be requested that will help this practice.

**Examples:**

$4 + 3 =$ $3 + 4 =$ <b>Clue:</b> I know $3 + 3 = 6$ , so $4 + 3$ is one more which is 7.	$5 + 3 =$ $3 + 5 =$ <b>Clue:</b> I know $5 + 5 = 10$ . Three is 2 less than 5 so $10 - 2 = 8$
$6 + 3 =$ $3 + 6 =$ <b>Clue:</b> I know $6 + 4 = 10$ . Three is one less than 4 so, $6 + 3 = 9$	$8 + 3 =$ $3 + 8 =$ <b>Clue:</b> I know that 8 needs 2 more to make 10 so I make the 3 into a 1, $10 + 1 = 11$
$7 + 3 =$ $3 + 7 =$ <b>Clue:</b> I know my 10 combinations	$9 + 3 =$ $3 + 9 =$ <b>Clue:</b> I take one from the 3 and make 9 into a 10. $10 + 2 = 12$

**Third Grade Computation Expectations:** Fluent with number combinations to  $10 + 10$ ; strategies for combinations to 100.