

Lesson 10 – Add 2-digits and 1-digit

NC Objective:

Add and subtract a two-digit number and ones

Resources needed:

Differentiated worksheets
Teaching slides

Vocabulary:

adding, crossing 10, partition, one digit, two digit, number bonds, number line, base 10

Before crossing the 10 with addition, children need to have a strong understanding of place value. The idea that ten ones are the same as one ten is essential here. They need to be able to partition two-digit numbers in order to add them. They need to understand the difference between one-digit and two-digit numbers and line them up in columns. Children need to be secure in number bonds in order for them to progress efficiently with the number line.

Key Questions:

Using Base 10, can you partition your numbers?

Can we exchange 10 ones for one ten? How many ones do we have?

How many tens do we have?

Can you draw the Base 10 and show the addition pictorially?

Arithmetic

Arithmetic		
Copy and solve the questions in your book.		
☆☆ One operation to help you.	☆☆	☆☆☆
$12 + 9 =$	$26 + 5 =$	$78 + \underline{\quad} = 84$
$18 + 5 =$	$64 + 9 =$	$24 + \underline{\quad} = 32$
$2 + 19 =$	$12 + 9 =$	$16 + \underline{\quad} = 24$
$6 + 16 =$	$7 + 28 =$	$38 + \underline{\quad} = 45$
$5 + 17 =$	$3 + 59 =$	$98 + \underline{\quad} = 103$
$13 + 8 =$	$9 + 23 =$	$62 + \underline{\quad} = 71$
$15 + 6 =$	$75 + 6 =$	$45 + \underline{\quad} = 52$
$4 + 18 =$	$45 + 7 =$	$78 + \underline{\quad} = 84$
$6 + 25 =$	$5 + 18 =$	$57 + \underline{\quad} = 83$
$28 + 7 =$	$67 + 4 =$	$78 + \underline{\quad} = 84$

★ Working Towards

Add 2-digits and 1-digit: Fluency & Precision 2

Solve the calculations by counting on from the larger number.

$17 + 8 = \underline{\quad}$

$13 + 9 = \underline{\quad}$

$25 + 6 = \underline{\quad}$

$26 + 8 = \underline{\quad}$

$22 + 9 = \underline{\quad}$

$14 + 7 = \underline{\quad}$

★★ Working Within

Add 2-digits and 1-digit: Fluency & Precision 2

Solve the calculations by counting on from the larger number.

$17 + 8 = \underline{\quad}$

$3 + 49 = \underline{\quad}$

$27 + 7 = \underline{\quad}$

$6 + 87 = \underline{\quad}$

$36 + 6 = \underline{\quad}$

$8 + 73 = \underline{\quad}$

★★★ Greater Depth

Add 2-digits and 1-digit: Fluency & Precision 2

Use the number line to solve the calculations. Show the use of your number bonds to solve efficiently.

$17 + 8 = \underline{\quad}$

$3 + 79 = \underline{\quad}$

$67 + 7 = \underline{\quad}$

$35 + 6 = \underline{\quad}$

$98 + 6 = \underline{\quad}$

$92 + 9 = \underline{\quad}$

Children on this sheet will start by using a completed number line. They then progress to a blank number line.

Children on this sheet will use a blank number line to solve the calculations.

Children on this sheet will create their own number lines to solve the calculations.

Reasoning & Problem Solving

Add 2-digits and 1-digit: Reasoning & Problem Solving 2

ALWAYS, SOMETIMES, NEVER?

Malachi says,

I am thinking of a two-digit number. If I add ones to it, I'll only need to change the ones digit.

Explain your answer.

Here are three digit cards.

Place the digit cards in the number sentence.

$\square + \square = ?$

What is the smallest total?

What is the largest total?

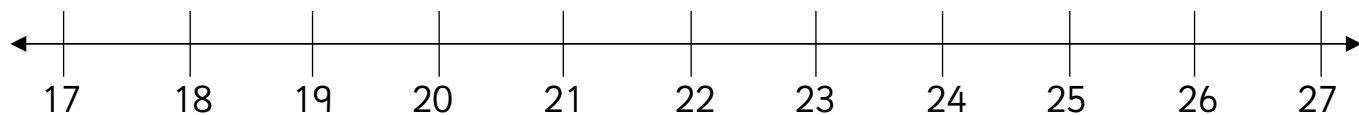
Children continue working on the addition of 2-digits and 1-digit.

They will identify whether a statement is always, sometimes or never true and place the numbers to make a number sentence correct.

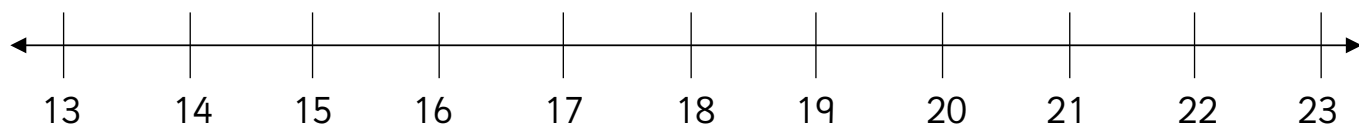


Solve the calculations by counting on from the larger number.

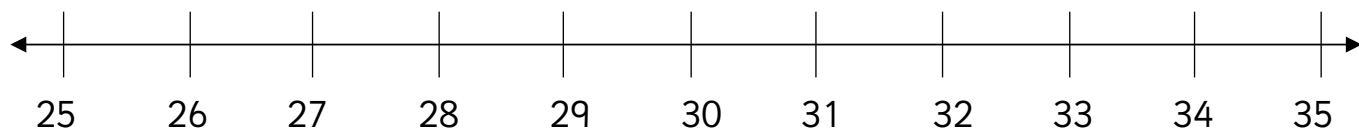
$$17 + 8 = \underline{\hspace{2cm}}$$



$$13 + 9 = \underline{\hspace{2cm}}$$



$$25 + 6 = \underline{\hspace{2cm}}$$



$$26 + 8 = \underline{\hspace{2cm}}$$



$$22 + 9 = \underline{\hspace{2cm}}$$



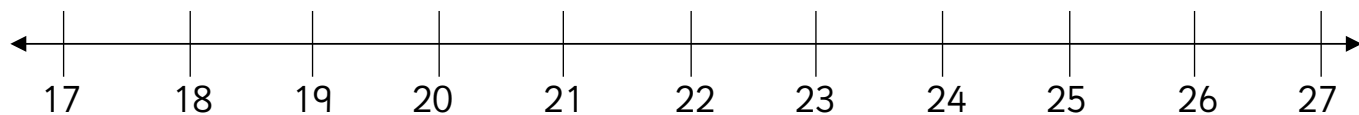
$$14 + 7 = \underline{\hspace{2cm}}$$



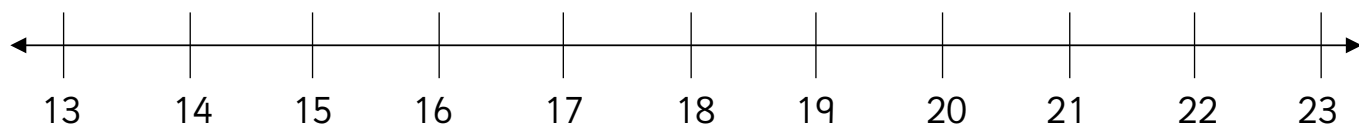


Solve the calculations by counting on from the larger number.

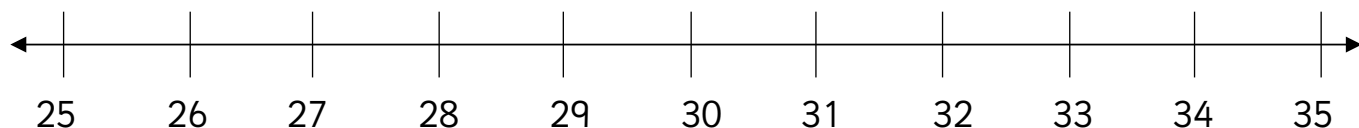
$$17 + 8 = \underline{25}$$



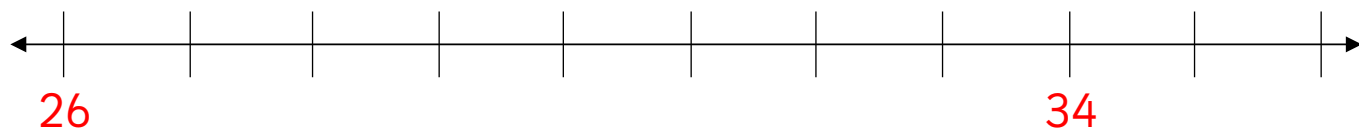
$$13 + 9 = \underline{22}$$



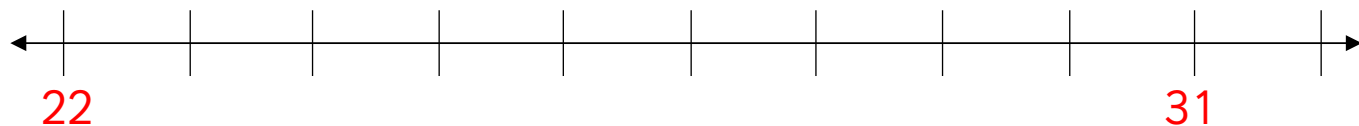
$$25 + 6 = \underline{31}$$



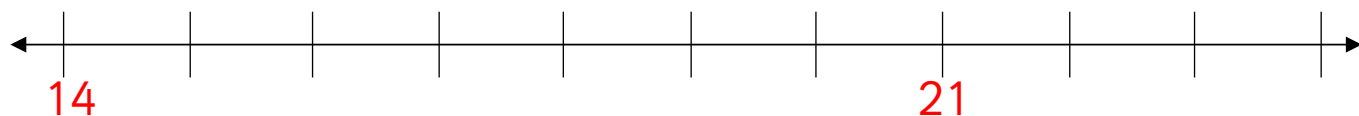
$$26 + 8 = \underline{34}$$



$$22 + 9 = \underline{31}$$



$$14 + 7 = \underline{21}$$





Solve the calculations by counting on from the larger number.

$$17 + 8 = \underline{\hspace{2cm}}$$



$$3 + 49 = \underline{\hspace{2cm}}$$



$$27 + 7 = \underline{\hspace{2cm}}$$



$$6 + 87 = \underline{\hspace{2cm}}$$



$$36 + 6 = \underline{\hspace{2cm}}$$



$$8 + 73 = \underline{\hspace{2cm}}$$





Solve the calculations by counting on from the larger number.

$$17 + 8 = \underline{25}$$



$$3 + 49 = \underline{52}$$



$$27 + 7 = \underline{34}$$



$$6 + 87 = \underline{93}$$



$$36 + 6 = \underline{42}$$



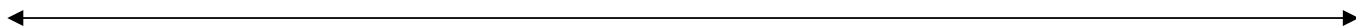
$$8 + 73 = \underline{81}$$



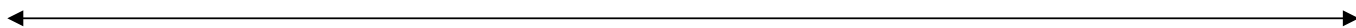


Use the number line to solve the calculations.
Show the use of your number bonds to solve it efficiently.

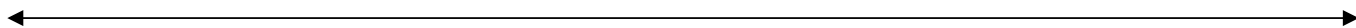
$$17 + 8 = \underline{\hspace{2cm}}$$



$$3 + 79 = \underline{\hspace{2cm}}$$



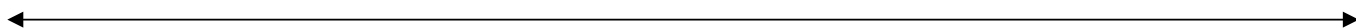
$$67 + 7 = \underline{\hspace{2cm}}$$



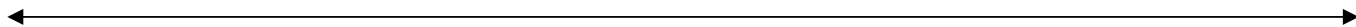
$$35 + 6 = \underline{\hspace{2cm}}$$



$$99 + 4 = \underline{\hspace{2cm}}$$



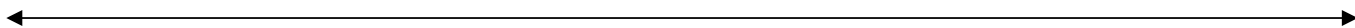
$$92 + 9 = \underline{\hspace{2cm}}$$



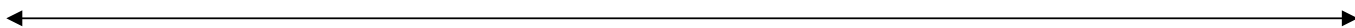


Use the number line to solve the calculations.
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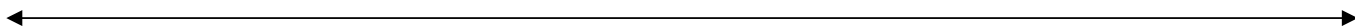
$$17 + 8 = \underline{25}$$



$$3 + 79 = \underline{82}$$



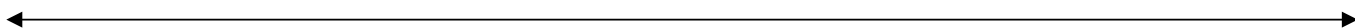
$$67 + 7 = \underline{74}$$



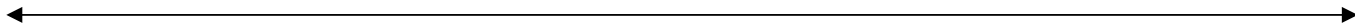
$$35 + 6 = \underline{41}$$



$$99 + 4 = \underline{103}$$









$$92 + 9 = \underline{101}$$



Arithmetic

Copy and solve the questions in your book.

 Use equipment to help you.	 	  
$12 + 9 =$	$26 + 5 =$	$78 + \underline{\quad\quad} = 84$
$18 + 5 =$	$64 + 9 =$	$24 + \underline{\quad\quad} = 32$
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$28 + 7 =$	$67 + 4 =$	$78 + \underline{\quad\quad} = 84$

Arithmetic

Copy and solve the questions in your book.

★ Use equipment to help you.	★★	★★★
$12 + 9 = 21$	$26 + 5 = 31$	$78 + \underline{6} = 84$
$18 + 5 = 23$	$64 + 9 = 73$	$24 + \underline{8} = 32$
$2 + 19 = 21$	$12 + 9 = 21$	$16 + \underline{8} = 24$
$6 + 16 = 22$	$7 + 28 = 35$	$38 + \underline{7} = 45$
$5 + 17 = 22$	$3 + 59 = 62$	$98 + \underline{5} = 103$
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$4 + 18 = 22$	$45 + 7 = 52$	$78 + \underline{6} = 84$
$6 + 25 = 31$	$5 + 18 = 23$	$57 + \underline{6} = 83$
$28 + 7 = 35$	$67 + 4 = 71$	$78 + \underline{6} = 84$

ALWAYS, SOMETIMES, NEVER?

Malachi says,



I am thinking of a two-digit number.
If I add ones to it, I'll only need to change the ones digit.

Explain your answer.

Here are three digit cards.

5

6

7

Place the digit cards in the number sentence.

$$\square \square + \square = \square ?$$

What is the smallest total?

What is the largest total?

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Malachi says,



I am thinking of a two-digit number.
If I add ones to it, I'll only need to change the ones digit.

Explain your answer.

Sometimes, because if your ones total 10 or more than 10, you will have to exchange them which will change the tens digit.

Here are three digit cards.

5

6

7

Place the digit cards in the number sentence.

$$\square \square + \square = \square ?$$

What is the smallest total?

$$56 + 7 = 63$$

What is the largest total?

$$57 + 6 = 63$$

$$65 + 7 = 72$$

$$67 + 5 = 72$$

$$76 + 5 = 81$$

$$75 + 6 = 81$$

63 is the smallest,
81 is the greatest.

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$$57 + 6 = 63$$

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$$67 + 5 = 72$$

$$76 + 5 = 81$$

$$75 + 6 = 81$$

63 is the smallest,
81 is the greatest.