

Lesson 9 – Add and Subtract 10s

NC Objective:

Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and tens

Resources needed:

Differentiated worksheets
Teaching slides
Base 10

Vocabulary:

Add, subtract, digit, tens, ones, 10 more, 10 less, pattern, columns

Children should make use of place value to add and subtract 10s from a given number within 100. The key teaching point again is the importance of the tens digit within the given numbers, and children should be encouraged to see the relationship. For example, $34 + 20 = 54$

Key Questions:

What column changes?

What column stays the same?

What's the same and what's different about the number sentences?

Arithmetic

Arithmetic

Copy and solve the questions in your book.

★	★★	★★★
$20 + 20 =$	$33 + 40 =$	$____ + 6 = 76$
$50 - 40 =$	$67 - 20 =$	$____ - 50 = 29$
$20 + 30 =$	$11 + 60 =$	$76 + ____ = 96$
$30 + 60 =$	$70 + 8 =$	$38 + ____ = 88$
$50 + 20 =$	$88 - 50 =$	$____ - 20 = 54$
$90 - 80 =$	$40 + 2 =$	$____ - 70 = 19$
$30 + 50 =$	$73 - 30 =$	$____ + 67 = 87$
$70 - 40 =$	$46 + 20 =$	$____ + 30 = 47$
$40 - 40 =$	$50 + 18 =$	$43 + ____ = 83$
$80 - 70 =$	$61 - 40 =$	$____ + 40 = 77$

★ Working Towards

Use the place value chart and concrete materials to complete the calculation.

Tens	Ones
40	0
+ 20	0
60	0
+ 30	0
90	0
- 70	0
20	0
- 40	0
80	0
- 50	0

Cross out the tens to show the answer to the subtraction calculation.

Tens	Ones
30	0
- 40	0
0	0

★★ Working Within

Use the place value chart and concrete materials to complete the calculation.

Tens	Ones
25	0
+ 40	0
65	0
+ 20	0
85	0
- 50	0
35	0
- 20	0
15	0

Cross out the tens to show the answer to the subtraction calculation.

Tens	Ones
45	0
- 40	0
5	0

★★★ Greater Depth

Use the place value chart and concrete materials to work out the missing number.

Tens	Ones
40	0
+ 50	0
90	0

Tens	Ones
20	0
- 70	0
0	0

Tens	Ones
40	0
- 40	0
0	0

Tens	Ones
80	0
- 10	0
70	0

Children on this sheet may need to consolidate working with 10s. They focus on adding and subtracting 2 numbers, both of which are multiples of 10.

Children on this sheet will add and subtract tens to a range of 2-digit numbers.

Children on this sheet will find missing numbers in the calculations.

Reasoning & Problem Solving

Here are class 2's pencils.

They are given a new package of ten crayons each day for a week.

How many crayons do they have at the end of the week?

Malachi has three spare red beads.

What number could he make? Explain your answer.

What is the value of each row and column?

Children continue working on adding and subtracting 10s by answering reasoning tasks.



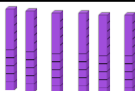
Use the place value chart and concrete materials to complete the calculation.

Tens	Ones
	
	

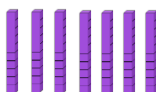
$$\begin{array}{r} 40 \\ + 20 \\ \hline \\ \hline \end{array}$$

Tens	Ones
	
	

$$\begin{array}{r} 50 \\ + 30 \\ \hline \\ \hline \end{array}$$

Tens	Ones
	
	

$$\begin{array}{r} 60 \\ + 30 \\ \hline \\ \hline \end{array}$$

Tens	Ones
	
	

$$\begin{array}{r} 10 \\ + 70 \\ \hline \\ \hline \end{array}$$

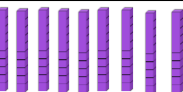
Cross out the tens to show the answer to the subtraction calculation.

Tens	Ones
	

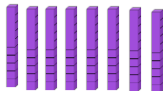
$$\begin{array}{r} 50 \\ - 40 \\ \hline \\ \hline \end{array}$$

Tens	Ones
	

$$\begin{array}{r} 70 \\ - 20 \\ \hline \\ \hline \end{array}$$

Tens	Ones
	

$$\begin{array}{r} 90 \\ - 60 \\ \hline \\ \hline \end{array}$$

Tens	Ones
	

$$\begin{array}{r} 80 \\ - 50 \\ \hline \\ \hline \end{array}$$



Use the place value chart and concrete materials to complete the calculation.

Tens	Ones
6	0

$$\begin{array}{r} 40 \\ + 20 \\ \hline 60 \end{array}$$

Tens	Ones
8	0

$$\begin{array}{r} 50 \\ + 30 \\ \hline 80 \end{array}$$

Tens	Ones
9	0

$$\begin{array}{r} 60 \\ + 30 \\ \hline 90 \end{array}$$

Tens	Ones
8	0

$$\begin{array}{r} 10 \\ + 70 \\ \hline 80 \end{array}$$

Cross out the tens to show the answer to the subtraction calculation.

Tens	Ones

$$\begin{array}{r} 50 \\ - 40 \\ \hline 10 \end{array}$$

Tens	Ones

$$\begin{array}{r} 70 \\ - 20 \\ \hline 50 \end{array}$$

Tens	Ones

$$\begin{array}{r} 90 \\ - 60 \\ \hline 30 \end{array}$$

Tens	Ones

$$\begin{array}{r} 80 \\ - 50 \\ \hline 30 \end{array}$$



Use the place value chart and concrete materials to complete the calculation.

Tens	Ones

$$\begin{array}{r} 25 \\ + 40 \\ \hline \\ \hline \end{array}$$

Tens	Ones

$$\begin{array}{r} 52 \\ + 20 \\ \hline \\ \hline \end{array}$$

Tens	Ones

$$\begin{array}{r} 69 \\ + 20 \\ \hline \\ \hline \end{array}$$

Tens	Ones

$$\begin{array}{r} 50 \\ + 17 \\ \hline \\ \hline \end{array}$$

Cross out the tens to show the answer to the subtraction calculation.

Tens	Ones

$$\begin{array}{r} 43 \\ - 40 \\ \hline \\ \hline \end{array}$$

Tens	Ones

$$\begin{array}{r} 34 \\ - 20 \\ \hline \\ \hline \end{array}$$

Tens	Ones

$$\begin{array}{r} 87 \\ - 60 \\ \hline \\ \hline \end{array}$$

Tens	Ones

$$\begin{array}{r} 59 \\ - 50 \\ \hline \\ \hline \end{array}$$



Use the place value chart and concrete materials to complete the calculation.

Tens	Ones
6	5

$$\begin{array}{r} 25 \\ + 40 \\ \hline 65 \end{array}$$

Tens	Ones
7	2

$$\begin{array}{r} 52 \\ + 20 \\ \hline 72 \end{array}$$

Tens	Ones
8	9

$$\begin{array}{r} 69 \\ + 20 \\ \hline 89 \end{array}$$

Tens	Ones
6	7

$$\begin{array}{r} 50 \\ + 17 \\ \hline 67 \end{array}$$

Cross out the tens to show the answer to the subtraction calculation.

Tens	Ones

$$\begin{array}{r} 43 \\ - 40 \\ \hline 3 \end{array}$$

Tens	Ones

$$\begin{array}{r} 34 \\ - 20 \\ \hline 14 \end{array}$$

Tens	Ones

$$\begin{array}{r} 87 \\ - 60 \\ \hline 27 \end{array}$$

Tens	Ones

$$\begin{array}{r} 59 \\ - 50 \\ \hline 9 \end{array}$$



Use the place value chart and concrete materials to work out the missing number.

Tens	Ones
	

$$\begin{array}{r} \boxed{} \\ + 40 \\ \hline 59 \end{array}$$

Tens	Ones
	

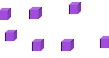
$$\begin{array}{r} 38 \\ + \boxed{} \\ \hline 98 \end{array}$$

Tens	Ones
	

$$\begin{array}{r} 20 \\ + \boxed{} \\ \hline 72 \end{array}$$

Tens	Ones
	

$$\begin{array}{r} \boxed{} \\ + 13 \\ \hline 43 \end{array}$$

Tens	Ones
	

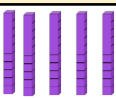
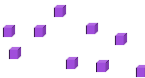
$$\begin{array}{r} \boxed{} \\ - 40 \\ \hline 7 \end{array}$$

Tens	Ones
	

$$\begin{array}{r} 99 \\ - \boxed{} \\ \hline 29 \end{array}$$

Tens	Ones
	

$$\begin{array}{r} 88 \\ - \boxed{} \\ \hline 18 \end{array}$$

Tens	Ones
	

$$\begin{array}{r} \boxed{} \\ - 30 \\ \hline 29 \end{array}$$



Use the place value chart and concrete materials to work out the missing number.

Tens	Ones
	
	
5	9

$$\begin{array}{r} 19 \\ + 40 \\ \hline 59 \end{array}$$

Tens	Ones
	
	
9	8

$$\begin{array}{r} 38 \\ + 60 \\ \hline 98 \end{array}$$

Tens	Ones
	
	
7	2

$$\begin{array}{r} 20 \\ + 52 \\ \hline 72 \end{array}$$

Tens	Ones
	
	
4	3

$$\begin{array}{r} 30 \\ + 13 \\ \hline 43 \end{array}$$

Tens	Ones
	

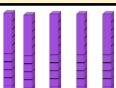
$$\begin{array}{r} 47 \\ - 40 \\ \hline 7 \end{array}$$

Tens	Ones
	

$$\begin{array}{r} 99 \\ - 70 \\ \hline 29 \end{array}$$

Tens	Ones
	

$$\begin{array}{r} 88 \\ - 70 \\ \hline 18 \end{array}$$

Tens	Ones
	

$$\begin{array}{r} 59 \\ - 30 \\ \hline 29 \end{array}$$

Arithmetic

Copy and solve the questions in your book.

 Use equipment to help you.	 	  
$20 + 20 =$	$33 + 40 =$	$\underline{\hspace{2cm}} + 6 = 76$
$50 - 40 =$	$67 - 20 =$	$\underline{\hspace{2cm}} - 50 = 29$
$20 + 30 =$	$11 + 60 =$	$76 + \underline{\hspace{2cm}} = 96$
$30 + 60 =$	$70 + 8 =$	$38 + \underline{\hspace{2cm}} = 88$
$50 + 20 =$	$88 - 50 =$	$\underline{\hspace{2cm}} - 20 = 54$
$90 - 80 =$	$90 + 2 =$	$\underline{\hspace{2cm}} - 70 = 19$
$30 + 50 =$	$73 - 30 =$	$\underline{\hspace{2cm}} + 67 = 87$
$70 - 40 =$	$46 + 20 =$	$\underline{\hspace{2cm}} + 30 = 47$
$40 - 40 =$	$50 + 18 =$	$43 + \underline{\hspace{2cm}} = 83$
$80 - 70 =$	$61 - 40 =$	$\underline{\hspace{2cm}} + 40 = 77$

Arithmetic

Copy and solve the questions in your book.

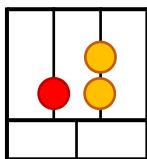
★ Use equipment to help you.	★★	★★★
$20 + 20 = 40$	$33 + 40 = 73$	$\underline{70} + 6 = 76$
$50 - 40 = 10$	$67 - 20 = 47$	$\underline{79} - 50 = 29$
$20 + 30 = 50$	$11 + 60 = 71$	$76 + \underline{20} = 96$
$30 + 60 = 90$	$70 + 8 = 78$	$38 + \underline{50} = 88$
$50 + 20 = 70$	$88 - 50 = 38$	$\underline{74} - 20 = 54$
$90 - 80 = 10$	$90 + 2 = 92$	$\underline{89} - 70 = 19$
$30 + 50 = 80$	$73 - 30 = 43$	$\underline{20} + 67 = 87$
$70 - 40 = 30$	$46 + 20 = 66$	$\underline{17} + 30 = 47$
$40 - 40 = 0$	$50 + 18 = 68$	$43 + \underline{40} = 83$
$80 - 70 = 10$	$61 - 40 = 21$	$\underline{37} + 40 = 77$

Here are class 2's pencils.



They are given a new pack of ten pencils each day for a week.

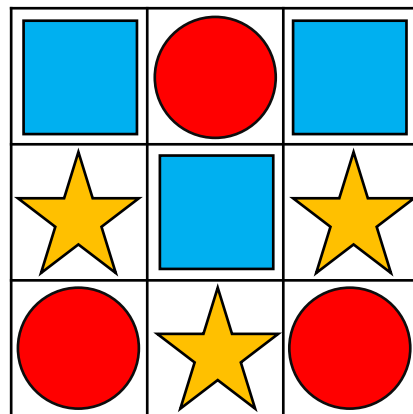
How many pencils do they have at the end of the week?



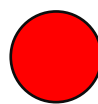
Malachi has three spare red beads.

What number could he make?
Explain your answer.

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= 20



= 10



= 40

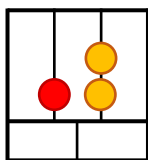
What is the value of each row and column?

Here are class 2's pencils.



They are given a new pack of ten pencils each day for a week.

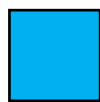
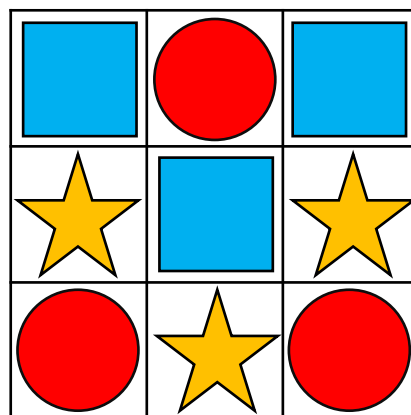
How many pencils do they have at the end of the week?



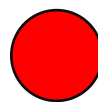
Malachi has three spare red beads.

What number could he make?
Explain your answer.

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= 20



= 10



= 40

What is the value of each row and column?

Here are class 2's pencils.

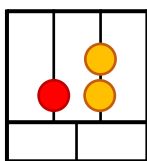


They are given a new pack of ten pencils each day for a week.

How many pencils do they have at the end of the week?

Discussion could be had about whether it's a full week or a school week.

Answers would be 95 and 75, respectively.



Malachi has three spare red beads.

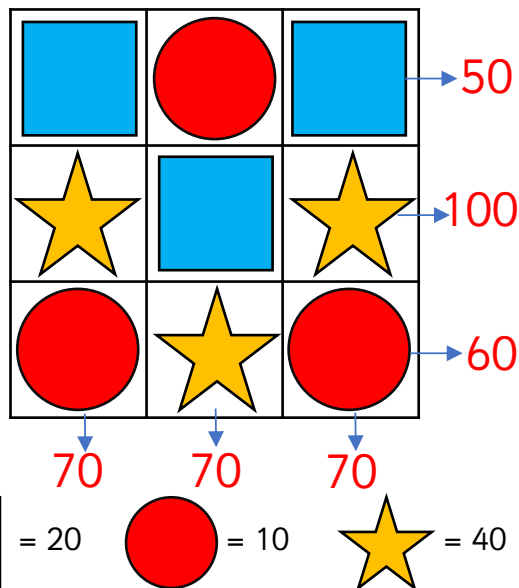
What number could he make?

Explain your answer.

22, 32, 42

He doesn't have to use all of the beads.

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What is the value of each row and column?

Here are class 2's pencils.

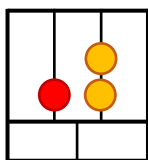


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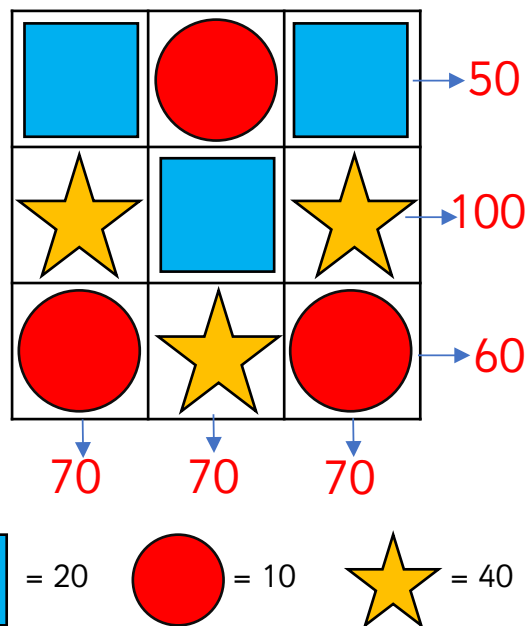
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What number could he make?

Explain your answer.

22, 32, 42

He doesn't have to use all of the beads.



What is the value of each row and column?

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