

18.1.21

Addition

LO: To add 2 two digit numbers using column addition

## Learning Hook

Revise number bonds to 20

<https://www.youtube.com/watch?v=h6udqW6VhWg>



2 digit and 2 digit  
addition

Who can remember how we did  
2 digit plus 2 digit addition  
before Christmas?

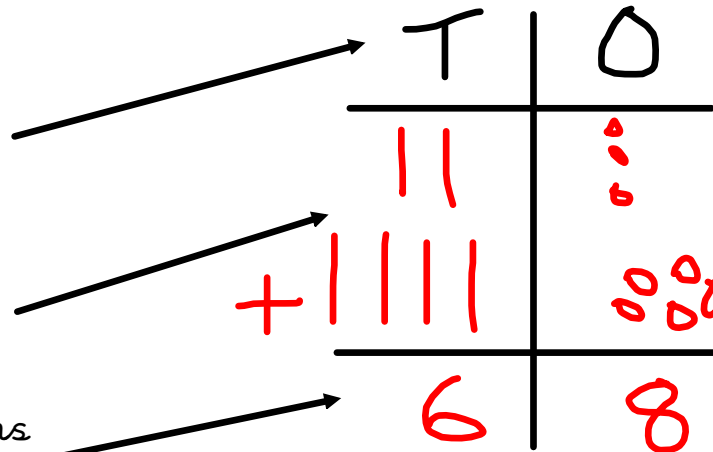
First we draw a tens frame

Then we draw our tens and  
ones (base ten) in the correct  
column

Finally we add them up the tens  
and ones (base ten) to find the  
total.

Look!

$$23 + 45 = \boxed{68}$$



Now let's carry out some more 2 digit plus 2 digit additions using the grown up 'column addition' method.

This will speed us up.

Now, instead of drawing the tens and ones, we can simply write them. Easy!

Just remember to keep the tens in the tens column and the ones in the ones column!

Add the ones, then the tens and write your answer below.

Look!

$$25 + 34 = \boxed{59}$$

	T	O
	2	5
+	3	4
	5	9

18.1.21- complete Task 1 and Task 3 on paper/ in a book

# Task 1

For each of the following additions, **draw** your base ten in a tens and ones frame.

$$37 + 12 =$$

$$55 + 14 =$$

$$22 + 74 =$$

$$51 + 18 =$$

$$66 + 22 =$$

# Task 2

For each of the following additions, **write** the numbers in the tens and ones columns within this tens and ones frame.

Name \_\_\_\_\_ Date \_\_\_\_\_

**DOUBLE DIGIT ADDITION**

Find the sum.

1.	<table border="1"> <tr> <th>tens</th> <th>ones</th> </tr> <tr> <td>6</td> <td>4</td> </tr> <tr> <td>1</td> <td>0</td> </tr> <tr> <td></td> <td></td> </tr> </table>	tens	ones	6	4	1	0			2.	<table border="1"> <tr> <th>tens</th> <th>ones</th> </tr> <tr> <td>4</td> <td>3</td> </tr> <tr> <td>4</td> <td>4</td> </tr> <tr> <td></td> <td></td> </tr> </table>	tens	ones	4	3	4	4			3.	<table border="1"> <tr> <th>tens</th> <th>ones</th> </tr> <tr> <td>2</td> <td>8</td> </tr> <tr> <td>5</td> <td>1</td> </tr> <tr> <td></td> <td></td> </tr> </table>	tens	ones	2	8	5	1		
tens	ones																												
6	4																												
1	0																												
tens	ones																												
4	3																												
4	4																												
tens	ones																												
2	8																												
5	1																												
4.	<table border="1"> <tr> <th>tens</th> <th>ones</th> </tr> <tr> <td>5</td> <td>2</td> </tr> <tr> <td>3</td> <td>2</td> </tr> <tr> <td></td> <td></td> </tr> </table>	tens	ones	5	2	3	2			5.	<table border="1"> <tr> <th>tens</th> <th>ones</th> </tr> <tr> <td>8</td> <td>0</td> </tr> <tr> <td>1</td> <td>9</td> </tr> <tr> <td></td> <td></td> </tr> </table>	tens	ones	8	0	1	9			6.	<table border="1"> <tr> <th>tens</th> <th>ones</th> </tr> <tr> <td>6</td> <td>2</td> </tr> <tr> <td>2</td> <td>7</td> </tr> <tr> <td></td> <td></td> </tr> </table>	tens	ones	6	2	2	7		
tens	ones																												
5	2																												
3	2																												
tens	ones																												
8	0																												
1	9																												
tens	ones																												
6	2																												
2	7																												
7.	<table border="1"> <tr> <th>tens</th> <th>ones</th> </tr> <tr> <td>3</td> <td>0</td> </tr> <tr> <td>5</td> <td>0</td> </tr> <tr> <td></td> <td></td> </tr> </table>	tens	ones	3	0	5	0			8.	<table border="1"> <tr> <th>tens</th> <th>ones</th> </tr> <tr> <td>5</td> <td>7</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td></td> <td></td> </tr> </table>	tens	ones	5	7	1	2			9.	<table border="1"> <tr> <th>tens</th> <th>ones</th> </tr> <tr> <td>7</td> <td>5</td> </tr> <tr> <td>1</td> <td>3</td> </tr> <tr> <td></td> <td></td> </tr> </table>	tens	ones	7	5	1	3		
tens	ones																												
3	0																												
5	0																												
tens	ones																												
5	7																												
1	2																												
tens	ones																												
7	5																												
1	3																												
10.	<table border="1"> <tr> <th>tens</th> <th>ones</th> </tr> <tr> <td>2</td> <td>4</td> </tr> <tr> <td>2</td> <td>4</td> </tr> <tr> <td></td> <td></td> </tr> </table>	tens	ones	2	4	2	4			11.	<table border="1"> <tr> <th>tens</th> <th>ones</th> </tr> <tr> <td>1</td> <td>9</td> </tr> <tr> <td>7</td> <td>0</td> </tr> <tr> <td></td> <td></td> </tr> </table>	tens	ones	1	9	7	0			12.	<table border="1"> <tr> <th>tens</th> <th>ones</th> </tr> <tr> <td>6</td> <td>4</td> </tr> <tr> <td>3</td> <td>3</td> </tr> <tr> <td></td> <td></td> </tr> </table>	tens	ones	6	4	3	3		
tens	ones																												
2	4																												
2	4																												
tens	ones																												
1	9																												
7	0																												
tens	ones																												
6	4																												
3	3																												

# Task 3

For each of the word problems, draw a tens frame and **write** the numbers in the tens and ones columns.

$$22 + 16 =$$

$$35 + 44 =$$

$$28 + 11 =$$

$$13 + 74 =$$

$$52 + 23 =$$

19.1.21

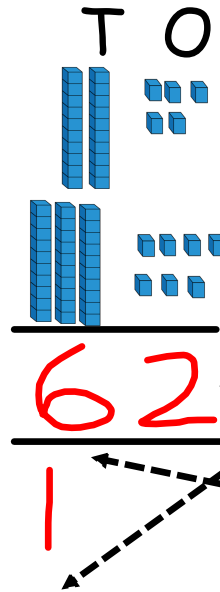
Addition

LO: To add 2 two digit numbers that cross ten practically.

Let's practice our column addition on wipe boards or paper...

write T and O. Then place your tens and ones underneath.

$$25 + 37 = \square$$



1. What do you notice when we add up the ones?

2. That's right... there are 12 and that's more than 9 so we need to carry the ten over to underneath the tens column and write the left over ones in the ones column- 2!

3. Now we have to add up all the tens including the one you have carried over. That's 6!

4. Write 6 in the tens column.  
So  $25 + 37 = 62$

*Now have a go at the following*

*2 digit + 2 digit calculations  
that cross ten. Remember to  
carry across the ten and then  
add it up at the end.*

$$26+56$$

$$38+47$$

$$65+27$$

$$49+32$$

$$74+17$$



20.1.21










Addition

LO: To add two 2 digit numbers that cross 10.

Learning Hook: revise addition without crossing the ten.

*Crack the code*

S	F	J	P	K	E	L	R	O
67	22	39	24	11	65	19	89	100
Q	U	P	G	A	T	Z	X	T
87	33	66	10	45	74	61	52	99

T O 4 5 +2 2 ____ ____	T O 1 1 +2 2 ____ ____	T O 1 2 +1 2 ____ ____	T O 5 3 +1 2 ____ ____	T O 4 7 +4 2 ____ ____	T O 1 4 +5 3 ____ ____	T O 4 5 +5 4 ____ ____	T O 2 2 +2 3 ____ ____	T O 3 3 +5 6 ____ ____
								

Today we are going to do the same as yesterday but draw it in our books. Let's try one together.

$$\begin{array}{r}
 \textcolor{red}{T} \quad \textcolor{red}{O} \\
 \begin{array}{cc}
 ||| & \begin{array}{c} \blacksquare \blacksquare \blacksquare \blacksquare \\ \blacksquare \blacksquare \blacksquare \blacksquare \end{array} \\
 + \begin{array}{cc}
 || & \begin{array}{c} \blacksquare \blacksquare \blacksquare \\ \blacksquare \blacksquare \end{array}
 \end{array} \\
 \hline
 \\
 \hline
 \end{array}$$

Task 1

T	O	T	O	T	O	T	O	T	O
	■		■		■		■		■
+		+		+		+		+	
	■		■		■		■		■
_____		_____		_____		_____		_____	
_____		_____		_____		_____		_____	

Task 2

+	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■ ■ ■
■ ■ ■ ■ ■ ■ ■ ■ ■ ■		
■ ■ ■ ■ ■ ■ ■ ■ ■ ■		

+	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■ ■ ■
■ ■ ■ ■ ■ ■ ■ ■ ■ ■		
■ ■ ■ ■ ■ ■ ■ ■ ■ ■		

21.1.21Addition

LO: To add 2 two digit numbers that cross a ten.

**Hook**  
*This is Sophie's work. Is she correct?*

$$\begin{array}{r} \text{T O} \\ 28 \\ + 36 \\ \hline \underline{54} \end{array}$$

Practice on w/boards.

$$\begin{array}{r} \text{T O} \\ + 45 \\ \underline{37} \\ \hline \end{array}$$









$$\begin{array}{r} \text{T O} \\ + 26 \\ \underline{27} \\ \hline \end{array}$$

$$\begin{array}{r} \text{T O} \\ + 48 \\ \underline{24} \\ \hline \end{array}$$

<u>Task 1</u>					
TO + 34 27	TO + 32 19	TO + 31 29	TO + 43 28	TO + 57 26	TO + 49 32
_____	_____	_____	_____	_____	_____

Choose two items and write it as column addition to find out how much they cost in total.



Choose two items and add them up using column addition.								
								
doughnut 17	Sprinkle doughnuts 25	Choc doughnuts 38	Strawberry doughnut 58					
								
Pirate doughnut 66	Lemon doughnut 19	Cream doughnut 27	Choc Orange doughnut 76					



### Plenary

Tom has £45 his Grandma gives him £29.

How much money does Tom have now?

22.1.21

Addition

LO: To solve 2 digit addition word problems by crossing the ten.

In today's lesson, we will be solving word problems by using column addition like we have been doing all week.

Step 1. Read the problem

Step 2. Underline the numbers that will help you to answer the question.

Step 3. Think about what it is asking you to find.

Step 4. Use column addition to solve the problem.

If you had 12 glass bottles and 13 plastic bottles, how many bottles are there altogether?



It is asking us to add the two numbers up.  
So we need to do a column addition:

**Look!**

Step 1. Read the problem

Step 2. Underline the numbers that will help you to answer the question.

Step 3. Think about what it is asking you to find.

Step 4. Use column addition to solve the problem.

$$\begin{array}{r|l}
 T & O \\
 \hline
 & 12 \\
 + & 13 \\
 \hline
 2 & 5
 \end{array}$$

So there are 25 bottles altogether. Did you notice we didn't have to carry over then ten? Why not?

If you had 34 jelly beans and 28 lollipops, how many would you have in total?



It is asking us to add the two numbers up again. So we need to do a column addition.

This time look closely at the numbers in the ones column.

Step 1. Read the problem

Step 2. Underline the numbers that will help you to answer the question.

Step 3. Think about what it is asking you to find.

Step 4. Use column addition to solve the problem.

	T	O
	3	4
+	2	8
	6	2

This time the ones add up to more than 9. They add up to 12 so we need to move the ten to under the tens column and write how many ones (2).




Then we add all the tens including the ones we have moved across. There are 6 tens. The answer is 62.

*Now it's your turn!*

*Take a word problem, stick it in your book and solve it by using column addition with numbers. See how many you can do.*

*Take note! You won't always have to carry over the ten- only if the ones add up to more than 9.*

*Use a ruler and draw your tens frame carefully. Line up the tens and ones carefully.*

<p>If you had 13 marbles and 28 dice, how many do you have in total?</p> 	<p>If you had 54 apples and 47 pears, how many do you have?</p> 
<p>If you had 18 milk cartons and 19 juice cartons, how many would you have altogether?</p> 	<p>If you have 19 boiled eggs and 12 fried eggs, how many would you have in total?</p> 