

Addition up to 99

STEP 1. No Pencil, Paper or Computer, Practice Adding up to 99 on a Transition Board.

1. Set up

Example
add 58 ▶
and 36 ▶ +

58 on top

36 below

Start by setting up the counters on the Transition Board, with TENS and ONES representing 58 above and 36 below.

2. Group all the ONES

Move all ONES into the grey transition area.

fourteen ONES!

There are more than ten ONES. It is necessary to rename 10 of units as one TEN. Next ...

3. Rename a TEN

Replace 10 ONES for a TEN (rename).

Now there are 6 TENS above

... there are 6 TENS on top and 3 TENS below. Only 4 ONES are left below the units label.

4. Add all TENS.

Move all TENS into the transition area as a group.

Now there are 9 TENS and 4 ONES.

Total ▶ 9 4

Use the numeral cards, 9 and 4 to label the total SUM.

STEP 2. Use the Interactive SCRATCH Resource Practice Interactive Addition Up to 99

There are ten ONES to rename as a TEN!

<https://scratch.mit.edu/projects/193739221>

You do not need to know anything about Scratch to use this resource. If you are interested in the code, when online click *See inside*. For more resources see the Studio at <https://scratch.mit.edu/studios/5999446>

This online resource provides lots of interactive practice exactly similar to the offline work. You add two 2-digit numbers with answers less than 99, with or without renaming.

Click the green flag to get started.

1. Input any 2-digit number. (Example 58)
Scratch will calculate and ask for a number which, when added to 58 will total **no more than 99**. Taking the example, it will ask for a number **lower than 42**.

2. Input a number lower than 42. This is the number to be added to the first number you have input.

The computer takes it from there. All you need to do is **CLICK** when instructed to do so, and make sense of what is happening. It will run on desktop PCs, laptops, tablets, iPads and on most smartphones.

NOTE to the Teacher or Parent: This PDF consists of 4 pages. This page shows how to *Add* on a Transition Board and it introduces the interactive SCRATCH resource. Page 2 is a printable Transition Board. Page 3 is a sheet of numeral cards and symbols. Page 4 contains Tens and Units place value pieces and some written practice.

Transition Board - for Addition / Subtraction of Tens and Units

Print in colour and stick to waste cardboard.

tens

units

Numeral Cards and Symbols



Print and stick to waste cardboard before cutting into separate numerals cards.

1

2

3

4

5

6

7

8

9

0

1

2

3

4

5

6

7

8


9

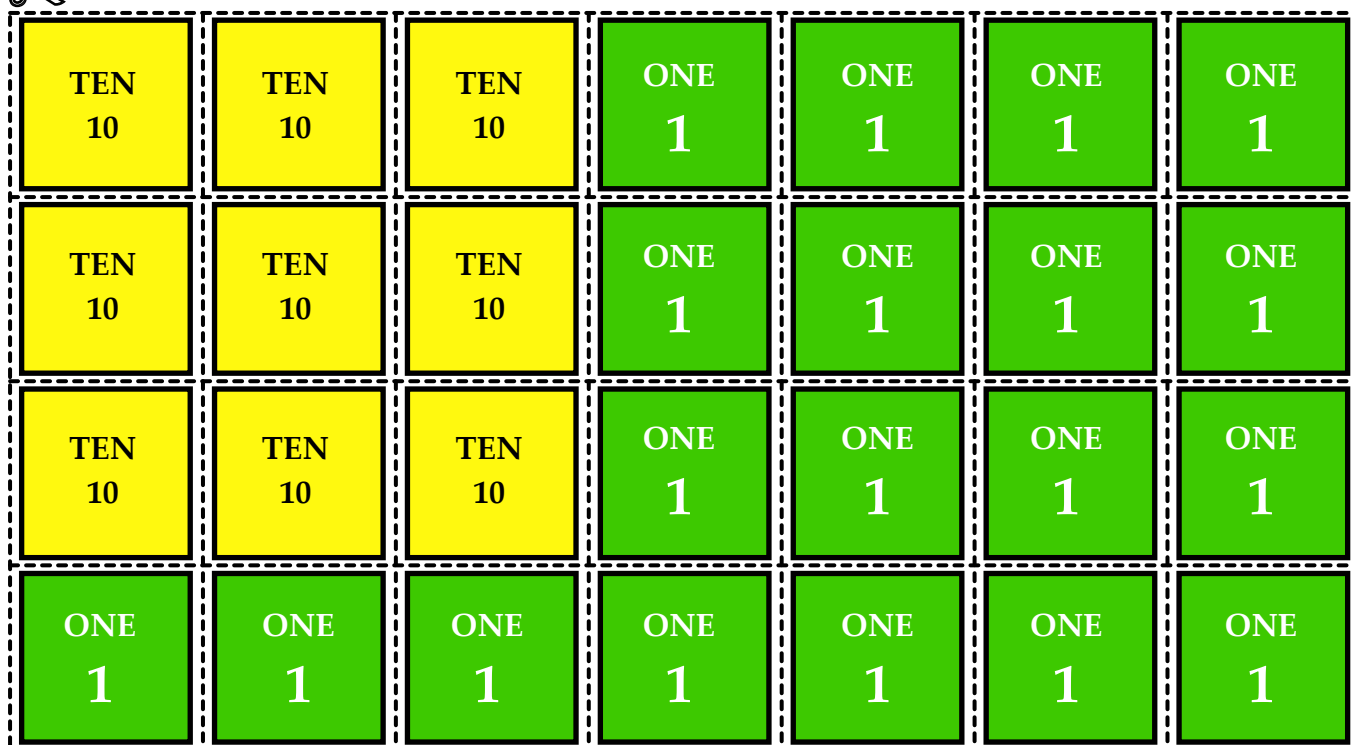
0

Symbols
(or Signs)



Place Value Manipulative Pieces

 Print in colour. Stick to cardboard and cut out as separate place value pieces (Yellow = Ten, Green = One)



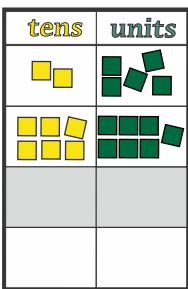
You shouldn't need more than 9 Tens, but you may need as many as 18 Ones

Summary and Written Practice

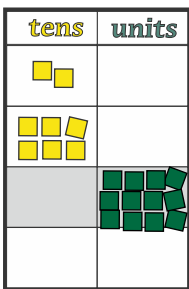
1. Revise: Addition with regrouping - without pencil and paper.

Example

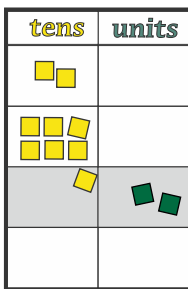
t	u	
2	5	
+6	7	



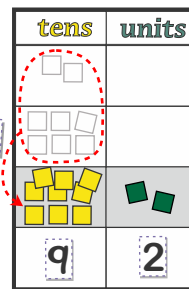
Set up



Add units



Regroup



Add all tens

2. Revise using the SCRATCH interactive resource.

Vertical & Horizontal Sums with Pencil and Paper.

3. Do these ten sums without the help of a Transition Board. Not all of them require you to rename a TEN. Use the interactive Scratch resource to check your answers.

a.
$$\begin{array}{r} 27 \\ + 45 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 42 \\ + 38 \\ \hline \end{array}$$

e. $47 + 27 = \square$

h. $56 + 28 = \square$

c.
$$\begin{array}{r} 56 \\ + 34 \\ \hline \end{array}$$

d.
$$\begin{array}{r} 51 \\ + 28 \\ \hline \end{array}$$

f. $38 + 45 = \square$

i. $70 + 24 = \square$

g. $67 + 14 = \square$

j. $39 + 39 = \square$