Working in the 100 square

Remember
A 100 square helps you to count in ones along each row, backwards and forwards, and in tens going up and down each column.

You will need: red and blue counters

Vocabulary
ones, tens, row, column, count, pattern

Counting on in ones

1  2  3  4  5  6  7  8  9  10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100

Counting on in tens

Unit 1A Number and problem solving
CPM Framework 2Nn1, 2Nn3, 2Nn6, 2Nn7, 2Pt3; CPM Teacher’s Resource 1.1
Example

Put two red counters on number 4. Count on five squares, following the arrows across the row. Move one of the counters to the new number.

Put two blue counters on 4, on top of the red one. Count down the column five squares, following the arrows down the column. Move one of the blue counters to the new number.

I counted in \[ \text{ones} \hspace{1cm} \text{tens} \] from 4 to 9. I counted in \[ \text{ones} \hspace{1cm} \text{tens} \] from 4 to 54.


Complete these sentences to show what you did.

I counted in \[ \text{ones} \hspace{1cm} \text{tens} \] from 2 to \[ \text{ } \].

I counted in \[ \text{ones} \hspace{1cm} \text{tens} \] from 2 to \[ \text{ } \].

Now choose your own start numbers and how many jumps to make.

Complete these sentences to show what you did.

I counted in \[ \text{ones} \hspace{1cm} \text{tens} \] from \[ \text{ } \] to \[ \text{ } \].

I counted in \[ \text{ones} \hspace{1cm} \text{tens} \] from \[ \text{ } \] to \[ \text{ } \].

When you count in rows you always count in \[ \text{ones} \hspace{1cm} \text{tens} \].

When you count up and down a column you always count in \[ \text{ones} \hspace{1cm} \text{tens} \].

Hint: As you count, move the counter one space.
Remember
When you are thinking about number bonds or pairs to 10, it doesn’t matter which order you write the numbers, they are the same pair.

Find all the numbers pairs for 10.

Cross out each number as you use it. Write each number pair twice in the table, just like 0 and 10. Two have already been done for you.

0 + 10 = 10
10 + 0 = 10

Which number could you not use? Write down the number bond for it.

0 + 0 = 10

Oh no! Gremlins have been here and taken some numbers.
Write in the pairs that add to 10. Make sure they all look different.

2 + 8 = 10
4 + 6 = 10
3 + 7 = 10
6 + 4 = 10
9 + 1 = 10

Hint: Try reversing the order of the numbers within the pairs to find all the possible pairs.

Vocabulary
number pairs, number bonds

Unit 1A Number and problem solving
CPM Framework 2Nc1, 2Nc10, 2Nc14, 2Pt3; CPM Teacher’s Resource 3.1
Number pairs for 100

**Remember**
Multiples of 10 have 0 in the ones place. Look at the tens digit to find the value of the number.

**Vocabulary**
multiples, number pairs, number bonds, equals

Here are the multiples of 10 to 100. Two have already been done for you.

<table>
<thead>
<tr>
<th></th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
</table>

Find all the pairs of these numbers that add to 100.
Cross out each number as you use it. Write each number pair twice in the table, just like 0 and 100. Some have already been done for you.

0 + 100 = 100
100 + 0 = 100

Which number could you not use? Write down the number bond for it.

+ = 100

Oh no! The gremlins are back!
Write in the pairs that equal 100. Make sure they all look different.

<table>
<thead>
<tr>
<th></th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>70</th>
<th>60</th>
<th></th>
</tr>
</thead>
</table>

**Hint**: Use what you have found out about number pairs to 10 to help you find number pairs to 100.
Count along the number track

Remember
When counting along a number track, don’t count the space you are already in.

Start at 0, count in fives. Colour the numbers.
Start at 0 on the other track. Count in tens. Colour the numbers.
Which numbers are coloured on both tracks?

You will need:
resource 1, page 60, a 1–6 dice
or resource 2, page 61, a counter for each player

Vocabulary
number track

Unit 1A Number and problem solving
CPM Framework 2Nn1, 2Nn3, 2Nn4, 2Nn9, 2Nn10, 2Pt2, 2Pt3, 2Pt8; CPM Teacher’s Resource 2.1, 4.1
Now use the tracks as a game for two players.

Decide who will have each track.

Place your counter on 0 on your track. Take turns to throw the dice and move that number of spaces. If there is no number in the space you land on, write the number that is missing.

The first player to reach 100 is the winner.

Play the game several times. Did the same player win each time?

**Hint:** Use a number line or 100 square for support.