

Mobile towers

Children create 4 or 5 two-digit numbers and add these to get different totals.

Skills practised:

- Adding 3, 4 or 5 two-digit numbers
- Estimating totals

Conjecture: *By choosing digits to create an addition of several two-digit numbers, we can make given totals.*

What to do:

Children work individually or in pairs.

1. Look at the display of numbers on a mobile phone like the one opposite.
2. Create 3 or 4 or 5 two-digit numbers, by using numbers from the phone that touch. For example you could use 35 as 3 and 5 touch by a corner, but you could NOT use 3 and 8 because they don't touch.
3. Add all the numbers you made.

1	2	3
4	5	6
7	8	9
	0	

TRY TO MAKE THESE ANSWERS:

- The largest possible number by adding just 4 two-digit numbers.
- The smallest possible number by adding just 4 two-digit numbers.
- Make 200 exactly! Can you do this in five different ways?
- Make 111 exactly by adding just 4 two-digit numbers

Now invent a challenge for your partner...

Aims:

- To use reasoning to create given answers

Minimum number of calculations expected

12-20

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56
48
75
21
<u>2</u>
<u>200</u>