Something Adds Up

You need: a classmate

Mekala is investigating numbers that add up to 100.

She writes a few equations:

50 + 50 = 100

40 + 60 = 100

20 + 80 = 100 10 + 90 = 100

Then she talks to Isaac about it.

The 2 numbers that add up to 100 have zeros in their ones places and add up to 10 in their tens places.

What do you mean?

Like 80 + 20. The 8 and 2 add up to 10.

Yes, but do the ones places have to be zero? What about 51 and 49?

So Mekala and Isaac write some more addition equations:

$$64 + 36 = 100$$

$$91 + 9 = 100$$

$$25 + 25 + 25 + 25 = 100$$

$$37 + 26 + 37 = 100$$

I can't see anything the same about these numbers.





Look at the ones digits: 4 and 6, 1 and 9, 5 and 5 and 5 and 5, 7 and 6 and 7. What do they add up to?

- With a classmate, find some other sets of 2 numbers that add up
 - **b.** What can Mekala and Isaac now say about sets of more than 2 numbers that add up to 100? (For example, 8 + 4 + 9 + 7 + 25 + 47 = 100.)
- 2. What can they say about any 2 numbers that add up to 1 000?