

Subtracting from zero...

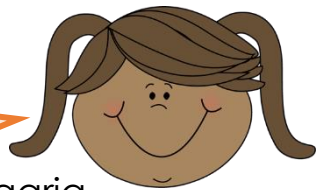
Sometimes we need to exchange more than once...

	Th	H	T	O
			3	1
	5	7	4	0
-	1	4	2	6
	2	3	1	4

	Th	H	T	O
	5	12	10	1
	6	3	1	4
-	1	7	2	5
	4	5	8	9

1. Start in the ones column $4 - 5$
Exchange 1 10s for 10 1s: $14 - 5 = 9$
2. Move to the tens column $0 - 2$
Exchange 1 100s for 10 10s: $10 - 2 = 8$
3. Move to the hundreds column $2 - 7$
Exchange 1 1000s for 10 100s: $12 - 7 = 5$

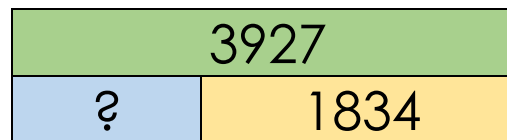
When I subtract 865 from 2153 I get 2712.



Maaria

Maaria is incorrect. She has found the difference between the numbers in the columns but she should have exchanged.

Part-part-whole models are useful for solving subtraction problems



$3927 - ? = 1834$

VOCABULARY

- subtract
- exchange
- column
- part-part-whole
- inverse operation
- check answer

We can check answers using the inverse operation...

	Th	H	T	O
	5	12	13	1
	6	3	4	1
-	2	6	9	2
	3	6	4	9

	Th	H	T	O
	3	6	4	9
+	2	6	9	2
	6	3	4	1
	1	1	1	