

Name _____

Class _____

Maths Challenge 4 yr5/6

solution

Mr. Muddle wanted to count the money in his piggy bank which contained 10p coins. He emptied out the coins onto the table top.

“That’s interesting,” thought Mr. Muddle, “half of the coins are tails up.”

“And if I turn over 2 of those coins one third will be tails up.”

1. How many coins did Mr. Muddle tip out of his piggy bank?

He must have an even number of coins for half to be tails up. So make a table.

No. of coins	Half the coins	One third	Three thirds	Possible answers
2	1	1-2		not possible
4	2	2-2=0	0x3=0	not possible
6	3	3-2=1	1x3=3	Must be even total
8	4	4-2=2	2x3=6	
10	5	5-2=3	3x3=9	Must be even total
12	6	6-2=4	4x3=12	Totals match
14	7	7-2=5	5x3=15	Must be even total
16	8	8-2=6	6x3=18	
18	9	9-2=7	7x3=21	Must be even total
20	10	10-2=8	8x3=24	