



COIN COUNT



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What's the point of this task?

Students need to recognise how the concepts of twice and half are related. If one amount is twice another, the second is half the first and vice-versa. So, in this problem, the number of 5 cent pieces must equal the number of 20 cent pieces. In addition, they must figure out that if there are half as many 20 cent pieces as 10 cent pieces, the number of 10 cent pieces has to be even. But since the number of 10 cent pieces is twice the number of 5 cent pieces, it will automatically be even. The task also provides students practice in adding money amounts.

Questions to facilitate the learning

Other questions that might be asked include:

- How many 10 cent pieces might there be? Why only those amounts?
- How does the number of 20 cent pieces compare to the number of 5 cent pieces? Why?
- Could the amount of money be of the form €[].[]5? Why or why not?

Curriculum connections

This activity relates to simple multiplication and division (doubling and taking half) as well as to the addition of money amounts.

Scaffolding the learning

- Suppose there were three 5 cent pieces. How many 10 cent pieces? How many 20 cent pieces? What is that worth?
- Suppose there were four 5 cent pieces. How many 10 cent pieces? How many 20 cent pieces? What is that worth?
- Could you decide the number of 10 cent pieces or 20 cent pieces first?

Extending the learning

Students might change the rules for the coin relationships, e.g. there are three times as many 10 cent pieces as 20 cent pieces and half as many 10 cent pieces as 5 cent pieces, and try the problem again.



About Mathletics:

Mathletics is an online maths resource specifically designed for personalised teaching and learning. Used by thousands of schools across the UK, it is proven to significantly increase levels of student engagement, confidence and motivation and to improve attainment and progress in maths from KS1 to KS4.

For more information on Mathletics visit: www.uk.mathletics.com and [@MathleticsUK](https://twitter.com/MathleticsUK)

About 3P Learning:

3P Learning was established in Australia in 2004 and in the UK in 2006 and has its UK office in Bristol. Its focus is on learner engagement, confidence and motivation and its best known products Mathletics, Spellodrome and Reading Eggs are strong on powerful curriculum-aligned content, 'gaming-style' challenges and rewards. 3P Learning is currently shortlisted for five 2019 Bett awards and its products are used in over 5,000 schools across the UK.

For further information on 3P Learning, please visit: www.3plearning.com

Coin Count

You pay for something.

You use twice as many 5 cent pieces as 2 cent pieces.

You use half as many 20 cent pieces as 5 cent pieces.

How much could it have cost?

How many answers can you come up with?



Ask your teacher for more coins if you need them.