

Diving into Mastery – Diving

Adult Guidance with Question Prompts



Two-Step Problems

Children use their addition and subtraction skills to find out how much they need to pay and how much change they would get, using a bar model to help. Alternatively, they can count on or back using number lines, coins or any other appropriate method.

How much did Sol spend on each item?

What operation will you use to find how much he spent altogether?

How will you find the total?

Which coin did he use to pay? How many pence is that equal to?

What operation will you use to calculate Sol's change?

What strategy or equipment will you use to find the answer?

Can you complete the calculation to show his change?

Can you draw a bar model to represent the next problem?

How much did ___ spend altogether? Prove it.

How much change did they get? Explain how you know.

Ned used £2 instead of £1. How will that affect the amount of change he got?

Stem Sentences

- ___p and ___p makes a total of ___p.
- £1 - ___p is the same as 100p - ___p = ___p.
- The change from ___ is ___p.

Two-Step Problems



Sol bought a packet of crisps and a banana.



Use a bar model to show how much he spent.

_____p	
_____p	_____p

He paid with a £1 coin. How much change did he get?

£1 = _____p

_____p - _____p = _____p

Kit bought a banana and an apple. They paid with a £1 coin. How much change did they get?

Ned bought an apple and some fruit juice. He paid with a £2 coin. How much change did he get?



Diving into Mastery – Deeper

Adult Guidance with Question Prompts



Two-Step Problems

Children will reason about how much Jess has to spend, how much she wants to spend and the coins she could use to do this. They will calculate how much the items cost and decide what coins she should have given. They will also calculate how much change she will get. Provide coins and practical equipment such as number lines for children to refer to when explaining their reasoning.

How much money does Jess have to begin with?

How do you know?

How much will the items cost altogether? Prove it.

Can you write a calculation to show this?

How much does Jess give the shopkeeper?

Is the shopkeeper correct? Explain why.

Which coins could she have given him instead?

How much change would she get from ___p?

Which coins could she get in her change?

If Jess had £1 to start with, how much will she have left?

What coins would she have left in her purse? How do you know?

Stem Sentences

- ___p and ___p makes a total of ___p.
- She could have paid with ___p because...
- She will have ___p left over.

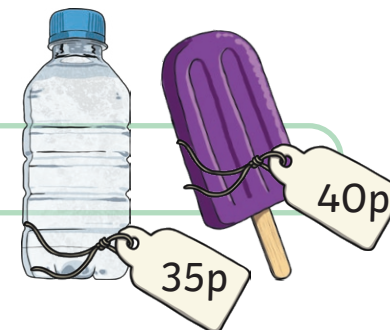
Two-Step Problems



Jess has these coins in her purse:



She wants to buy these items:



She gives the shopkeeper these coins:



Jess

The shopkeeper said I haven't given him enough money.

Is the shopkeeper correct?
Explain why.

How much does Jess need to pay?
What coins could she use to pay?
How much change will she get?



Diving into Mastery – Deepest

Adult Guidance with Question Prompts



Two-Step Problems

Children first work out how much money Rory has spent before partitioning this into two parts to find out how much the items could have cost. Children could use either bar models or part-whole models to represent their answers.

How much did Rory have to begin with?

How many items did he buy?

How much change did he get?

Look at the calculation. How will you find the missing number?

Can you work out what the two items cost altogether?

Explain how you know.

If the two items cost a total of £16, what could they have cost separately?

How many ways can you partition £16?

Can you represent your ideas as a bar model or part-whole model?

What is the whole? What are the parts?

How could you check your answers?

Stem Sentences

- £____ and £____ makes a total of £____.
- $£40 - £______ = £______.$
- The change from £40 is £____.

Two-Step Problems



Rory had saved up £40.

He bought a book and a jigsaw puzzle.



Rory

He got £24 change.

How much did the two items cost altogether?

$$£40 - £______ = £24$$

If each item cost a whole number of pounds, what could they have cost?

Draw bar models to show four possible answers.



£ _____	
£ _____	£ _____

