





Year 3 maths week 3

5 days of problem solving	Day 1 Activity	Day 2 Activity	Day 3 Activity	Day 4 Activity	Day 5 Activity
Factual fluency (to aid fluency)	https://www.topmarks.co.uk/maths-games/hit-the-button Hit the answer - x 8	https://www.topmarks.co.uk/maths-games/hit-the-button Hit the answer - divided by 8	https://www.topmarks.co.uk/maths-games/hit-the-button Hit the answer - divided by 8	https://www.topmarks.co.uk/maths-games/daily10 level 3-multiplication-mixed tables x2,x3,x4,x5,x8,x10	https://www.topmarks.co.uk/maths-games/daily10 level 3-multiplication-mixed tables x2,x3,x4,x5,x8,x10
Problem/activity of the day	<p>Can you find the total cost of these two items?</p> <p>A new book = £7 and 30p</p> <p>Blueberries = £1 and 50p</p> <p>How much would it cost if you bought a book, blueberries and a packet of crisps?</p> <p>Packet of crisps = 80p</p> <p>Now create a pretend shop in your home. Label the items in your shop with how much they cost.</p> <p>Calculate how much it would cost to buy two items in your shop. Then two different items. Then two other items.</p>	<p>A bottle of juice costs £2 and 80p.</p> <p>How many different combinations of coins could you use to pay for the bottle of juice?</p> <p>How could you pay for it using the greatest amount of coins?</p> <p>How could you pay for it using the least amount of coins?</p>	<p>Try the warm-up questions first (see below), then do the following activity.</p> <p>Holly receives £10 pocket money every month. She spends most of it, but makes sure to save £2 and 50p every month to put in her piggy bank.</p> <p>How much money will she spend in one month?</p> <p>In two months? In six months?</p> <p>What if she saved £6 and 25p instead of £2 and 50p each month?</p> <p>What could she be spending her money on?</p>	<p>Set up your pretend shop in your house.</p> <p>A brother, sister, grown up or teddy bear should play the role of the shop keeper.</p> <p>Choose five items from around the house and give them the following prices: £2 and 55p, £8 and 75p, £2 and 60p, £7 and 20p and £3 and 14p.</p> <p>Choose which note to buy each item with.</p> <p>Calculate for the shopkeeper how much change they owe you.</p>	<p>https://nrich.maths.org/223 Rosie went into the sweet shop with 10p to spend.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>2p</p>  <p>chews</p> </div> <div style="text-align: center;"> <p>3p</p>  <p>mini eggs</p> </div> <div style="text-align: center;"> <p>5p</p>  <p>Chocko bars</p> </div> <div style="text-align: center;"> <p>7p</p>  <p>lollypops</p> </div> </div> <p>What could she buy if she wanted to spend ALL her money? How many different answers can you find?</p> <p>James went into the shop too. He had 20p to spend and spent ALL of his money. What could James have bought?</p> <p>Challenge: James spent his money on just one kind of sweet, but he does not like chews. Which sweets did he buy?</p>
Resources you will need	Paper and pencil Coins and notes if possible: 1p, 2p, 5p, 10p, 20p, 50p, £1 and £2 coins, £5 note <u>If you do not have these at home: Draw around the notes and coins from the images below to make your own. Keep them safe for the week!</u>	Paper and pencil Coins if possible: 1p, 2p, 5p, 10p, 20p, 50p, £1 and £2 coins	Paper and pencil Coins if possible: 1p, 2p, 5p, 10p, 20p, 50p, £1 and £2 coins and £10 and £5 notes	Paper and pencils Coins if possible: 1p, 2p, 5p, 10p, 20p, 50p, £1 and £2 coins and £10 and £5 notes	Paper and pencils Coins if possible: 1p, 2p, 5p, 10p, 20p, 50p, £1 and £2 coins and £10 and £5 notes

Tips, clues or methods to help	Use the coins and notes to add the amounts together. Hint: You might need to rename pence for pounds. Remember: 100p = £1 Use the formal written method (see below)	Remember: 100p = £1 Try using the coins to make £2 and 80p in different ways	Remember: 100p = £1 Try using the coins and notes to subtract. Try using the formal written method (see below)	Remember: 100p = £1 Use the coins and notes to subtract or count up. Use the formal written method (see below)	Write down your calculations as you do them to keep track
Want to check?	Use the inverse to check	Check your coins total	Use the inverse to check	Use the inverse to check	Check the total
Theme	Money	Money	Money	Money	Money

See below for: Pictures of coins and notes, formal written method, day 3 warm-up questions, place value chart for renaming pence for pounds and pounds for pence

Additional activities below: extension for day 5's problem, money maze

Coins and notes support:



5 pounds



10 pounds



20 pounds



50 pounds

Formal written method for adding money (Day 1):

$$\begin{array}{r} \text{£ } 12 \quad 30 \text{ p} \\ + \text{£ } 8 \quad 45 \text{ p} \\ \hline \end{array}$$

Step 1: Add the pence Step 2: Add the pounds Step 3: Add the total

	T	O	T	O	
£					p
+ £					p
	+				
£					p

Remember 100p = £1

Formal written method for subtracting money (Day 3 and 4):

$$\begin{array}{r} \text{£ } 10 \quad 00 \text{ p} \\ - \text{£ } 6 \quad 25 \text{ p} \\ \hline \end{array}$$

Day 3: Try these warm-up questions using coins and notes or the support frame:

- 1) £5 and 60p - £2 and 20p
- 2) £6 and 70p - £3 and 15p
- 3) £7 - £3 and 50p

Step 1: Subtract the pence Step 2: Subtract the pounds Step 3: Add the total

	T	O	T	O	
£					p
- £					p
	-		+		
£					p

Print out or copy these support frames to help you.

If you need to rename pounds for pence, remember 100p = £1

Place value chart for renaming pence for pounds and pounds for pence

H	T	O
pounds (£)	← pence (p) →	

Additional activities:

Challenge for Day 5 problem:

Katie and Henry went into the shop too. They also each had 20p to spend and they all spent all of their money.

Katie bought the same number of sweets as James but she had 3 different kinds. Which sweets did she buy?

Henry chose 8 sweets. What could he have bought?

Extra challenge:

The Money Maze

Go through the maze, collecting and losing your money as you go. You may not go through any cell more than once, and can only go into a cell through a gap, for example, you may not go from 5 to 6, or from 7 to 3.

Which route gives you the highest return? How much is it?

Which route gives you the lowest return? How much is it?

