Maths – Activity 1

LO: To add and subtract numbers with up to four digits.

<u>Core skill</u> – **Solve these calculations using the formal written method.**

1. £16.45
   +£13.30

2. £19.99
   +£ 4.56

3. £12.43
   +£10.98

4. £14.93
   +£13.47

5. £29.50
   - £18.94

6. £12.50
   -£ 7.08

7. £15.75
   -£12.25

8. £10.50
   -£ 9.00

<u>Depth task</u> – **Solve the word problems using addition or subtraction column method.**

1. You have £5.00 in your pocket and you visit the shop. You buy a magazine for £1.50 and a book for £2.20. How much change do you have?

2. You have a £20 note to pay for yourself and one friend at the Cinema. The tickets cost £4.50 and you buy a drink each for £2.00. How much do you spend at the Cinema? How much change do you receive from your £20?

3. You have £50, which you received in birthday money. You decide to buy a ball for £7.00, a book for £6.50 and a DVD for £12.00. How much money will you have left?

4. Sam is saving up to buy his mum some chocolates for her birthday. He has £3.45 in his piggy bank; his dad gave him £2.39 and his nan gave him £1.76. The chocolates cost £12.50. How much more does Sam need to save?

<u>Greater Depth task</u>
To estimate my answer, I can round to the nearest pound or to the nearest 10 pounds. Remember we round down if the tenths digit is 1, 2, 3 or 4. We round up if the tenths digit is 5, 6, 7, 8 or 9.

Faiza wants to buy a computer game. It costs £38.96.
He has £50 in his bank account.
He estimates he will have £11 left after he has bought the game.

Is Faiza's estimation correct? Prove it.

Maths – Activity 2

LO: To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use.

Core skill – **Solve these calculations using the formal written method.**

1. £16.45
   +£13.20

2. £12.43
   +£09.98

3. £67.54
   +£33.46

4. £19.99
   +£10.99

5. £38.47
   - £21.25

6. £52.03
   - £31.42

7. £25.94
   - £14.06

8. £40.25
   -£15.00

Depth task – **Solve the word problems using addition or subtraction, formal written method.**

1. Hannah went shopping with £15.10. She spent half of her money on a pair of sunglasses. How much money did she have left? She then bought some sandals for £3.45. How much money did Hannah come home with?

2. A child's ticket to the cinema costs £6.65, whilst an adult's costs £9.75. How much would it cost for 2 adults and 2 children to go to the cinema?

3. Amir has £1,000. He buys a scooter for £345 and a skateboard for £110 How much money does he have left?

Greater Depth task - Tamsin has £4,000 to spend on new items for her bedroom. What can she buy from the list below that leaves her with £569?

Wardrobe £1592

Chest of Drawers £836

Curtains £45

Rug £104

Mirror £17

Lamp £8

Bed £899
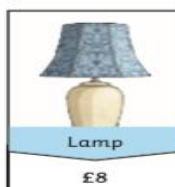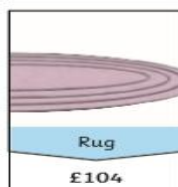
Activity 3

LO: To add and subtract numbers with up to four digits using the formal method of columnar addition.

Core skill 1 – Estimate the answer to the calculation below. Round to the nearest tens.	Core skill 2 - What calculations can you create from the following numbers using addition and subtraction?
£42.65 + £35.09	£14.25 £22.05 £36.30 Example: £36.30 – £22.05 = £14.25

Depth Task 1

1. Mark each calculation with a tick or cross.

	✓ or ✗
£5.00 – £2.30 = £3.70	
£10.00 – £1.70 = £8.30	
£3.90 + £1.10 = £5.00	
£7.60 + £3.40 = £10.00	

True or False?
Maria bought a cup of a coffee that costs £2.20. Maria paid with a £10.00 so she gets and £8.80 change.

Depth task 2- Solve the problem below.

£2.99   £1.99   99p

£3.98   £4.00

Jim looks at the items for sale and chooses some to buy with his pocket money.
Which items did he buy if he spent:
£4.98
£4.97
£6.98
Could he spend £5.98?

Greater Depth task – Use the inverse operation to solve the problems below.

Find A, B and C.

- A + £576.24 = B
- £696.23 – B = £117.46
- A + £337.35 = C

Activity 4

LO: To add and subtract money up to four digits.

Core skill – Fill in the missing values.

1. Example

	£	3	5 .	[1]	8
+	£	2	[8] .	4	[3]
	£	[6]	3 .	6	1

    1   1

2.

	£	3	4 .	[ ]	1
+	£	1	[ ] .	5	9
	£	4	8 .	0	[ ]

3.

	£	4	[ ] .	4	5
+	£		[ ] .	5	[ ]
	£	4	9 .	0	3

4.

	£	1	8 .	6	2
+	£		[ ] .	2	[ ]
	£	2	2 .	8	4

5.

	£	2	[ ] .	7	3
+	£	1	9 .	[ ]	6
	£	4	8 .	9	9

6.

	£	1	[ ] .	8	9
+	£	2	2 .	7	[ ]
	£	3	7 .	6	6

Depth task – *Solve the word problems below using your knowledge of addition and subtraction.*

1. Jamie buys a twirl for 38p and a double decker for 47p and a galaxy for 76p. He has £3.75 left. How much money did he have to begin with?

2. Jason buys flowers for his mum at the market. The flowers cost £5.67. Jason has £8.44. How much change would he get if he gave the shopkeeper all his money?
 How much change would he get if he only gave the shopkeeper £8.00?

3. Jean buy a pen for £2.00, a pencil for 50p and a ruler for £30p. Jean's dad gives him £5.00 and tells Jean to keep the change once he has paid. How much does he keep?

Greater Depth task
Remember we round down if the tenths digit is 1, 2, 3 or 4. We round up if the tenths digit is 5, 6, 7, 8 or 9.

Anna and Rob are estimating the answer to £27.93 + £46.29 =
Who makes the most sensible estimate?
Explain your choice.

Anna: It's about £73.00

Rob: It's about £74.00

Maths – Activity 5

LO: To estimate and use inverse operations to check answers to a calculation.

Core skill - Match the two amounts that give an approximate answer of £23.

£17.15	£14.34
£10.60	£5.88
£9.41	£12.24

Depth task
Estimate the answers to the nearest tenths for the following calculations.

A. £45.72 – £2.32

B. £46.08 – £7.84

C. £14.31 + £22.79

Example:
 £45.72
-£ 2.32
 £43.40
£43.40 rounded to the nearest tenths is £43.4

Depth task 2
Choose the best calculation for an estimated answer of £40.00. Rounded to the nearest ten.

A. £19.70 + £24.58

B. £57.94 – £56.31

C. £28.69 + £16.49

Greater Depth task – Complete the table.
The table shows the total cost of tickets sold at a theme park over a weekend. Use addition and subtraction to complete the table.

	Adult	Child	Total
Saturday		£267.34	
Sunday	£116.46	£276.24	£392.70
Total	£272.69		£816.27

+£13.30	+£ 4.56	+£10.98	+£13.47
£29.75	£24.55	£23.41	£28.40
	11.1	1.1	1.1

5. £29.50   6. £12.50   7. £15.75   8. £10.50
- £18.94   -£ 7.08   - £12.25   -£ 9.00
£10.56   £ 5.42   £03.50   £ 1.50

Depth task – Solve the two steps word problems below.

1. You have £5.00 in your pocket and you visit the shop. You buy a magazine for £1.50 and a book for £2.20. How much change do you have?
£1.50+£2.20 = £3.70
£5.00-£3.70=£1.30

2. You have a £20 note to pay for yourself and one friend at the Cinema. The tickets cost £4.50 and you also buy a drink each for £2.00. How much do you spend at the Cinema? How much change do you receive from your £20?
£4.50+£2.00= £6.50
£20.00-£6.50 = £13.50

3. You have £50 which you received in birthday money. You decide to buy a ball for £7.00, a book for £6.50 and a DVD for £12.00. How much money will you have left?
£7.00+£6.50+£12.00 = £25.50
£50.00-£25.50= £24.50

4. Sam is saving up to buy his mum some chocolates for her birthday. He has £3.45 in his piggy bank, his dad gave him £2.39 and his nan gave him £1.76. The chocolates cost £12.50. How much more does Sam need to save?
£3.45+£2.39+£1.76 = £7.60
£12.50-£7.60 = £4.90

Greater Depth task

Faiza is correct, because £38.96 rounds up to £39.
£50 – £39 = £11

Answers - Activity 2

Core Skill - Find the missing number using the formal written method.

1. £16.45
   +£13.20
   £29.65

2. £12.43
   +£ 9.98
   £22.41
      1 .1

3. £67.54
   +£23.46
   £91.00
      11.1

4. £19.99
   +£10.99
   £30.98
      1 .1

5. £38.47
   - £21.25
   £17.22

6. £52.03
   - £31.42
   £20.61

7. £25.94
   - £14.06
   £11.88

8. £40.25
   -£15.00
   £25.25

Depth task – Solve the word problems using addition or subtraction formal written method.

1. Hannah went shopping with £15.10. She spent half of her money on a pair of sunglasses. How much money did she have left? She then bought some sandals for £3.45. How much money did Hannah come home with?
   Half of £15.10 = £7.55
   £7.55 - £3.45 = £4.10

2. A child's ticket to the cinema costs £6.65, whilst an adults costs £9.75. How much more does an adult ticket cost? How much would it cost for 2 adults and 2 children to go to the cinema?
   £9.75-£6.65 = £3.10
   2 adults = £9.75 + £9.75 = £19.50
   2 children = £6.65 +£6.65 = £13.30
   Total £19.50 + £13.30 = £32.80

3. Amir has £1,000. He buys a scooter for £345 and a skateboard for £110.
   How much money does he have left?
   £345 + £110 = £455
   £1000-£455 = £545

Greater Depth task

The total spent was £3431. Tamsin bought a wardrobe for £1592, a chest of drawers for £836, a bed for £899 and a rug for £104.
£1592+£836+£899+£104 = £3431
£4000-£569 = £3431

Answers - Activity 3

Core skill 1 - Estimate the answer to the calculation below. Round to the nearest tens.	Core skill 2 = - What calculations can you create from the following numbers using addition and subtraction?

Core skill 1 - Estimate the answer to the calculation below. Round to the nearest tens.

£42.65 + £35.09

£42.65
+£35.09
£77.74
1

Rounded to the nearest tens is £80.00

Core skill 2 = - What calculations can you create from the following numbers using addition and subtraction?

£14.25   £22.05   £36.30

Example:
£36.30 – £22.05 = £14.25

Answers
£36.30 – £14.25 = £22.05
£14.25 + £22.05 = £36.30
£22.05 + £14.25 = £36.30

Depth task 1

	✓ or ✗
£5.00 – £2.30 = £3.70	✓
£10.00 – £1.70 = £8.30	✓
£3.90 + £1.10 = £5.00	✗
£7.60 + £3.40 = £10.00	✗

a. **False**

Depth task 2

£2.99   £1.99   99p

£3.98   £4.00

Which items did
he buy if he spent:
£4.98 – **bear and doll**
£4.97 – **ball and vase**
£6.98 – **ball and bear. Altogether with a total cost of £6.97 with a penny change.**

Could he spend £5.98 – **Yes, he could buy a bear, doll and vase which all cost - £6.97 with a remaining change of a penny.**

Greater Depth task
A = £2.53
C = £339.88
B = £578.77

Answers - Activity 4

Core skill – Fill in the missing values.

1.

	£	3	5	.	1	8
+	£	2	8	.	4	3
	£	6	3	.	6	1
			1		1	

2.

	£	3	4	.	4	1
+	£	1	3	.	5	9
	£	4	8	.	0	0
					1	1

3.

	£	4	3	.	4	5
+	£		5	.	5	8
	£	4	9	.	0	3
					1	1

4.

	£	1	8	.	6	2
+	£		4	.	2	2
	£	2	2	.	8	4
			1			

5.

	£	2	9	.	7	3
+	£	1	9	.	2	6
	£	4	8	.	9	9
			1			

6.

	£	1	4	.	8	9
+	£	2	2	.	7	7
	£	3	7	.	6	6
					1	1

Depth task - Solve the word problems below using your knowledge of addition and subtraction.

1. Jamie buys a twirl for 38p and a double decker for 47p and a galaxy for 76p. He has £3.75 left. How much money did he have to begin with?
38p+47p+76p = £1.61
£3.75 + £1.61 = £5.36

2. Jason buys flowers for his mum at the market. The flowers cost £5.67. Jason has £8.44. How much change would he get if he gave the shopkeeper all his money?
How much change would he get if he only gave the shopkeeper £8.00?
£8.44-£5.67 = £2.77
£8.00 - £5.67 = £2.33

3. Jean buy a pen for £2.00, a pencil for 50p and a ruler for £30p. Jean's dad gives him £5.00 and tells Jean to keep the change once he has paid. How much do he keep?
£2.00 + 50p + 30p = £2.80
£5.00 - £2.80 = £2.20

Greater Depth task

Rob has made the most sensible estimate because £27.93 + £46.29 when rounded to the nearest 10 is £28.00 + £46.00 = £74.00.

Answers - Activity 5

Core skill

£17.15	£14.34
£10.60	£5.88
£9.41	£12.24
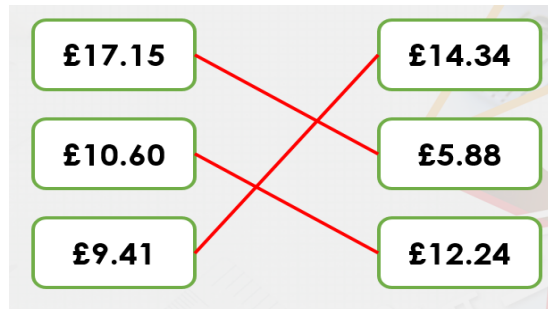
Depth task 1

Estimate the answers to the nearest tenths for the following calculations:

A. £45.72 - £2.32

B. £46.08 - £7.84

C. £14.31 + £22.79

A. £43.4
B. £38.2
C. £37.1

Depth task 2

Choose the best calculation for an estimated answer of £40.00. Rounded to the nearest ten.

Answer - A

A. £19.70 + £24.58

B. £57.94 - £56.31

C. £28.69 + £16.49

Greater Depth task

The table shows the total cost of tickets sold at a theme park over a weekend. Use addition and subtraction to complete the table.

	Adult	Child	Total
Saturday	£156.23	£267.34	£423.57
Sunday	£116.46	£276.24	£392.70
Total	£272.69	£543.58	£816.27