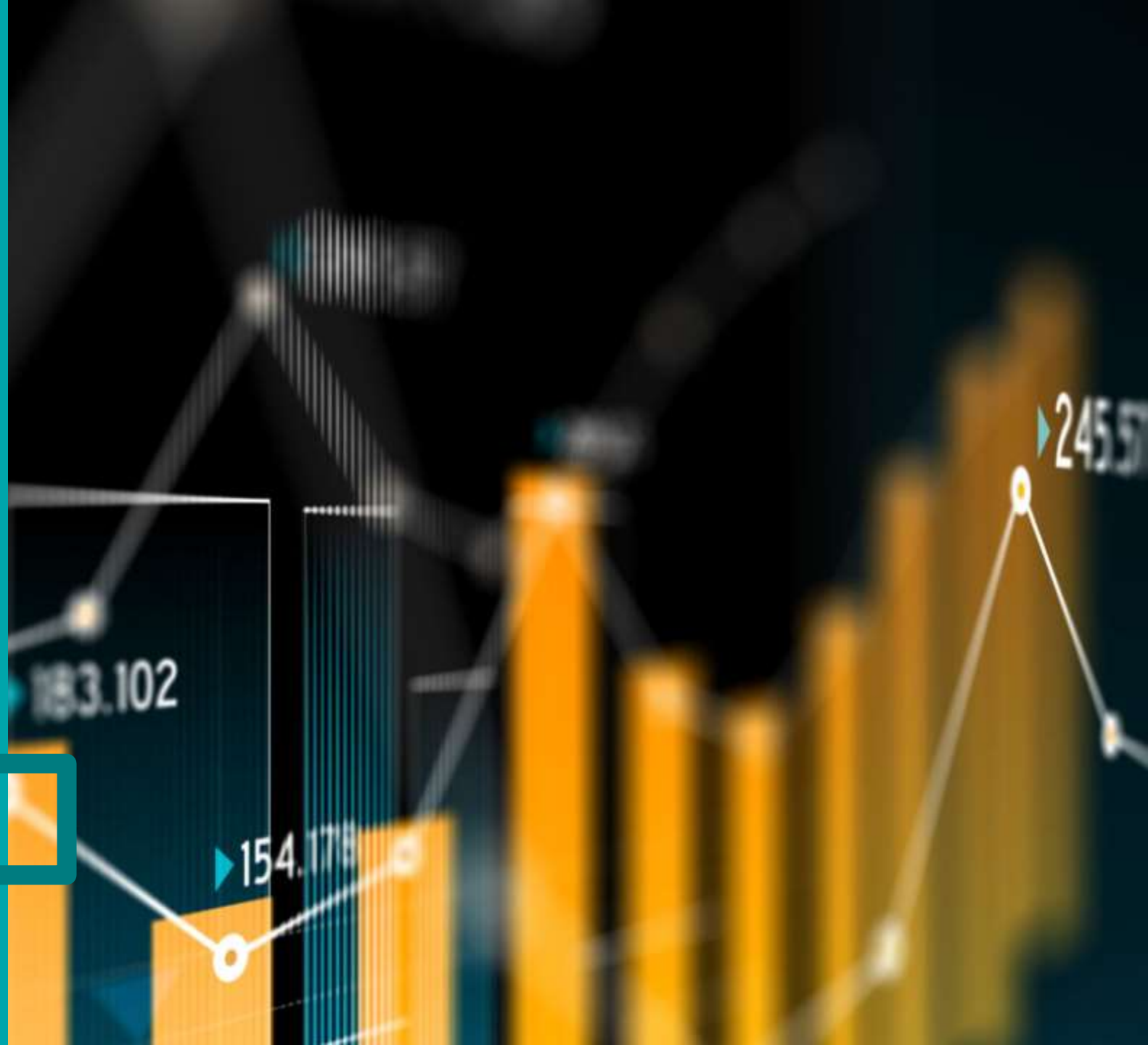
Adding Decimals in the Context of Money

Lesson 1: Rounding and Estimating

Lesson 2: Adding

Lesson 3: More Adding



ney or decimals

Lesson 1 Rounding and Estimating

https://www.bbc.co.uk/bitesize/topics/zh8dmp3/articles/zsvt97h

Watch this video first

Now it’s your turn
Round these numbers to the nearest pound.
If you’re feeling confident, round to the nearest 50p.

- £4.56
- £6.89
- £7.89
- £5.88

£5.36
£3.47
£8.42
£6.28

£9.32
£1.78
£2.11
£4.44

Now let's use estimation to add money

1. Divide your paper into two columns.
2. Write 'more than £10' on one side and 'less than £10' on the other.
3. **Round** these numbers.
4. **Estimate** the total.
5. Write your estimate in the correct column.

1. £4.25 + £3.69
2. £5.75 + £2.63
3. £6.69 + £1.35
4. £5.75 + £3.89
5. £4.68 + £3.55
6. £9.25 + £3.32
7. £8.29 + £7.35
8. £6.79 + £5.25
9. £7.25 + £2.49
10. £6.49 + £4.25

Example:

1. £4.25 + £3.69
£4.25 can be rounded to £4
£3.69 can be rounded to £4
Total: £8
So this will go in the 'less than £10' column

Extension

- My estimated total was £11.70. What could my two amounts have been? Think of 3 possible combinations.

- My estimated total was £15.40. What could my two amounts have been? Think of 3 possible combinations.

Lesson 2
Adding Decimals in the Context of Money

Adding money

Model:

£		1	0	.	1	8	4		
£	2	.	2		9				
	3	.	1		3				

£		1	4	.	1	3	7		
£	3	.	8		5				
	8	.	2		2				

Remember:

- always start from smallest side
- carry numbers over to next column if they go over 10
- keep the decimal point in the same place through the method
- one digit in each square

Now it's your turn. Choose your *spice level.*

Spicy

£4.52 + £5.83
£4.65 + £3.87
£3.68 + £4.57
£6.54 + £3.65
£2.81 + £6.65
£5.48 + £4.78
£6.82 + £4.36
£7.95 + £4.24

Mild · Fill in the missing numbers:

1. £1.00 20p □
   + £2.00 30p □
   £3.00 □ 8p

2. £3.00 □ 5p
   + £2.00 □ 1p
   £5.00 20p □

3. £1.00 20p □
   + £3.00 20p □
   £4.00 □ 7p

4. £3.00 20p □
   + £1.00 50p □
   10p
   £4.00 □ 1p

5. £3.□2
   + £2.□6
   1
   £6. 2□

6. £4. 3□
   + £2. 2□
   1
   £6.□□

Hot

£4.75 + £1.82 + £2.37
£7.42 + £7.56 + £8.54
£8.57 + £6.79 + £1.65
£6.49 + £3.28 + £2.35
£5.78 + £4.21 + £7.39
£8.15 + £3.69 + £4.55
£6.34 + £4.52 + £1.91
£7.82 + £3.38 + £4.36

Challenge

Write 2 amounts that add to exactly £12.34.
BUT the 1ps must add to more than 10p and the 10ps must add to more than £1.

Further challenge
Write three amounts that add to exactly £15.46 – same rules as above!

Lesson 3

Adding Decimals in the Context of Money

Adding money

Model:

$$\begin{array}{r} \overset{1}{\pounds 13.25} \\ +\ \pounds 12.94 \\ \hline \pounds 26.19 \end{array} \qquad \begin{array}{r} \overset{1\,1\,1}{\pounds 15.84} \\ +\ \pounds 14.76 \\ \hline \pounds 30.60 \end{array}$$

- Try these.
- Choose your spice level.
- If it’s too easy, stop and try a trickier level.
- If it’s too difficult, stop and try an easier level.

Mild	Spicy	Hot
£3.67 + £7.32	£13.45 + £12.65	£25.45 + £13.67
£4.83 + £5.64	£11.68 + £18.24	£32.56 + £18.90
£5.72 + £3.35	£14.72 + £19.86	£27.83 + £23.57
£4.68 + £5.39	£17.45 + £13.67	£34.51 + £48.92
£4.24 + £8.75	£14.56 + £16.72	£46.78 + £37.81
£3.31 + £2.95	£12.47 + £15.72	£34.51 + £45.21
£5.68 + £1.72	£13.56 + £13.22	£42.12 + £53.48
£6.79 + £2.33	£17.84 + £11.22	£29.57 + £62.89

Extension

Mastery - To use my knowledge of the value of money to explain my reasoning

1. Emily, Tim and Jane are at the shop paying for sweets.

   Tim has got £1.52 and Jane has got 146p.

   Emily has got more money than Jane but less money than Tim.

   How much money could Emily have? Explain your answer.

2. Tanvi and Toby have collected money for charity.

   Tanvi has collected 354p whereas Toby has collected £3.54.

   Tanvi says, **"I have collected more money than Toby because 3.54 is a smaller number than 354."**

   Is she correct? Explain how you know.

3. Use these digits to make a price that is **more than three pounds** but **less than five pounds**.

   How many prices can you make following these rules?

   Put all of your answers in **ascending order**.

3	4	1

4. What would you rather have, **seven** 20p coins or **three** 50p coins? Explain your answer fully.