White Rose Maths

Summer - Block 2

Money

Year 4
Overview

Small Steps

- Pounds and pence
- Ordering money
- Estimating money
- Four operations

NC Objectives

Estimate, compare and calculate different measures, including money in pounds and pence.

Solve simple measure and money problems involving fractions and decimals to two decimal places.
Children develop their understanding of pounds and pence. This is the first time they are introduced to decimal notation for money. Once children are confident with this, they can move on to convert between different units of money.

Children can use models, such as the part-whole model, to recognise the total of an amount being partitioned in pounds and pence.

**Mathematical Talk**

How many pence make a pound?

Why do we write a decimal point between the pounds and pence?

How would we write 343 p using a pound sign?

How can the amounts be partitioned into pounds and pence?

Is there only one way to complete the part-whole model?

How can these amounts be converted into pounds and pence?
Some children are converting 1206 p into pounds.

Who is correct?

Whitney

Rosie is correct.

Whitney has not written the 6 p in the correct column.

Teddy has not understood how many pence there are in a pound, therefore his place value is incorrect.

What have the others done wrong?

Teddy

Eva has these coins:

She picks three coins at a time.

Decide whether the statements will be always, sometimes or never true.

• She can make a total which ends in 2
• She can make an odd amount.
• She can make an amount greater than £6
• She can make a total which is a multiple of 5 pence

Can you think of your own always, sometimes, never statements?

Never
• Sometimes e.g. £3.05
• Never – she can only choose three coins so the largest amount she can make is £5
• Always, because every coin is a multiple of 5 pence
Two classes save their pennies for a year.

Class A saves 3,589 pennies.
Class B saves 3,859 pennies.

Which class saves the most money?

Write the amounts as pence, then compare using <, > or =

\[
\begin{align*}
6,209 \text{ p} &< 60.09 \\
0.54 &< 54 \text{ p}
\end{align*}
\]

Write the amounts as pounds, then compare using <, > or =

\[
\begin{align*}
62 \text{ p} &< 6.02 \\
5,010 &< 5,010 \text{ p}
\end{align*}
\]

Order the amounts in ascending order.

\[
\begin{align*}
130 \text{ p} &< 0.32 \\
132 \text{ p} &< 13.20
\end{align*}
\]

Order the amounts in descending order.

\[
\begin{align*}
257 \text{ p} &< 2.50 \\
2,057 \text{ p} &< 25.07
\end{align*}
\]
Teddy, Dora and Jack are buying toys.

Teddy: I have £5.43

Dora: I have 534p

Jack: I have more money than Dora but less than Teddy.

How much money could Jack have? Is there only one answer?

What would you rather have, five 50p coins or twelve 20p coins? Explain your answer fully.

I would rather have five 50p coins because

50 × 5 = 250p

but

20 × 12 = 240p

Jack could have anything from £5.35 to £5.42

Children may record this as 535p to 542p

Amir has these digits cards.

He uses them to fill the frame below:

£ 4 6 3 2

He makes a total that is more than three pounds but less than six pounds.

How many amounts can he make?

Order your amounts in ascending order.

£3.24, £3.26
£3.42, £3.46
£3.62, £3.64
£4.23, £4.26
£4.32, £4.36
£4.62, £4.63
Place the amounts on the number line and round to the nearest pound.

- £3.67
- £3.21
- £3.87
- £7.54
- £7.45
- 701 p

Complete this number line.

Complete the table by rounding each amount and finding the total.

Annie has £15 to spend at the theme park. She rides on the roller coaster which costs £4.34. Then she rides on the big wheel which costs £3.85. Approximately how much money will she have left?
Three children buy toys.
Can you work out who buys what?
Tommy buys a toy which rounds to £5
but gets change from £5
Amir buys two toys which total
approximately £25
Eva’s toy costs 5 p more than the
number the cost rounds to.
If you had £30, what combinations could
you buy and what change would you
approximately get?

Tommy – car
Amira – computer
game and rugby
ball
Eve – panda

Mo buys some socks and gloves.
He estimates how much
he’ll spend.
£4 + £5 = £9
What could the actual price of the socks
and gloves have been?
Mo has £12
He says he has enough money to buy
three pairs of socks.
Do you agree?
Explain why.

The socks could cost between
£3.50 and £4.49
The gloves could cost between
£4.50 and £5.49
It depends. If the
socks costs £3.50
to £4, he will.
If the socks cost
£4.01 to £4.49, he
will not.
Ron has £48. He spends one quarter of his money. How much does he have left? Use the bar model to help.

A family is going bowling. How much does it cost for 1 child and 1 adult at peak time? How much does it cost for 1 adult and 2 children off peak?

Amir buys some clothes in a half price sale.
- Jumper £14
- Scarf £7
- Hat £2.50
- T-shirt £6.50

What would the full price of each item be? How much would he have paid altogether if they were full price? How much does he pay in the sale? How much does he save?
A class has £100 to spend on books.

**Book Prices**

Hardback = £8
Paperback = £4

How many books could they buy for £100?
How many different ways can this be done?

Dexter buys a teddy bear for £6.00, a board game for £4.00, a CD for £5.50 and a box of chocolates for £2.50

He has some discount vouchers. He can either get £10.00 off or pay half price for his items. Which voucher would save him more? Explain your thinking.

Children may explore this systematically e.g.

\[ 8 \times 12 = 96 \]

(12 hardbacks)

\[ 4 \times 1 = 4 \]

(1 paperback) etc.

Or they may start with paperback

\[ 4 \times 25 = 100 \]

(25 paperbacks) etc.

Total = £18

\[ 18 - 10 = 8 \]

\[ \frac{1}{2} \text{ of } 18 = 9 \]

\[ 18 - 9 = 9 \]

The £10 voucher would save more.

Here is Dora's receipt.

<table>
<thead>
<tr>
<th>Receipt</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandwich</td>
<td>£2.75</td>
</tr>
<tr>
<td>Orange juice</td>
<td>90 p</td>
</tr>
<tr>
<td>Crisps</td>
<td>60 p</td>
</tr>
<tr>
<td>Banana</td>
<td>30 p</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>£4.55</td>
</tr>
</tbody>
</table>

Use the information to complete the receipt:

- The sandwich costs £2.15 more than the crisps.
- The orange juice is the same price as the crisps and banana together.
- The banana is half the price of the crisps.