

























# KS2 Problem

## Mystery Money

Cut out the following coins or write their values on pieces of paper.



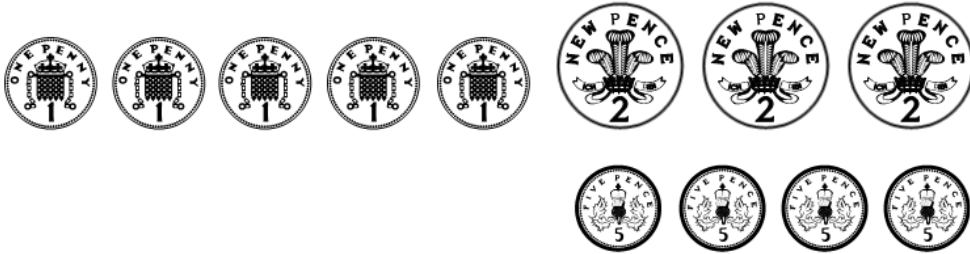
Place the coins into the blank spaces on this grid so that the rows and columns add up to the totals shown.

|     |   |   |   |  |   |   |     |
|-----|---|---|---|--|---|---|-----|
|     |   | 9p  | 10p   | 10p  | 8p  | 10p   | 11p |
| 10p |  |   |  |  |  |  |     |
| 10p |  |  |  |  |  |   |     |
| 9p  |  |  |  |  |   |  |     |
| 10p |  |   |  |  |   |  |     |
| 9p  |  |  |   |  |  |  |     |
| 10p |   |  |  |  |   |  |     |

























# KS2 Problem

## Challenge 1

Cut out the following coins or write their values on pieces of paper.



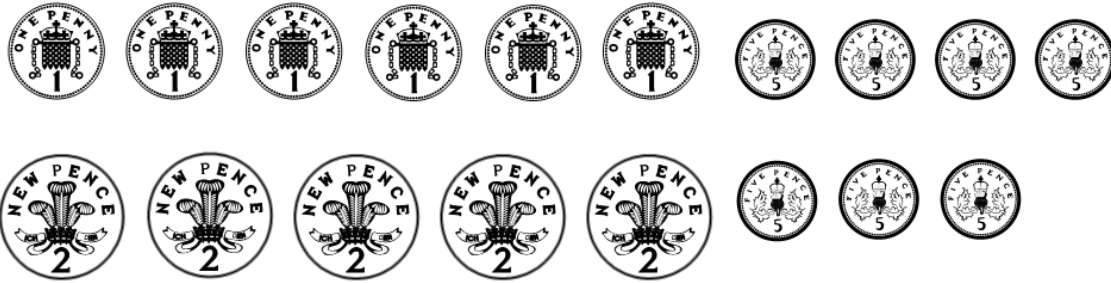
Place the coins into the blank spaces on this grid so that the rows and columns add up to the totals shown.

|     | 16p   | 10p   | 16p   | 14p  | 20p   | 15p   |
|-----|---|---|---|--|---|---|
| 18p |  |   |  |  |  |   |
| 20p |   |  |  |  |  |  |
| 16p |  |  |  |  |   |   |
| 11p |  |  |  |  |  |   |
| 13p |  |   |  |  |  |  |
| 13p |  |  |  |  |   |   |



















# KS2 Problem

## Challenge 2

Cut out the following coins or write their values on pieces of paper.




























Place the coins into the blank spaces on this grid so that the rows and columns add up to the totals shown.

|     | 22p   | 19p   | 23p   | 11p  | 12p   | 17p   |
|-----|---|---|---|--|---|---|
| 23p |   |   |  |  |  |  |
| 13p |  |  |   |  |   |   |
| 14p |   |   |  |  |  |  |
| 12p |   |  |  |  |   |   |
| 19p |  |  |  |  |   |   |
| 23p |  |  |   |   |   |   |

# KS2 Problem

## Support for Parents and Carers

When deciding where to place the coins, encourage your child to look for a row or column that only has one blank space, as these have only one possibility.

|     | 9p  | 10p   | 10p   | 8p  | 10p   | 11p   |
|-----|---|---|---|---|---|---|
| 10p |  |   |  |   |  |  |
| 10p |  |  |  |   |  |   |
| 9p  |  |  |  |   |   |  |
| 10p |  |   |  |  |   |  |
| 9p  |  |  |   |  |  |  |
| 10p |   |  |  |  |   |  |





































This row and this column only have one blank space.

There is only one possible coin for these two blank spaces.

After coins have been put in these blank spaces, look for more rows and columns that only have one blank space.





































If there are no rows or columns with only one blank space then encourage your child to use what we call a trial and improvement method to solve this problem. That means that if their first guess at the coins isn't correct, they don't remove them all, they think about what needs to be changed and how, rather than starting from scratch each time. When your child has solved the problem, ask them how they did it.

## Solution





































|     | 9p  | 10p   | 10p   | 8p  | 10p   | 11p   |
|-----|---|---|---|---|---|---|
| 10p |  |  |  |  |  |  |
| 10p |  |  |  |  |  |  |
| 9p  |  |  |  |  |  |  |
| 10p |  |  |  |  |  |  |
| 9p  |  |  |  |  |  |  |
| 10p |  |  |  |  |  |  |

# KS2 Problem

## Solution – Challenge 1

|     | 16p   | 10p   | 16p   | 14p   | 20p   | 15p   |
|-----|---|---|---|---|---|---|
| 18p |  |  |  |  |  |  |
| 20p |  |  |  |  |  |  |
| 16p |  |  |  |  |  |  |
| 11p |  |  |  |  |  |  |
| 13p |  |  |  |  |  |  |
| 13p |  |  |  |  |  |  |

## Solution – Challenge 2

|     | 22p   | 19p   | 23p   | 11p   | 12p   | 17p   |
|-----|---|---|---|---|---|---|
| 23p |  |  |  |  |  |  |
| 13p |  |  |  |  |  |  |
| 14p |  |  |  |  |  |  |
| 12p |  |  |  |  |  |  |
| 19p |  |  |  |  |  |  |
| 23p |  |  |  |  |  |  |