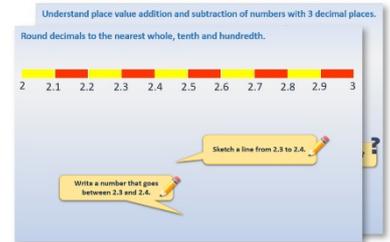


# Week 15, Day 3

## Coin puzzles

Each day covers one maths topic. It should take you about 1 hour or just a little more.

1. Start by reading through the **Learning Reminders**.



2. Tackle the questions on the **Practice Sheet**.  
There might be a choice of either **Mild** (easier) or **Hot** (harder)!  
Check the answers.

Practice Sheet (Hot)

Practice Sheet (Mild)

Place value addition and subtraction

Sheet 1

1. $4.538 + 0.2$	2. $4.538 + 0.03$
3. $4.538 - 0.004$	4. $4.538 - 0.02$
5. $6.231 + 0.11$	6. $6.231 + 0.101$
7. $6.231 + 0.011$	8. $5.846 - 0.211$
9. $5.846 - 0.13$	10. $5.846 - 0.013$
11. $5.846 - 0.204$	12. $4.789 + 0.001$

Challenge

Start at 4.562.  
Add tenths and hundredths to make an addition chain ending with the number 4.627.  
Start at 107.69.  
Subtract tenths, hundredths and thousandths to make a subtraction chain ending with the number 9.782.

3. Think you've cracked it? Whizzed through the Practice Sheets?  
Have a go at the **Investigation**...

# Learning Reminders

Solve coin puzzles.



These four coins need to be arranged in a line according to the following rules.

1. The first two coins have a total of 12p.
2. The first coin is double the value of the third coin.
3. The second and third coins have a total of 7p.
4. The second coin is double the value of the last coin.

Look at the first clue. What must the first 2 coins be?



2p and 10p, but we don't know what order yet.

Look at the third clue. What must the second coin be? 2p.



Now we're getting there!  
Carry on working through the other clues.

Tip! When you have a solution, check through the clues again to make sure that your solution meets all the rules.

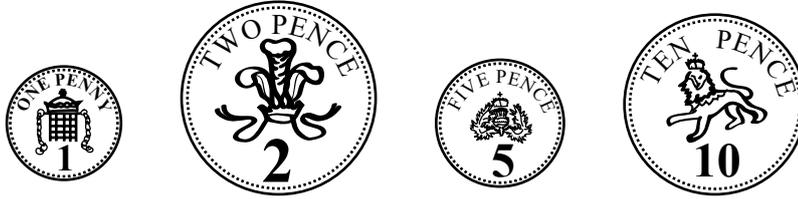
1. The first two coins have a total of 12p.
2. The first coin is double the value of the third coin.
3. The second and third coins have a total of 7p.
4. The second coin is double the value of the last coin.



Solve coin puzzles.

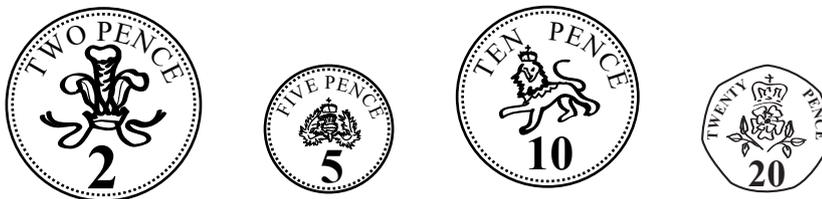
## Practice Sheet for All Coin logic puzzles

Arrange these four coins in a row to match the clues.



1. The first coin is worth 3p more than the second coin.
2. The first coin is half the value of the last coin.
3. The second coin is twice the value of the third coin.

Arrange these four coins in a row to match the clues.



1. The first coin is worth double the second coin.
2. The second coin is worth double the third coin.
3. The last two coins have a total of 7p.

**Hot:** Now try this Challenge.

### Challenge

Now choose how to line up four coins, 2p, 5p, 10p and 20p.  
Write your own clues for other children to guess your order of coins!

## Practice Sheet Answers

### Coin logic puzzles

Arrange these four coins in a row to match the clues.

1. The first coin is worth 3p more than the second coin.
2. The first coin is half the value of the last coin.
3. The second coin is twice the value of the third coin.



Arrange these four coins in a row to match the clues.

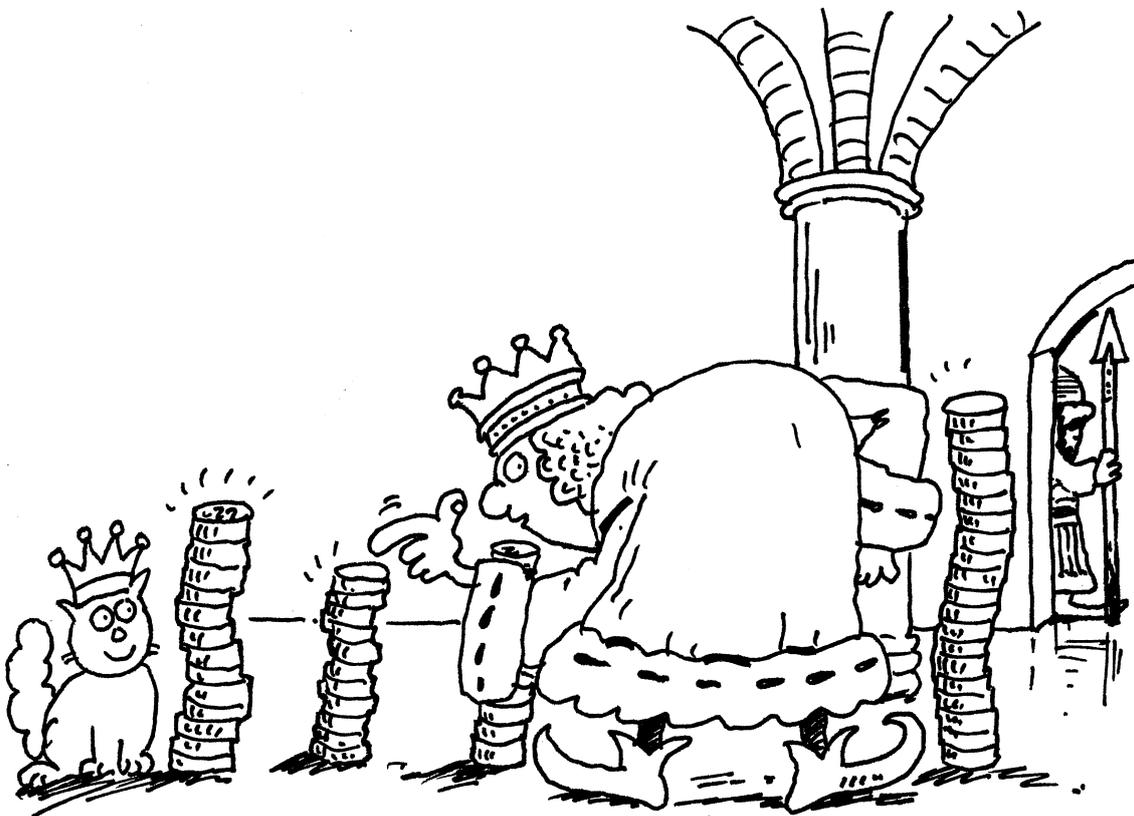
1. The first coin is worth double the second coin.
2. The second coin is worth double the third coin.
3. The last two coins have a total of 7p.



## Investigation

### Queen Esmerelda's coins

Queen Esmerelda had 20 gold coins.  
She put them in four piles.



- ◆ The first pile had four more coins than the second.
- ◆ The second pile had one less coin than the third.
- ◆ The fourth pile had twice as many coins as the second.

How many gold coins did Esmerelda put in each pile?