# Week 11, Day 4 <br> Use coins to make amounts 

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. They come from our PowerPoint slides.

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

3. Finding it tricky? That's OK... have a go with a grown-up at A Bit Stuck?

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

## Learning Reminders



## Learning Reminders



## Learning Reminders



## Practice Sheet Mild <br> Paying with exact amounts

Find two different ways to pay for each fruit - which uses the smallest number of coins?

|  |  | Set 1 | Set 2 |
| :--- | :--- | :--- | :--- |
| $17 p$ |  |  |  |
| $28 p$ |  |  |  |
| $41 p$ |  |  |  |
| $36 p$ |  |  |  |
| 520 |  |  |  |

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## Practice Sheet Hot Paying with exact amounts

Find three different ways to pay for each fruit - which uses the smallest number of coins?

|  | Set 1 | Set 2 | Set 3 |
| :---: | :---: | :---: | :---: |
| 47p |  |  |  |
| 52p |  |  |  |
| 69p |  |  |  |
| 83p |  |  |  |
| £1 |  |  |  |
| £ 1.44 |  |  |  |
| £1.75 |  |  |  |
| £1.89 |  |  |  |

## Practice Sheets Answers

Paying with exact amounts (mild)

|  | Set 1 | Set 2 |
| :--- | :--- | :--- |
| $17 p$ | 10p, 5p, 2p <br> uses fewest coins | e.g. 10p, 5p, 1p, 1p |
| $28 p$ | 20p, 5p, 2p, 1p <br> uses fewest coins |  |
| e.g. 10p, 10p, 2p, 2p, 2p, 1p, |  |  |

## Practice Sheets Answers

## Paying with exact amounts (hot)

|  | Set 1 | Set 2 | Set 3 |
| :---: | :---: | :---: | :---: |
| 47p | 20p, 20p, 5p, 2p uses fewest coins | $\begin{aligned} & \text { e.g. } \\ & 20 p, 10 p, 10 p, 2 p, \\ & 2 p, 2 p, 1 p \end{aligned}$ | 20p, 10p, 5p, 5p, <br> 5p, 2p |
| 52p | $50 p, 2 p$ <br> uses fewest coins | $\begin{aligned} & \text { e.g. } \\ & \text { 20p, 20p, 10p, 2p } \end{aligned}$ | $\begin{aligned} & \text { e.g. } \\ & 10 p, 10 p, 10 p, \\ & 20 p, 1 p, 1 p \end{aligned}$ |
| 69p | $\begin{aligned} & \text { 50p, 10p, 5p, 2p, } \\ & 2 p \\ & \text { uses fewest coins } \end{aligned}$ | $\begin{aligned} & \text { e.g. } \\ & 20 p, 20 p, 20 p, 5 p, \\ & 2 p, 1 p, 1 p \end{aligned}$ | e.g. 20p, 20p, 10p, 10p, 5p, 2p, 2p |
| $83 p$ | ```50p, 20p, 10p, 2p, 1p uses fewest coins``` | $\begin{aligned} & \text { e.g. } \\ & 20 p, 20 p, 20 p, \\ & 20 p, 2 p, 1 p \end{aligned}$ | ```e.g. 20p, 20p, 10p, 10p, 10p, 5p, 5p, 2p, 1p``` |
| £1 | £1 <br> uses fewest coins | $\begin{aligned} & \text { e.g. } \\ & 20 p, 20 p, 20 p, \\ & 20 p, 20 p \end{aligned}$ | $\begin{aligned} & \text { e.g. } \\ & \text { 50p, 50p } \end{aligned}$ |
| £1.44 | £1, 20p, 20p, 2p, 2p <br> uses fewest coins | $\begin{aligned} & \text { e.g. } \\ & \text { 50p, 50p, 20p, } \\ & \text { 20p 2p, 1p, 1p } \end{aligned}$ | ```e.g. 20p, 20p, 20p, 20p, 20p, 10p, 10p, 10p, 10p, 2p, 2p``` |
| $£ 1.75$ | £1,50p, 20p, 5p uses fewest coins | $\begin{aligned} & \text { e.g. } \\ & \text { £1, 20p, 20p, 20p, } \\ & 10 p, 5 p \end{aligned}$ | $\begin{aligned} & \text { e.g. } \\ & 50 p, 50 p, 50 p, \\ & 20 p, 5 p \end{aligned}$ |
| £1.89 | £1, 50p, 20p,10p, 5p, 2p, 2p uses fewest coins | ```e.g. 50p, 50p, 20p, 20p, 20p, 20p, 5p 2p, 2p``` | ```e.g. £1, 20p, 20p, 20p, 10p, 10p, 5p, 2p, 1p.1p``` |

## Work in pairs

Things you will need:

- A pot of 1p, 2p, 5p, 10p and 20p coins
- 11p to 30p cards


## What to do:

- Shuffle the cards and place face down. Take the top card and turn it over.
- Work together to make the amount on the card using coins. Place the coins on the card in a tower. Try and keep your towers as small as possible!
- Repeat with as many cards as you can.
- You will score one point for each correct total, and a bonus point if you used the smallest number of coins possible.



## S-t-r-e-t-c-h:

Choose three amounts between 30p and 40p to make using the smallest number of coins possible.

## Learning outcomes:

- I can make amounts up to 30 p using coins.
- I am beginning to make amounts up to 40 p using the smallest number of coins possible.




