## Number Bonds and Money

Adult Information: In Year 2, children learn the pairs of numbers that make 20, as this helps them to develop their understanding of number patterns and can be applied to bigger numbers - for example $14+6=20$, so $140+60=200$. Children are also developing their understanding of the relationship between addition and subtraction, realising, for example, that if $12+8=20$, then $20-8=12$. To show real fluency, children then need to be able to apply these skills to 'real life' situations, often involving money. Help your child develop a good understanding of the value of different coins by talking to them about money, letting them explore coins and encouraging them to make small purchases in shops.

## Number Bonds and Money

1. Sam has 15 p. Which coin does he need to make 20 p altogether?


2. Meg has $19 p$. Which coin does she need to make 20p altogether?


3. Joe has 10 p. Which coin does he need to make 20p altogether?

4. Mia has 18p. Which coin does she need to make 20p altogether?
$\square$

5. Beth has 17p. Which two coins does she need to make 20p altogether?

6. Oliver has 12 p. Which three coins does he need to make 20p altogether?


Challenge: How many different ways can you find to make 20p altogether?

## Number Bonds and Money - Answers

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2. Meg has $19 p$. Which coin does she need to make 20p altogether?

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4. Mia has $18 p$. Which coin does she need to make 20p altogether?

5. Beth has 17p. Which two coins does she need to make 20p altogether?

6. Oliver has 12 p. Which three coins does he need to make 20 p altogether?


Challenge: How many different ways can you find to make 20p altogether?
Open ended investigation, look for children being methodical.
Answers include:
20 lots of 1 p, 10 lots of 2 p, four 5ps, two 10ps, one $20 p$, plus various combinations of different coins, e.g. 10p + 5p + 5p

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## Number Bonds and Money

1. Sam has 14 p. Which coins does he need to make 20 p altogether?

2. Joe has 17p. Which two coins does he need to make 20p altogether?

3. Molly buys an apple for 16p. She gives the shopkeeper this coin: The shopkeeper gives her two coins in change. What are those coins?

4. Tom buys a pen for 13p. He gives the shopkeeper this coin: The shopkeeper gives him two coins in change. What are
 those coins?

5. William buys a notebook for 11p and pays with a 20p piece. Write three different sets of coins that he might be given as change.
$\square$
$\square$
$\square$

## Number Bonds and Money - Answers

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 coins?

4. Tom buys a pen for 13p. He gives the shopkeeper this coin: The shopkeeper gives him two coins in change. What are
 those coins?

5. William buys a notebook for 11p and pays with a 20 p piece. Write three different sets of coins that he might be given as change.
Answers: Various combinations here, as long as each one makes the correct change of 9 p. For example, $5 p, 2 p, 2 p$, or $5 p, 2 p, 1 p, 1 p$. For a challenge, ask your child to think of the smallest number of coins that William might be given.

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## Number Bonds and Money



You are at the shop buying some fruit and you have 20p to spend.
Fill in the table:

| Fruit bought | Price | Change from 20p | Coins to give change |
| :---: | :---: | :---: | :---: |
| banana | $12 p$ | $8 p$ | $5 p, 2 p$ and $1 p$ |
| peach and apple | $11 p+3 p=14 p$ | $6 p$ |  |
| grapes and plum | $15 p+2 p=17 p$ |  |  |
| lemon and <br> raspberries |  |  |  |
| pineapple |  |  |  |
| lemon and peach |  |  |  |
| strawberries and <br> pear |  |  |  |
| two lemons |  |  |  |
| Challenge: What is the smallest number of coins the shopkeeper could give as <br> change each time? Write the coins: |  |  |  |

## Number Bonds and Money

## Challenge

You have 30p to spend at the fruit shop. You want to make a fruit salad with at least three different fruits in it - maybe more. What different combinations could you buy?

Which is the most expensive?
Which is the least expensive?
For each one, show how much it will be, what your change will be and how the shopkeeper could give you your change.


| Fruit bought | Price | Change from 30p | Coins to give change |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Number Bonds and Money - Answers

You are at the shop buying some fruit, and you have 20p to spend.
Fill in the table:

| Fruit bought | Price | Change from 20p | Coins to give change |
| :---: | :---: | :---: | :---: |
| banana | $12 p$ | $8 p$ | For example $5 p, 2 p$ and $1 p$ |
| peach and apple | $11 p+3 p=14 p$ | $6 p$ | For example $5 p$ and $1 p$ |
| grapes and plum | $15 p+2 p=17 p$ | $\mathbf{3 p}$ | For example $2 p$ and $1 p$ |
| lemon and <br> raspberries | $\mathbf{9 p}+\mathbf{7 p}=\mathbf{1 6 p}$ | $\mathbf{4 p}$ | For example $2 p$ and $2 p$ |
| pineapple | $\mathbf{1 8 p}$ | $\mathbf{2 p}$ | $2 p$ |
| lemon and peach | $\mathbf{9 p}+\mathbf{1 1 p = \mathbf { 2 0 }}$ | $\mathbf{0}$ | No change |
| strawberries and <br> pear | $\mathbf{1 0 p}+\mathbf{5 p = 1 5 p}$ | $\mathbf{5 p}$ | $5 p$ |
| two lemons | $\mathbf{9 p}+\mathbf{9 p = 1 8 p}$ | $\mathbf{2 p}$ | $\mathbf{2 p}$ |

Challenge: What is the smallest number of coins the shopkeeper could give as change each time? Write the coins:

Answer: As shown above

