

Reasoning and Problem Solving

Step 5: Divide by 5

National Curriculum Objectives:

Mathematics Year 2: (2C6) [Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers](#)

Mathematics Year 2: (2C7) [Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication \(\$\times\$ \), division \(\$\div\$ \) and equals \(=\) signs](#)

Mathematics Year 2: (2C8) [Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts](#)

Differentiation:

Questions 1, 4 and 7 (Reasoning)

Developing Identify which statement is correct using knowledge of dividing by 5, includes pictorials and where images are easily grouped.

Expected Identify which statement is correct using knowledge of dividing by 5.

Includes using multiplication as the inverse.

Greater Depth Identify which statement is correct using knowledge of dividing by 5.

Includes questions in context where children need to create their own pictorial support.

Questions 2, 5 and 8 (Reasoning)

Developing Identify how much money a group will receive using knowledge of dividing by 5, includes pictorials and where images are easily grouped.

Expected Identify how much money a group will receive using knowledge of dividing by 5

Includes some pictorial support.

Greater Depth Identify a mystery number using knowledge of dividing by 5. Includes

questions in context where children need to create their own pictorial support.

Questions 3, 6 and 9 (Problem Solving)

Developing Find and correct the pictorial mistake. Includes pictorials and where images are easily grouped.

Expected Find and correct the mistake. Includes some pictorial support and using multiplication as the inverse.

Greater Depth Find and correct the mistake. Includes questions in context where children need to create their own pictorial support.

More [Year 2 Multiplication and Division](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Divide by 5

1a. 15 badges are shared equally between 5 people.



Ivy

I think they will get 4 badges each.

I think they will get 3 badges each.



Olly

Who is correct? Explain why.



R

Divide by 5

1b. 20 counters are shared equally between 5 people.



Hannah

I think they will get 4 counters each.

I think they will get 5 counters each.



Zoe

Who is correct? Explain why.



R

2a. John wants to share his money between his 5 friends. How much will they each get?



Explain your answer.



R

2b. Carol wants to share her money between her 5 friends. How much will they each get?

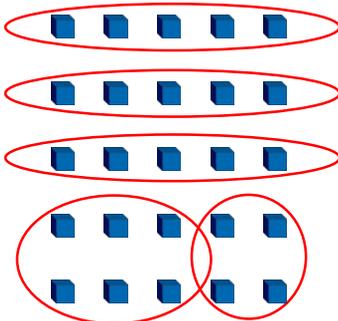


Explain your answer.



R

3a. Spot and correct the mistake.

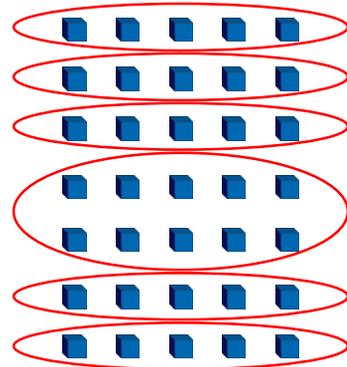


$$20 \div 5 = 5$$



PS

3b. Spot and correct the mistake.



$$35 \div 5 = 6$$



PS

Divide by 5

4a. 50 stickers are shared equally between 5 people.



Kris

I think they will get 10 stickers each



Dee

I think they will get 9 stickers each.

Who is correct? Explain why using a division picture to prove it.



R

Divide by 5

4b. 55 crayons are shared equally between 5 people.



Bob

I think they will get 9 crayons each



Anna

I think they will get 11 crayons each.

Who is correct? Explain why using a division picture to prove it.



R

5a. Cara wants to share her money between her 5 friends. How much will they each get?



Explain your answer.



R

5b. Kevin wants to share his money between his 5 friends. How much will they each get?



Explain your answer.



R

6a. Spot and correct the mistakes.

$$\begin{array}{l} 30 \div 5 = 7 \\ 3 \times 5 = 15 \\ 40 \div 5 = 9 \\ 2 \times 5 = 10 \end{array}$$



PS

6b. Spot and correct the mistakes.

$$\begin{array}{l} 45 \div 5 = 8 \\ 6 \times 5 = 30 \\ 25 \div 5 = 4 \\ 4 \times 5 = 20 \end{array}$$



PS

Divide by 5

7a. Joel had 45 sweets to share between 5 people. Joel ate 5 sweets before sharing the rest.



Joel

I think they will get 8 sweets each

I think they will get 7 sweets each.



Mina

Who is correct? Explain why using a division picture and a multiplication sentence to prove it.



R

Divide by 5

7b. Kasey had 35 sweets to share between 5 people. Kasey ate 5 sweets before she shared the rest.



José

I think they will get 8 sweets each

I think they will get 6 sweets each.



Kasey

Who is correct? Explain why using a division picture and a multiplication sentence to prove it.



R

8a. Lily wants to share 5 pence coins between her 5 friends. Each friend receives 2 coins. How many coins did Lily share? How much money will they each get?



Explain your answer by drawing the extra coins and sharing them.



R

8b. Jamal wants to share 5 pence coins between his 7 friends. He shares 70p altogether. How many coins does each friend get? How many 5 pence coins will he need altogether?



Explain your answer by drawing the extra coins and sharing them.



R

9a. Spot and correct the mistakes.

5 packets of crisps shared between 5 people = 1 packet each

Nine lots of 5 sweets equals 40

5 cinema tickets = £30, each ticket costs £6 each

4 lots of 5p = 25 one pence coins



PS

9b. Spot and correct the mistakes.

10 marbles shared between 5 people = 1 marble each

Three packs of five cards equals 15 cards

5 train rides = £20, each train ride costs £5 each

Eight 5 pence coins = two 20 pence coins



PS

Reasoning and Problem Solving Divide by 5

Developing

- 1a. Oly is correct because $15 \div 5 = 3$.
- 2a. 3p each, because $15 \div 5 = 3$
- 3a. It should say $25 \div 5 = 5$. The last two groups are uneven, it should be 5 groups of 5.

Expected

- 4a. Kris is correct because $50 \div 5 = 10$.
- 5a. 5p, because $25 \div 5 = 5$
- 6a. $30 \div 5 = 6$, $40 \div 5 = 8$

Greater Depth

- 7a. Joel is correct because $45 - 5 = 40$; $40 \div 5 = 8$; $5 \times 8 = 40$
- 8a. Lily had ten coins to share. Each friend will get 10p each.
- 9a. Nine lots of 5 sweets equals 45; 4 lots of 5p = 20 one pence coins

Reasoning and Problem Solving Divide by 5

Developing

- 1b. Hannah is correct because $20 \div 5 = 4$.
- 2b. 4p each, because $20 \div 5 = 4$
- 3b. It should say $35 \div 5 = 7$. One of the groups contains 10 instead of two groups containing 5.

Expected

- 4b. Anna is correct because $55 \div 5 = 11$.
- 5b. 2p, because $10 \div 5 = 2$
- 6b. $45 \div 5 = 9$, $25 \div 5 = 5$

Greater Depth

- 7b. Kasey is correct because $35 - 5 = 30$, $30 \div 5 = 6$. $5 \times 6 = 30$.
- 8b. Each friend gets 2 coins each; he will need 14 coins altogether.
- 9b. 10 marbles shared between 5 people = 2 marbles each; 5 train rides = £20, each train ride costs £4 each.