Reasoning and Problem Solving
Step 8: Divide 2-Digits by 10

National Curriculum Objectives:

Mathematics Year 4: (4F9) Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths

Differentiation:

Questions 1, 4 and 7 (Reasoning)
Developing Identify and explain the odd out. Includes place value grids to support.
Expected Identify and explain the odd out. Includes mixture of place value grids, Gattegno charts and digits.
Greater Depth Identify and explain the odd out. Includes digits only and no pictorial support.

Questions 2, 5 and 8 (Problem Solving)
Developing Use the counters to complete the place value grid in the number sentence.
Expected Use the number cards to complete the number sentence. Find 3 possibilities.
Greater Depth Use the answers on the number cards to create 3 number sentences.

Questions 3, 6 and 9 (Reasoning)
Developing Explain if a calculation is correct. Includes place value grids to support.
Expected Explain if a calculation is correct. Includes use of Gattegno charts for pictorial representation.
Greater Depth Explain if a calculation is correct. Includes no pictorial support.
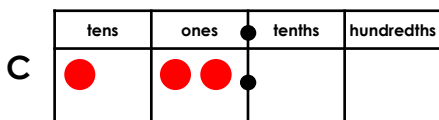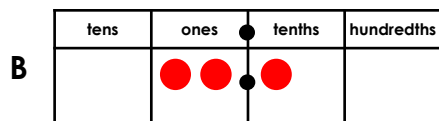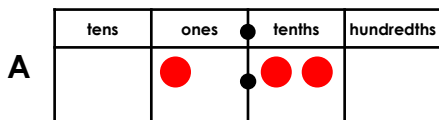
More Year 3 and 4 Decimals resources.

Did you like this resource? Don't forget to review it on our website.

Divide 2-Digits by 10

Divide 2-Digits by 10

1a. Use your knowledge of dividing 2-digits by 10 to find the odd one out.

tens	ones	tenths	hundredths

A

tens	ones	tenths	hundredths

B

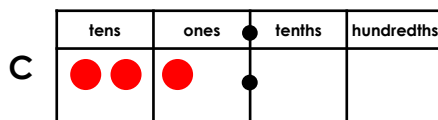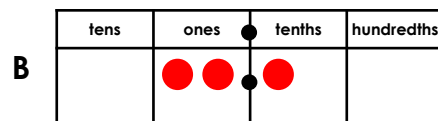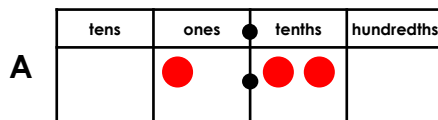| tens	ones	tenths	hundredths

C

Explain your reasoning.

4 R

1b. Use your knowledge of dividing 2-digits by 10 to find the odd one out.

tens	ones	tenths	hundredths

A

tens	ones	tenths	hundredths

B

tens	ones	tenths	hundredths

C

Explain your reasoning.

4 R

2a. Add the counters to the place value grid to complete the number sentence.

tens	ones	tenths	hundredths
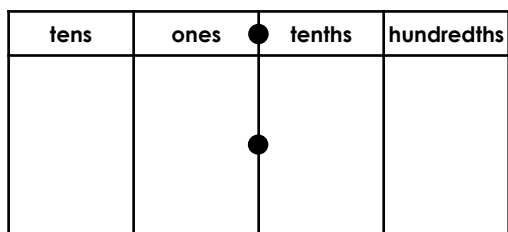
$\div 10 = 5.2$

4 PS

2b. Add the counters to the place value grid to complete the number sentence.

tens	ones	tenths	hundredths
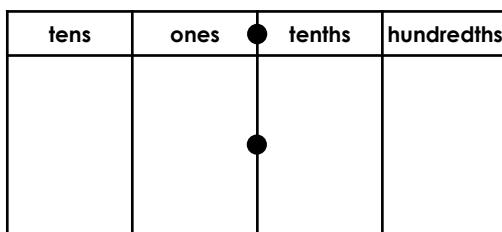
$\div 10 = 4.3$

4 PS

3a. Freya has divided 24 by 10 in the place value grid below.

tens	ones	tenths	hundredths
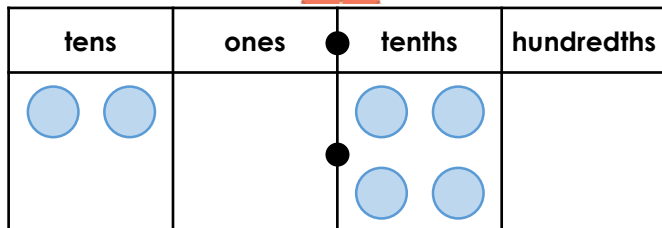
Is she correct? Convince me.

4 R

3b. Oscar has divided 32 by 10 in the place value grid below.

tens	ones	tenths	hundredths

Is he correct? Convince me.

4 R

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Reasoning and Problem Solving – Divide 2-Digits by 10 – Year 4 Developing

4a. Use your knowledge of dividing 2-digits by 10 to find the odd one out.

A

10	20	🔴	40	50	60	70	80	90
1	2	3	🔴	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9

B

tens	ones	tenths	hundredths
	🔴🔴 ● 🔴🔴		
	🔴 🔴		

C **4.3**

Explain your reasoning.

4 R

4b. Use your knowledge of dividing 2-digits by 10 to find the odd one out.

A

10	20	30	40	50	60	70	80	90
🔴	2	3	4	5	6	7	8	9
0.1	0.2	🔴	0.4	0.5	0.6	0.7	0.8	0.9

B

tens	ones	tenths	hundredths
🔴	🔴🔴 ●		
	🔴		

C **3.1**

Explain your reasoning.

4 R

5a. Use the cards to complete the number sentence. Find 3 possibilities.

9.3	58	10	93
36	39	5.8	3.6

◻ ÷ ◻ = ◻

4 PS

5b. Use the cards to complete the number sentence. Find 3 possibilities.

25	68	4.7	86
8.6	10	2.5	47

◻ ÷ ◻ = ◻

4 PS

6a. Callie has divided 71 by 10 on the Gattegno chart below.

10	20	30	40	50	60	70	🔴	90
1	🔴	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9

Is she correct? Convince me.

4 R

6b. Fletcher has divided 54 by 10 on the Gattegno chart below.

10	20	30	40	🔴	60	70	80	90
1	2	3	🔴	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9

Is he correct? Convince me.

4 R

Divide 2-Digits by 10

Divide 2-Digits by 10

7a. Use your knowledge of dividing 2-digits by 10 to find the odd one out.

6.7	81	4.5
24	45	67
8.1	2.4	5.4

Explain your reasoning.

GD

4 R

7b. Use your knowledge of dividing 2-digits by 10 to find the odd one out.

95	5.1	3.2
51	32	46
4.6	2.3	9.5

Explain your reasoning.

GD

4 R

8a. The number cards below are possible answers to the calculation:

☐ ÷ 10 = ☐

| 5.9 | 7.6 | 1.5 |

Use them to write 3 number sentences.

GD

4 PS

8b. The number cards below are possible answers to the calculation:

☐ ÷ 10 = ☐

| 2.7 | 8.3 | 6.4 |

Use them to write 3 number sentences.

GD

4 PS

9a. Yasmin has divided 92 by 10.

Yasmin says,

> The answer is 920

Is she correct? Convince me.

GD

4 R

9b. Imran has divided 77 by 10.

Imran says,

> The answer is 0.77

Is he correct? Convince me.

GD

4 R

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Reasoning and Problem Solving – Divide 2-Digits by 10 – Year 4 Greater Depth

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Developing

1a. B is the odd one out because C ÷ 10 = A

2a. 5 counters in the tens column, 2 counters in the ones

3a. Freya is not correct because she has only moved the counters in the ones column. The correct answer is 2.4

Expected

4a. C is the odd one out because A ÷ 10 = B

5a. 36 ÷ 10 = 3.6, 58 ÷ 10 = 5.8, 93 ÷ 10 = 9.3

6a. Callie is not correct because she has moved the counters right instead of down. The correct answer is 7.1

Greater Depth

7a. 5.4 is the odd one out because it is the only number which cannot be used in a division by 10 number sentence. 81 ÷ 10 = 8.1, 24 ÷ 10 = 2.4, 45 ÷ 10 = 4.5, 67 ÷ 10 = 6.7

8a. 59 ÷ 10 = 5.9, 76 ÷ 10 = 7.6, 15 ÷ 10 = 1.5

9a. Yasmin is incorrect because 92 ÷ 10 = 9.2. 920 = 92 x 10.

Developing

1b. A is the odd one out because C ÷ 10 = B

2b. 4 counters in the tens column, 3 counters in the ones

3b. Oscar is correct because he has moved the counters one column to the right to find the answer 3.2

Expected

4b. C is the odd one out because B ÷ 10 = A

5b. 25 ÷ 10 = 2.5, 86 ÷ 10 = 8.6, 47 ÷ 10 = 4.7

6b. Fletcher is not correct because he has not moved the counters. The correct answer is 5.4

Greater Depth

7b. 2.3 is the odd one out because it is the only number which cannot be used in a division by 10 number sentence. 95 ÷ 10 = 9.5, 51 ÷ 10 = 5.1, 32 ÷ 10 = 3.2, 46 ÷ 10 = 4.6

8b. 27 ÷ 10 = 2.7, 83 ÷ 10 = 8.3, 64 ÷ 10 = 6.4

9b. Imran is incorrect because 77 ÷ 10 = 7.7. 0.77 = 77 ÷ 100.

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