

Homework/Extension

Step 10: Divide 3 Digits by 1 Digit

National Curriculum Objectives:

Mathematics Year 4: (4C6a) [Recall multiplication and division facts for multiplication tables up to \$12 \times 12\$](#)

Mathematics Year 4: (4C6b) [Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers](#)

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Find and correct the mistake by dividing a 3-digit number by a 1-digit number with pictorial support. No exchanges but includes remainders.

Expected Find and correct the mistake by dividing a 3-digit number by a 1-digit number with some pictorial support. Includes exchanges and remainders.

Greater Depth Find and correct the mistake by dividing a 3-digit number by a 1-digit number. Create own pictorial support where the calculation includes exchanges and remainders with partial information provided.

Questions 2, 5 and 8 (Varied Fluency)

Developing Complete and compare the division models. No exchanges but includes remainders. Models scaffolded.

Expected Complete and compare the division models. Includes exchanges and remainders. Models scaffolded.

Greater Depth Compare the division calculations by completing the division models. Create own pictorial support where calculations include exchanges and remainders.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Explain whether an odd one out statement is correct by dividing 3-digit numbers by 1-digit numbers with pictorial support. No exchanges but includes remainders.

Expected Explain whether an odd one out statement is correct by dividing 3-digit numbers by 1-digit numbers. Includes exchanges and remainders.

Greater Depth Create calculations to match an odd one out statement by dividing 3-digit numbers by 1-digit numbers. Create own pictorial support where calculations include exchanges and remainders.

More [Year 4 Multiplication and Division](#) resources.

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

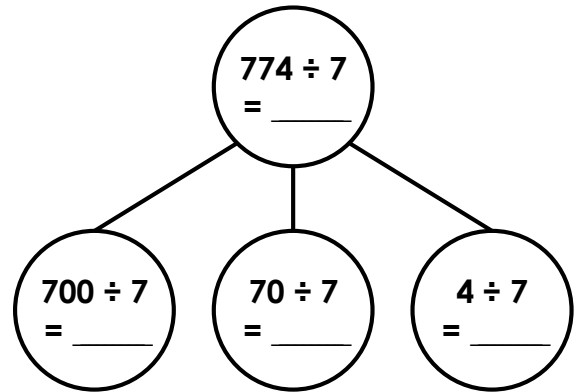
Divide 3 Digits by 1 Digit

1. Aleena has solved the calculation $774 \div 7$ using a part-whole model.

She says,



My answer has a remainder of 3.

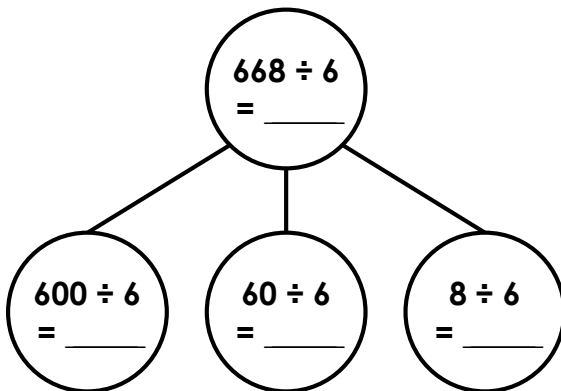


Find and correct Aleena's mistake.



VF
HW/Ext

2. Compare the two division models by adding $<$, $>$ or $=$ to the box.



$559 \div 5$

H	T	O	
100	10	1	1
100	10	1	1
100	10	1	1
100	10	1	1
100	10	1	1



VF
HW/Ext

3. Lee is comparing the following calculations. He writes the statement below.

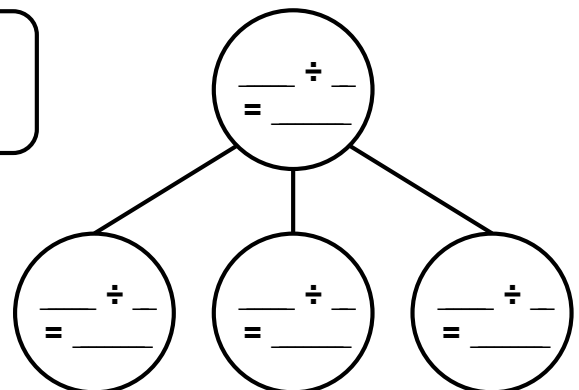


Calculation A is the odd one out as it has a different answer to the others.

A. $449 \div 4 =$

B. $779 \div 7 =$

C. $557 \div 5 =$



Do you agree with Lee? Explain your answer using the blank part-whole model.



RPS
HW/Ext

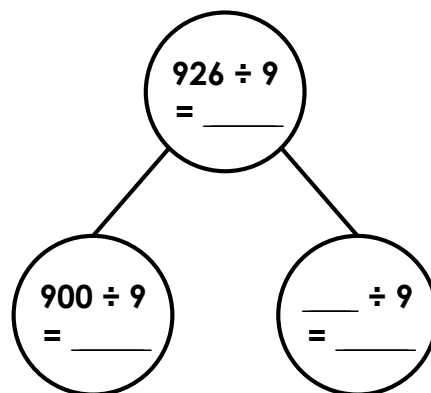
Divide 3 Digits by 1 Digit

4. Suzy has solved the calculation $926 \div 9$ using a part-whole model.

She says,



My answer has no remainder.

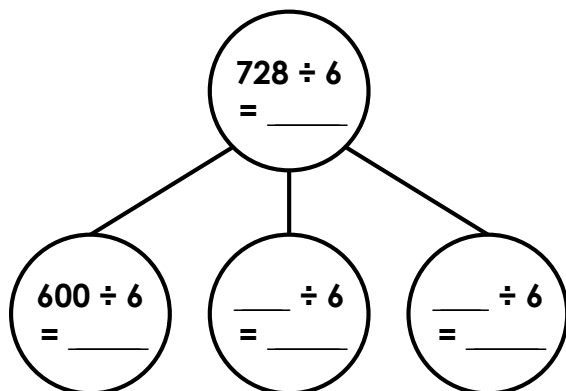


Find and correct Suzy's mistake.



VF
HW/Ext

5. Compare the two division models by adding $<$, $>$ or $=$ to the box.



$736 \div 6$

H	T		O	
100	10	10	1	1
100	10	10	1	1
100	10	10	1	1
100	10	10	1	1
100	10	10	1	1
100	10	10	1	1

1
1
1
1

100

Exchanged for 10 tens and shared equally.



VF
HW/Ext

6. Navdeep is comparing the following calculations. He writes the statement below.



Calculation B is the odd one out because it has 26 in the answer.

A. $219 \div 9 =$

B. $159 \div 6 =$

C. $170 \div 7 =$

Do you agree with Navdeep? Explain your answer.



RPS
HW/Ext

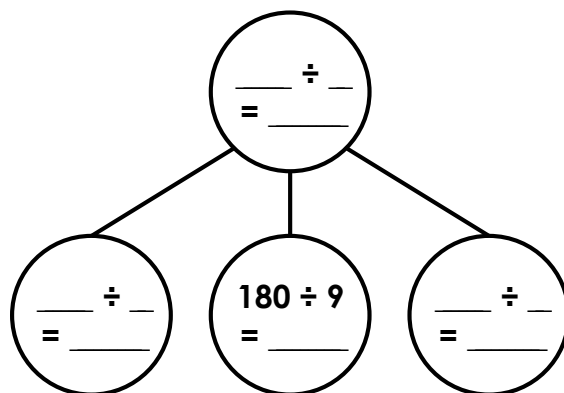
Divide 3 Digits by 1 Digit

7. Nathan has solved the calculation $736 \div 9$ using a part-whole model.

He says,



My answer has a remainder that is less than 5.

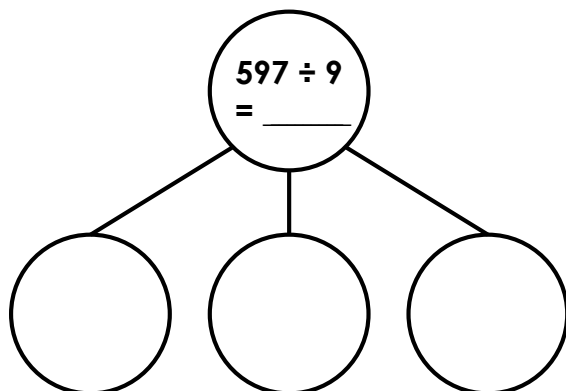


Complete the part-whole model to find his mistake.



VF
HW/Ext

8. Add the symbol $<$, $>$ or $=$ to make the following statement correct.



$359 \div 6$

H	T	O



Use the part-whole model and place value chart to help you.

VF
HW/Ext

9. Abiha challenges her friend to write three calculations that fit with her clues below.



A and B have the same remainder.

The answer to calculation B is between 100 and 150.

The first 3 digits in calculation C are odd. It was divided by a multiple of 3.

All calculations have a 3-digit whole number solution which are in ascending order.

- A. $730 \div \square = \square r \square$
 B. $4\square\square \div 4 = \square r \square$
 C. $\square 5\square \div \square = \square 5\square r \square$

What could the three calculations be?



RPS
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Homework/Extension

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Developing

1. Aleena has a remainder of 4, not 3, because the answer is 110 r4 ($700 \div 7 = 100$, $70 \div 7 = 10$, $4 \div 7 = 0$ r4).
2. $668 \div 6 < 559 \div 5$ because 111 r2 < 111 r4.
3. Lee is correct because A equals 112 r1, while B and C equal 111 r2.

Expected

4. Suzy has a remainder of 8, not 0, because the answer is 102 r8 ($900 \div 9 = 100$ and $26 \div 9 = 2$ r8).
5. $728 \div 6 < 736 \div 6$ because 121 r2 < 122 r4.
6. Navdeep is correct as B is the only answer with the whole number 26. Also accept answers which recognise that C could be the odd one out as it is the only calculation with a remainder of 2, not 3.

Greater Depth

7. Nathan has a remainder of 7, which is not less than 5, because the answer is 81 r7 ($540 \div 9 = 60$, $180 \div 9 = 20$, $16 \div 9 = 1$ r7).
8. $597 \div 9 > 359 \div 6$ because 66 r3 > 59 r5.
9. Various answers, for example: A. $730 \div 7 = 104$ r2; B. $490 \div 4 = 122$ r2; C. $751 \div 3 = 250$ r1