## YR5 PROGRESSION IN MASTERY LESSON PACK - DIVIDE BY 10, 100 AND 1000.

## FLUENCY 1

Use the PV chart to calculate $679 \div 1,000$

| TH | H | T | O | t | h | th |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{6}$ | 7 | 9 |  |  |  |

When we divide by 1,000 , the digits move $\qquad$ spaces to the $\qquad$ .

## FLUENCY 2

Match the calculation to the answer.

| $7,600 \div 10$ |
| :---: |
| $76,000 \div 1000$ |
| $760,000 \div 1000$ |
| $7,600,000 \div 1000$ |
| $760,000 \div 100$ |
| $76,000 \div 10$ |


| 0.76 |
| :---: |
| 7.6 |
| 76 |
| 760 |
| 7,600 |
| 76,000 |

## FLUENCY 3

Help Darcey to complete the following calculations:


How else could you write these calculations?

## FLUENCY 4

Caleb has made $13,817 \mathrm{ml}$ of mocktail to sell at the Summer Fayre.


How much mocktail has he made in litres?
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## YR5 PROGRESSION IN MASTERY LESSON PACK - DIVIDE BY 10, 100 AND 1000.

REASONING 1
Which would you rather have?


Explain why?

REASONING 2
True or False?

| $146 \div 100$ | $=$ | $14,600 \div 1,000$ |
| :---: | :---: | :---: |
| $9,870 \div 10$ | $>$ | $98,700 \div 100$ |
| $76,720 \div 100$ | $<$ | $760,720 \div 10$ |

Convince me.

## REASONING 3

Always, Sometimes or Never true

> When you divide a two-digit number by 10 , the answer will have a decimal point.

Prove your answer with examples!

## REASONING 4

Jane is using a Gattegno chart. She says:
"When I divide by 10, each counter moves up one row."

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 20 | 30 | $(40)$ | 50 | 60 | 70 | 80 | 90 |
| 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | $(900)$ |
|  | 20 | 2000 | 3000 | 4000 | 5000 | $(6000$ | 7000 | 8000 |
| 100 | 20000 | 30000 | $(0000$ | 50000 | 60000 | 70000 | 80000 | 90000 |

Do you agree with Jane? Explain your reasoning!
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## YR5 PROGRESSION IN MASTERY LESSON PACK - DIVIDE BY 10, 100 AND 1000.

## PROBLEM SOLVING 1

Here are some answers to division calculations:


92

### 0.651

PROBLEM SOLVING 2
Alfie thinks of a 5 -digit number.

When he divides it by 1,000 the answer has a decimal.

In his new number, the thousandths and the tenths digit are the same.

The number's digit sum is 14 .

What could Alfie's number have been?
What could the calculations have been?

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