



RUSKIN
A PRIORY ACADEMY

Year 6 - 7

Mathematics

Transition Booklet

The Mathematics Department wanted to send you a big hello and say how excited they are that you are joining us in September!

To give you a flying start to your new adventure with us, we thought you might like some challenges to have a go at before you arrive. You will be given this booklet on Transition day in July. Please hand this in to your Mathematics teacher in September so you can receive some reward points. We will mark your work, review your answers and this will help us see what support you need when you join us – so, just have a go, have a great summer and see you again in Year 7!

Name: _____

Worded Problems

1. If the Eiffel Tower is 298m tall and the London Shard is 309m. What is their combined height?

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2. James has £467 in the bank. He pays what is left of his birthday money in to his account. If he pays in his £45.57, how much does he have in total in his account?

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3. Ryan goes shopping. In the first shop he spends £66.73, in the second £25, the third £156 and £14.56 in the last shop. How much money does he spend total?

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Spot the mistake.

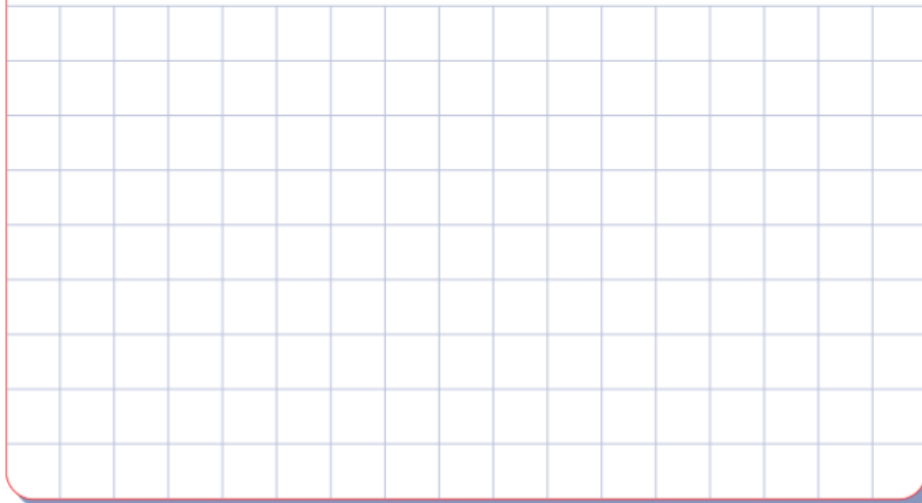
| | |
|---|---|
| $\begin{array}{r} + 238 \\ 1487 \\ \hline 3867 \end{array}$ | $\begin{array}{r} + 238 \\ 526 \\ \hline 754 \end{array}$ |
| $\begin{array}{r} + 5 \\ 2.3 \\ \hline 2.8 \end{array}$ | $\begin{array}{r} + 438 \\ 21.6 \\ \hline 65.4 \end{array}$ |

The way I do my calculations

Subtraction

$440 - 61$

$432 - 187$



Calculations

| | | | |
|--------------------------------|------------------------------|--------------------------------|--------------------------------|
| A $8 - 3$ | B $36 - 24$ | C $47 - 18$ | D $74 - 56$ |
| E $100 - 58$ | F $\square - 33 = 45$ | G $798 - 268$ | H $1012 - 389$ |
| I $844 - \square = 541$ | J $8.7 - 6.5$ | K $3.5 - \square = 1.2$ | L $\square - 3.6 = 9.7$ |
| M $74.63 - 17.21$ | N $6 - 2.4$ | O $78.54 - 13.6$ | P $586 - 85.31$ |

Worded Problems

1. The London Eye is 117m tall and BT Tower is 190m tall. How much taller is the BT Tower than the London Eye?

2. If the distance from Cardiff to London is 172miles and Amy has driven 87 miles. How many miles are left for Amy to drive before she reaches London?

3. Alex is checking the addition of two numbers. The ANSWER is 843, and one of the numbers is 591, what is the other number in the sum?


Spot the mistake.

| | |
|---|---|
| $\begin{array}{r} 6783- \\ 47 \\ \hline 2383 \end{array}$ | $\begin{array}{r} 567 - \\ \underline{138} \\ 431 \end{array}$ |
| $\begin{array}{r} 83.69 - \\ \underline{782.7} \\ 54.2 \end{array}$ | $\begin{array}{r} 8532- \\ \underline{23.1} \\ 830.1 \end{array}$ |

The way I do my calculations

Multiplication

234×3 42×27



Calculations

| | | | |
|----------------------------------|--------------------------|---------------------------|-------------------------------------|
| A 8×7 | B 12×10 | C 11×12 | D 134×2 |
| E $\square \times 4 = 56$ | F 361×5 | G 426×4 | H $243 \times \square = 486$ |
| I 672×7 | J 2456×5 | K 24×12 | L 68×47 |
| M 384×67 | N 34.5×3 | O 57.24×3 | P 465.78×8 |

Worded Problems

1. How many days in 17 weeks?

2. If eggs are packed in boxes of 6. How many eggs altogether in 248 boxes?

3. Dylan gets paid £5.75 every evening to do a paper round. How much does he earn if he completes the round every evening in May?


Spot the mistake.

| | |
|---|--|
| $\begin{array}{r} 45x \\ 3 \\ \hline 1215 \end{array}$ | $\begin{array}{r} 85.35x \\ 6 \\ \hline 51210 \end{array}$ |
| $\begin{array}{r} 38.4x \\ 6 \\ \hline 23.04 \end{array}$ | $\begin{array}{r} 352x \\ 4 \\ \hline 1409 \end{array}$ |

The way I do my calculations

Division

159 ÷ 3 476 ÷ 17



Calculations

| | | | |
|--|--|--|---------------------------------------|
| A 8 ÷ 2 | B 35 ÷ <input type="text"/> = 5 | C 36 ÷ 9 | D <input type="text"/> ÷ 7 = 8 |
| E 72 ÷ 3 | F <input type="text"/> ÷ 8 = 13 | G 130 ÷ 10 | H 168 ÷ 7 |
| I 52 ÷ <input type="text"/> = 4 | J 258 ÷ 8 | K 121 ÷ <input type="text"/> = 11 | L 1655 ÷ 5 |
| M 2392 ÷ 4 | N 12.45 ÷ 5 | O 145.18 ÷ 2 | P 6205.35 ÷ 3 |

Worded Problems

1. James, Simon and Angela win £771 between them in a draw. How much money do they each get?

2. 3,600 football supporters want to go to an away game together. A coach holds 50 passengers. How many coaches would they need to all go to the game?

3. Fin buys sherbet straws from the newsagents. They cost 4p each and he spends £1.12. How many straws has he bought?

Spot the mistake.

| | |
|--|---|
| $\begin{array}{r} 201 \\ 3 \overline{) 623} \end{array}$ | $\begin{array}{r} 1095 \\ 5 \overline{) 547.5} \end{array}$ |
| $\begin{array}{r} 31 \\ 3 \overline{) 903} \end{array}$ | $\begin{array}{r} 14 \\ 9 \overline{) 135} \end{array}$ |

Colour by Number

Instructions

Calculate each answer then use the key to shade each section in the correct colour.

| | |
|--------|-------------|
| Red | 0-100 |
| Yellow | 101-200 |
| Orange | 201-300 |
| Blue | 301 or more |

The Value of Words

Instructions

Use the key to calculate the value of each word, in pounds. The first question has been completed for you.

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
|-----|-------|-------|-------|-----|-----|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-----|-----|-------|-----|-------|-------|-------|-------|-------|
| 50p | £1.03 | £0.62 | £0.15 | 10p | 72p | 22p | £0.15 | £0.08 | £1.21 | £2.50 | £1.08 | 42p | £0.78 | £0.05 | £1.65 | £3.00 | 45p | 68p | £0.18 | 95p | £0.27 | £1.11 | £1.85 | £2.05 | £2.88 |

| | | |
|----|----------------|---|
| 1 | NUMBER | $£0.78 + 95p + 42p + £1.03 + 10p + 45p = £3.73$ |
| 2 | ALGEBRA | |
| 3 | PROBABILITY | |
| 4 | STATISTICS | |
| 5 | GEOMETRY | |
| 6 | RATIO | |
| 7 | MEASURE | |
| 8 | OPERATION | |
| 9 | ADDITION | |
| 10 | SUBTRACTION | |
| 11 | MULTIPLICATION | |
| 12 | DIVISION | |

| | |
|---------------|--|
| 13 SUM | |
| 14 TOTAL | |
| 15 PRODUCT | |
| 16 CALCULATOR | |

Extension

- Does the longest word have the longest value?

- Does the shortest word have the smallest value?

- Create a mathematical word which has a bigger value than any words in the list.

Times Table and Division Challenge

Complete each question without a calculator.

| | |
|----------------|--|
| 4×5 | |
| 9×8 | |
| 7×2 | |
| 12×11 | |
| 10×9 | |
| 13×3 | |
| 2×12 | |
| 4×6 | |
| 7×8 | |
| 2×11 | |
| 9×7 | |
| 11×9 | |
| 8×4 | |
| 12×9 | |
| 5×6 | |
| 7×4 | |
| 3×8 | |
| 9×6 | |
| 8×1 | |
| 0×7 | |

| | |
|---------------|--|
| $108 \div 9$ | |
| $72 \div 6$ | |
| $35 \div 5$ | |
| $40 \div 8$ | |
| $28 \div 4$ | |
| $66 \div 11$ | |
| $144 \div 12$ | |
| $36 \div 2$ | |
| $45 \div 5$ | |
| $99 \div 9$ | |
| $120 \div 10$ | |
| $84 \div 6$ | |
| $96 \div 8$ | |
| $48 \div 6$ | |
| $49 \div 7$ | |
| $21 \div 3$ | |
| $16 \div 2$ | |
| $12 \div 4$ | |
| $15 \div 5$ | |
| $60 \div 12$ | |

| | |
|----------------|--|
| 2×13 | |
| 3×12 | |
| 11×7 | |
| 6×12 | |
| 8×5 | |
| 5×12 | |
| 15×2 | |
| 3×20 | |
| 2×18 | |
| 3×4 | |
| 4×4 | |
| 0×5 | |
| 2×6 | |
| 3×9 | |
| 7×12 | |
| 13×11 | |
| 10×9 | |
| 15×10 | |
| 13×4 | |
| 2×14 | |

| | |
|-----------------|--|
| $65 \div 5$ | |
| $2 \div 2$ | |
| $8 \div 4$ | |
| $25 \div 5$ | |
| $56 \div 8$ | |
| $77 \div 11$ | |
| $117 \div 9$ | |
| $132 \div 12$ | |
| 169×13 | |
| $156 \div 12$ | |
| $35 \div 7$ | |
| $42 \div 6$ | |
| $54 \div 9$ | |
| $63 \div 7$ | |
| $48 \div 4$ | |
| $30 \div 5$ | |
| $40 \div 10$ | |
| $88 \div 8$ | |
| $130 \div 10$ | |
| $121 \div 11$ | |

Addition and Subtraction Challenge

Complete each question without a calculator.

| | |
|---------------|--|
| $45 + 101$ | |
| $23 + 27$ | |
| $68 + 43$ | |
| $112 + 45$ | |
| $145 + 62$ | |
| $132 + 98$ | |
| $43 + 56$ | |
| $98 + 35$ | |
| $114 + 232$ | |
| $101 + 98$ | |
| $85 + 67$ | |
| $42 + 55$ | |
| $109 + 156$ | |
| $246 + 398$ | |
| $312 + 497$ | |
| $458 + 984$ | |
| $1092 + 48$ | |
| $456 + 86$ | |
| $549 + 290$ | |
| $236 + 641$ | |
| $1032 + 1067$ | |

| | |
|--------------|--|
| $67 - 34$ | |
| $98 - 55$ | |
| $104 - 89$ | |
| $256 - 87$ | |
| $567 - 314$ | |
| $312 - 49$ | |
| $687 - 563$ | |
| $981 - 607$ | |
| $604 - 239$ | |
| $345 - 268$ | |
| $938 - 412$ | |
| $656 - 437$ | |
| $298 - 131$ | |
| $385 - 215$ | |
| $1085 - 617$ | |
| $2567 - 678$ | |
| $9875 - 567$ | |
| $2050 - 498$ | |
| $114 - 89$ | |
| $262 - 119$ | |
| $562 - 229$ | |

| | |
|---------------|--|
| $1088 + 478$ | |
| $2056 + 789$ | |
| $295 + 498$ | |
| $312 + 714$ | |
| $896 + 747$ | |
| $409 + 6802$ | |
| $608 + 7897$ | |
| $2145 + 421$ | |
| $3987 + 318$ | |
| $803 + 746$ | |
| $1043 + 157$ | |
| $952 + 986$ | |
| $475 + 9042$ | |
| $1037 + 2498$ | |
| $5682 + 492$ | |
| $632 + 1084$ | |
| $783 + 209$ | |
| $6013 + 549$ | |
| $619 + 8014$ | |
| $378 + 504$ | |
| $409 + 656$ | |

| | |
|---------------|--|
| $4506 - 216$ | |
| $9997 - 658$ | |
| $2054 - 417$ | |
| $1081 - 804$ | |
| $670 - 487$ | |
| $248 - 119$ | |
| $902 - 675$ | |
| $9783 - 406$ | |
| $8962 - 434$ | |
| $786 - 387$ | |
| $962 - 908$ | |
| $4894 - 1394$ | |
| $561 - 416$ | |
| $896 - 516$ | |
| $7845 - 2478$ | |
| $2398 - 1304$ | |
| $9987 - 4377$ | |
| $9832 - 984$ | |
| $736 - 698$ | |
| $295 - 117$ | |
| $8978 - 3659$ | |