## Year 6 Autumn-Themed

## Maths Activity Booklet

Name: $\qquad$

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## Place Value Code Breaker

|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | 1 | 6 | 5 | 4 | 0 | 8 | 7 | 2 | 9 |


| What is the number |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Answer: $\qquad$

| What is the number |  |  |  |  |  | rounded to the nearest $100 ?$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Answer: $\qquad$


Answer: $\qquad$

| What is the number |  |  | written in Roman numerals? |
| :--- | :--- | :--- | :--- | :--- | :--- |

Answer: $\qquad$

| What is the number |  |  |  |  | written in Roman numerals? |
| :---: | :---: | :---: | :---: | :---: | :---: |

Answer: $\qquad$


Answer: $\qquad$

## Calculations Code Breaker

Solve the calculations and use the code breaker to spell out the autumn-themed words.

| A | B | C | D | E | F | G | H | I | J | K | L | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | 23 | 13 | 20 | 6 | 10 | 1 | 15 | 19 | 24 | 4 | 9 | 17 |


| $\mathbf{N}$ | $\mathbf{O}$ | $\mathbf{P}$ | $\mathbf{Q}$ | $\mathbf{R}$ | $\mathbf{S}$ | $\mathbf{T}$ | $\mathbf{U}$ | $\mathbf{V}$ | $\mathbf{W}$ | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | 2 | 7 | 21 | 11 | 25 | 8 | 26 | 16 | 5 | 22 | 12 | 18 |


|  | Answer | Letter |
| :--- | :--- | :--- |
| $-10+23$ |  |  |
| $1^{2}+1^{2}$ |  |  |
| $(2 \times 5)+2^{2}$ |  |  |
| $2^{3} \div 2$ |  |  |
| $7.15-1.15$ |  |  |
| $(100-45) \div(-6+11)$ |  |  |


|  | Answer | Letter |
| :--- | :--- | :--- |
| $(100-1) \div(10-1)$ |  |  |
| $\frac{2}{12}$ of 36 |  |  |
| $2^{3}+12$ |  |  |


|  | Answer | Letter |
| :--- | :--- | :--- |
| $50 \%$ of 20 |  |  |
| $\frac{1}{10}$ of 190 |  |  |
| $121 \div 11$ |  |  |
| $2^{3}-2$ |  |  |
| $\square^{2}=25$ |  |  |
| $-1+3$ |  |  |
| $0.11 \times 100$ |  |  |
| $4000 \div 10^{3}$ |  |  |


|  | Answer | Letter |
| :--- | :--- | :--- |
| $3^{2}$ |  |  |
| $180 \div 30$ |  |  |
| $4^{2}-13$ |  |  |
| $7.4+2.6$ |  |  |


|  | Answer | Letter |
| :--- | :--- | :--- |
| $3000 \div 200$ |  |  |
| $300 \div 10^{2}$ |  |  |
| $10+1^{2}$ |  |  |
| $4^{2}$ |  |  |
| $2.92+3.08$ |  |  |
| $5^{2}$ |  |  |
| $4.61+3.39$ |  |  |

## Autumn Calculations Mosaic

Work out the numbers to reveal the hidden picture. Each value has a special colour.

$$
\begin{array}{l|l|l|l}
\text { brown }=7200 & \text { blue }=7500 & \text { red }=7800 & \text { yellow }=8100
\end{array} \text { orange }=8400
$$

| $\begin{gathered} 5927+ \\ 1573 \end{gathered}$ | $\begin{gathered} 5124+ \\ 2376 \end{gathered}$ | $\begin{gathered} 6329+ \\ 1171 \end{gathered}$ | $\begin{array}{r} 7692 \\ 192 \end{array}$ | $\begin{gathered} 2650+ \\ 5450 \end{gathered}$ | $\begin{gathered} 5959+ \\ 1841 \end{gathered}$ | $\begin{gathered} 8263- \\ 463 \end{gathered}$ | $\begin{gathered} 1171+ \\ 6629 \end{gathered}$ | $\begin{aligned} & 715+ \\ & 7085 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 8233 \\ 733 \end{gathered}$ | $\begin{gathered} 8899- \\ 1399 \end{gathered}$ | $\begin{gathered} 3637+ \\ 3863 \end{gathered}$ | $\begin{gathered} 4865+ \\ 2935 \end{gathered}$ | $\begin{gathered} 3101+ \\ 4699 \end{gathered}$ | $\begin{aligned} & 718+ \\ & 6482 \end{aligned}$ | $\begin{array}{r} 8300- \\ 500 \end{array}$ | $\begin{aligned} & 757+ \\ & 7343 \end{aligned}$ | $\begin{gathered} 1920+ \\ 5880 \end{gathered}$ |
| $\begin{gathered} 1528+ \\ 6872 \end{gathered}$ | $\begin{gathered} 9959- \\ 1559 \end{gathered}$ | $\begin{gathered} 5858+ \\ 1642 \end{gathered}$ | $\begin{gathered} 9972 \text { - } \\ 1872 \end{gathered}$ | $\begin{gathered} 5518+ \\ 2282 \end{gathered}$ | $\begin{gathered} 1036+ \\ 6764 \end{gathered}$ | $\begin{gathered} 3412+ \\ 3788 \end{gathered}$ | $\begin{gathered} 7554+ \\ 246 \end{gathered}$ | $\begin{gathered} 2107+ \\ 5993 \end{gathered}$ |
| $\begin{gathered} 958+ \\ 7442 \end{gathered}$ | $\begin{gathered} 1108+ \\ 6992 \end{gathered}$ | $\begin{gathered} 3979+ \\ 4421 \end{gathered}$ | $\begin{gathered} 8688-888 \\ 88 \end{gathered}$ | $\begin{gathered} 7262- \\ 62 \end{gathered}$ | $\begin{gathered} 9526- \\ 1426 \end{gathered}$ | $\begin{gathered} 938+ \\ 6262 \end{gathered}$ | $\begin{gathered} 677+ \\ 7123 \end{gathered}$ | $\begin{gathered} 9756- \\ 2556 \end{gathered}$ |
| $\begin{gathered} 7787+ \\ 613 \end{gathered}$ | $\begin{gathered} 7308+ \\ 1092 \end{gathered}$ | $\begin{gathered} 5993+ \\ 2107 \end{gathered}$ | $\begin{gathered} 7787+ \\ 613 \end{gathered}$ | $\begin{gathered} 9892- \\ 2092 \end{gathered}$ | $\begin{gathered} 1566+ \\ 5634 \end{gathered}$ | $\begin{gathered} 6967+ \\ 233 \end{gathered}$ | $\begin{gathered} 1827+ \\ 5373 \end{gathered}$ | $\begin{gathered} 333+ \\ 7467 \end{gathered}$ |
| $\begin{gathered} 1162+ \\ 7238 \end{gathered}$ | $\begin{gathered} 9512- \\ 2312 \end{gathered}$ | $\begin{gathered} 4334+ \\ 4066 \end{gathered}$ | $\begin{gathered} 8703 \\ 303 \end{gathered}$ | $\begin{gathered} 9999-2499 \\ \end{gathered}$ | $\begin{gathered} 4399+ \\ 3401 \end{gathered}$ | $\begin{gathered} 3043+ \\ 4157 \end{gathered}$ | $\begin{gathered} 2546+ \\ 4654 \end{gathered}$ | $\begin{gathered} 7619+ \\ 481 \end{gathered}$ |
| $\begin{gathered} 1685+ \\ 5515 \end{gathered}$ | $\begin{gathered} 3574+ \\ 3626 \end{gathered}$ | $\begin{gathered} 1208+ \\ 5992 \end{gathered}$ | $\begin{gathered} 9875 \\ 1775 \end{gathered}$ | $\begin{gathered} 6810+ \\ 690 \end{gathered}$ | $\begin{gathered} 8001- \\ 501 \end{gathered}$ | $\begin{gathered} 658+ \\ 6542 \end{gathered}$ | $\begin{gathered} 6012+ \\ 1188 \end{gathered}$ | $\begin{gathered} 2012+ \\ 5488 \end{gathered}$ |
| $\begin{gathered} 7347+ \\ 753 \end{gathered}$ | $\begin{gathered} 8888-1688 \\ \hline \end{gathered}$ | $\begin{gathered} 1577+ \\ 6823 \end{gathered}$ | $\begin{gathered} 1980+ \\ 5520 \end{gathered}$ | $\begin{gathered} 9516- \\ 2016 \end{gathered}$ | $\begin{gathered} 5501+ \\ 1999 \end{gathered}$ | $\begin{gathered} 4380+ \\ 2820 \end{gathered}$ | $\begin{gathered} 5190+ \\ 2010 \end{gathered}$ | $\begin{gathered} 1979+ \\ 5521 \end{gathered}$ |
| $\begin{gathered} 9286- \\ 1786 \end{gathered}$ | $\begin{gathered} 7398- \\ 198 \end{gathered}$ | $\begin{gathered} 1042+ \\ 6458 \end{gathered}$ | $\begin{gathered} 1964+ \\ 5536 \end{gathered}$ | $\begin{gathered} 8825- \\ 1325 \end{gathered}$ | $\begin{gathered} 6169 \text { + } \\ 1331 \end{gathered}$ | $\begin{gathered} 552+ \\ 6648 \end{gathered}$ | $\begin{gathered} 3129+ \\ 4071 \end{gathered}$ | $\begin{gathered} 3260+ \\ 4240 \end{gathered}$ |
| $\begin{gathered} 5927+ \\ 1573 \end{gathered}$ | $\begin{gathered} 6508+ \\ 692 \end{gathered}$ | $\begin{gathered} 7992- \\ 492 \end{gathered}$ | $\begin{gathered} 7471+ \\ 29 \end{gathered}$ | $\begin{gathered} 5145+ \\ 2355 \end{gathered}$ | $\begin{aligned} & 453+ \\ & 7047 \end{aligned}$ | $\begin{gathered} 9221- \\ 2021 \end{gathered}$ | $\begin{gathered} 7641 \\ 441 \end{gathered}$ | $\begin{gathered} 6329+ \\ 1171 \end{gathered}$ |

## Autumn Measures

Read the digital scales and calculate the mass of one item.
Show your working out in each box. The first one has been done for you.

$497 \div 7=71$
$=71 \mathrm{~g}$

$\qquad$

kg

## Autumn Measures

Calculate the length of one item.
Write the calculation you use. The first one has been done for you.


## Autumn Number Cross

Use the code to complete the calculations. Solve each one using written methods of multiplication.

|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | 1 | 6 | 5 | 4 | 0 | 8 | 7 | 2 | 9 |



## Autumn Coordinates



Write the coordinates of each autumn-themed object. Translate each object and write its new coordinates.

| Object | Starting <br> Coordinates | Translation | Ending <br> Coordinates |
| :---: | :---: | :---: | :---: |
|  |  | Left 4, Down 3 |  |
|  |  | Left 5, Down 5 |  |
|  |  | Left 2, Down 5 |  |
|  |  | Right 6, Up 3 |  |

## Autumn Number Puzzles

I collect some conkers on my walk home from school.

I multiply the number of conkers by 7 .
I then subtract 22 , multiply by 25 , subtract 9, and divide by 17.

I end with the number 173.
How many conkers did I collect?

Eddie watches a firework display.
50\% ofthefireworkswereCatherinewheels.
$\frac{1}{7}$ of the remaining fireworks were fountains.

The rest were Roman candles.
There were 36 Roman candles.
How many fireworks were there in total?

Eva and Melody pick some blackberries to make some blackberry pies.

They weigh the berries and share them equally between them.

Eva eats 85 g of her berries on the walk home.

She divides the berries between three pie dishes.

Each dish now contains 255 g of berries.
How many kilograms of berries did Melody and Eva pick?


## Converting Measures Board Game

## Instructions

Each player must choose a place to start and place their counter on it.

The first player rolls the dice and moves their counter clockwise.

They must answer the question in that square, find the answer on the correct acorn and cover it over.

The next player will take their turn.
If a player lands on an answer that has already been covered, they must miss a go.

The winner is the player gets four acorns in a row.

| How many miles are there in 3.2 kilometres? | How many millilitres are there in 2 pints? | How many grams are there in 2 lb ? | How many grams are there in 4oz? | How many litres are there in 2 gallons? |
| :---: | :---: | :---: | :---: | :---: |
| How many centimetres are there in 4 feet? |  |  |  | How many kilometres are there in 4 miles? |
| How many millilitres are there in half a pint? |  |  |  | How many inches are there in 10 centimetres? |
| How many centimetres are there in 10 inches? |  |  |  | How many grams are there in 4 lb ? |
| How many litres are there in 10 gallons? | How many grams are there in 0.5 lb ? | How many metres are there in half a mile? | How many centimetres are there in 6 feet? | How many ounces are there in 1 kilogram? |


| proximately <br> 2.5 cm | approxima <br> 30 cm | 1 pint approximately 570 ml |  | pproximately <br> 1.6 km | proximately $25 \mathrm{~g}$ | $\left\lvert\, \begin{gathered} 1 \mathrm{lb}= \\ \text { approximat } \\ 450 \mathrm{~g} \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

