# Connaught Junior School
*"Caring, Confident, Committed"*

# Supporting your child's learning: Maths in Year 3, 4, 5 and 6

**At Connaught Junior School our aim is to make maths exciting, practical and relevant, to ensure that all our pupils develop as confident and independent mathematicians. We aim to develop:**

| | **Fluency** | **Reasoning** | **Problem-solving** |
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| | To become fluent in the fundamentals of mathematics, through varied and frequent practice, so that pupils develop conceptual understanding and recall and apply knowledge. This includes having a solid knowledge of number fact (e.g. number bonds to 10 and 100, times tables) and frequently involves the use of practical resources to support learning, e.g. bead strings, counters, number lines, dienes. | To find relationships, generalise and use mathematical language to prove or disprove a line of enquiry. This includes seeing patterns, choosing appropriate strategies and being able to explain why. | To apply their mathematics to a variety of problems in the context of everyday life. This involves using the skills built up through fluency and reasoning to break down a problem and identify suitable strategies to solve it. |
| **Year 3** | Calculate:<br>a) 153 + 6 =    b) 153 + 60 =<br>b) 153 + 600 =    d) 856 − 8 =<br>e) 856 − 80 =    f) 856 − 800 =<br><br>34 + 45=79<br><table><tr><td colspan="2">79</td></tr><tr><td>45</td><td>34</td></tr></table><br>Can you write any other number sentences for this calculation?<br><br>Work out the missing numbers.<br>127 = 67 +___<br>___ 100 = 450 − 75<br>299 − 101 > 50 + ___ | Are these number sentences true or false?<br>396 + 6 = 412<br>504 − 70 = 444<br>556 + 150 = 706<br>Justify your answers.<br><br>**Always, sometimes, never?**<br>When you add 7 to a whole number ending in 8, your answer ends with 5. Explain your answer. | How many 2 digit subtract 2 digit calculations can you find where the answer is 14?<br><br>   ? ?<br>−  ? ?<br>   1 4<br><br>Molly went swimming every day for 5 days. She swam 80 lengths each day. How many lengths did she swim altogether? |

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| **Year 4** | Check the answers to the following calculations using the inverse. Show all your working.<br>762 + 345 = 1,107<br>2,456 - 734 = 1,822<br><br>Complete the bar models.<br><br>| 430 |<br>| ? | 90 |<br><br>| ? |<br>| 2271 | 632 |<br><br>Complete these addition calculations:<br>432 + 251 = ?<br>? + 345 = 1,170<br>? = 2, 637 – 1,256<br>5568 - ? = 3915 | Hazel fills in this bar model. She makes the following calculations from it.<br>3,028 – 2,271 = 757<br>3,028 – 757 = 2,271<br>2,271 + 757 = 3,028<br>757 + 2,271 = 3,028<br><br>| 3028 |<br>| 2271 | ? |<br><br>Is she correct? Explain why.<br><br>**Always, sometimes, never?**<br>The difference between two odd numbers is odd. | Can you fill in the missing numbers?<br>  3  __  5        4 3 2 1<br>+ 2  7  __      - 1 __ 1 0<br>_____     _____<br>  __ 3 9         2 7 __ 1<br><br>A supermarket has 1284 loaves of bread at the start of the day. During the day, 857 loaves are sold and a further 589 loaves are delivered. How many loaves of bread are there at the end of the day?<br><br>I am thinking of 2 secret numbers where the sum of the numbers is 16 and the difference is 2. What are my secret numbers? Can you make up 2 secret numbers and tell somebody what the sum and difference is? |
| **Year 5** | Work out the missing numbers:<br>____ - 1,356 = 3,432<br>1205 + ____ = 6,964<br>____ = 45, 123 + 7,843<br><br>Complete the bar model.<br><br>| 4,730 |<br>| ? | 743 |<br><br>Can you find as many addition and subtraction number sentences that represent the model.<br><br>Follow a series of instructions to find a mystery number.<br>Start with 50<br>Add 400<br>Take away 140<br>Add 20<br>Subtract 274<br>What number have you got? | Adam is twice as old as Barry. Charlie is 3 years younger than Barry. The sum of all their ages is 53. How old is Barry?<br><br>Here is an addition sentence with whole numbers and digits missing.<br>____ + 3 475 = 6 _24<br>What numbers could go in the spaces? How many different answers are there? Convince me.<br><br>**Always, sometimes, never?**<br>Linda says that a quick way to add 97 to any number, you can add 100 and subtract 3.<br>Explain your answer. | A car showroom reduces the price of a car from £18 750 to £14 999.<br>By how much was the price of the car reduced?<br><br>My answer is 5 398. What's the question?<br>Create 3 addition calculations.<br>Create 3 subtraction questions.<br>Did you use a strategy?<br>Explain it.<br><br>If 378 people have not ordered an inflight meal on an aeroplane but 852 people have…<br>How many people are on the aeroplane?<br>Give your answer to the nearest hundred. |

## Year 6

Work out the missing numbers:
5,419 + 2,000 = 9,836 - ?
? + 63,145 = 115,999
54,983 - ? = 76,329
? = 23,756 + 85,432

Which is the odd one out?
345 + 452 = 800
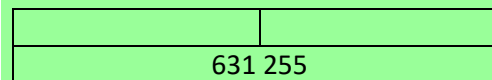691 + 113 = 800
368 + 482 = 800

Abdul says "If I add any two 4 digit numbers together it will always make a 5 digit number."
Do you agree? Explain why.

Here is a bar model.

| | |
|---|---|
| 631 255 | |

Select two 6-digit numbers to complete the model.  Your calculation should involve 3 incidences of exchanging.
How did you select your numbers?

Three pandas are eating bamboo sticks. There are 51 altogether. They all eat an odd number of sticks above 10. How many bamboo sticks did they each eat? How many different ways can you do it?

The number in the square in the middle is calculated using the following rule:
A + B– C
Work out the value of the question mark.