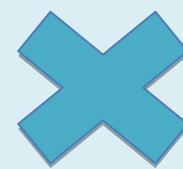




Neroche Primary School

Multiplication Progression Poster



These methods have been agreed to reflect the Mathematics Programmes of Study, September 2013

Language to be used:

Foundation

Lots of, groups, altogether

Key Stage One

All of Foundation and
Double, count on, repeat, multiply,
multiplied by, times.

Key Stage Two

All of Foundation and KS1 and
Product, multiple, square, factor.



The formal written methods we have chosen as a school are illustrated in the Maths Appendix One, September 2013 Curriculum

End of Foundation Stage Expectations

They will count in 2s and 10s and begin to count in 5s.
They will work on practical problem solving activities involving equal sets or groups.
They will also double objects and numbers up to 5.

End of Year One Expectations

- Double single-digit numbers
- Count on in steps of 2s, 5s, 10s from zero
- Calculate single digit multiplication using 2s, 5s and 10s as an array.

$$5 \times 3 = 15$$

End of Year Two Expectations

- Recall and use multiplication facts for the 2, 3, 5 and 10 times tables to calculate mathematical statements. E.g. Solve $5 \times 7 = 35$ by counting in 5s, seven times.
- Use commutativity for efficiency e.g. We know that 7×2 is the same as 2×7 . Which is easier?
 - Double two-digit numbers

End of Year Three Expectations

- Recall and use 2, 3, 4, 5, 6, 8 and 10 times tables facts
- Multiply 2 digit numbers by 1 digit using expanded short multiplication (within the above times tables)

$$51 \times 4 = 204$$

| | |
|----------|-----|
| | 51 |
| X | 4 |
| <hr/> | |
| 1 x 4 = | 4 |
| 50 x 4 = | 200 |
| <hr/> | |
| | 204 |

End of Year Four Expectations

- Recall and use every times table up to 12×12
- Multiply 2 digit by 1 digit and 3 digit by 1 digit using short multiplication

$$512 \times 6 = 3072$$

| | |
|-------|------|
| | 512 |
| X | 6 |
| <hr/> | |
| | 3072 |

Numbers are carried above the line to be added and then crossed off once added.

End of Year Five Expectations

- Multiply up to a 4 digit number by 1 digit number, using short multiplication as year four.
- Also multiply a 2 digit number by a 2 digit number, using long multiplication

$$45 \times 37 = 1665$$

| | |
|---------------|--|
| 45 | |
| 45 | |
| x 37 | |
| <hr/> | |
| 315 | |
| 1350 | |
| <hr/> | |
| 1665 | |

Numbers are carried above the line to be added and then crossed off once added.

End of Year Six Expectations

- Multiply a range of numbers up to 4 digits by 2 digits using short long multiplication.
- Multiply one digit numbers with up to 2.d.p by up to 2 digit whole numbers.

$$2.13 \times 14 = 29.82$$

| | |
|-----------------|--|
| 2.13 | |
| 2.13 | |
| x 14 | |
| <hr/> | |
| 852 | |
| 2130 | |
| <hr/> | |
| 29.82 | |

Numbers are carried above the line to be added and then crossed off once added. When calculating, the decimal point is ignored then replaced at the end according to how many decimal places the original decimal has.