Multiplication KS1

<table>
<tr><td>EYFS</td><td colspan="3">Reception: ELG 2018
Numbers to 20: place them in order and say which number is one more or one less than a given number
Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer
They solve problems, including doubling, halving and sharing.

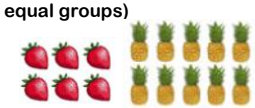
Exceeding:
Estimation and checking quantities by counting up to 20
Combining groups of 2, 5 or 10 or sharing into equal groups</td></tr>
<tr><td>Year</td><td>1</td><td colspan="2">2</td></tr>
<tr><td>Layers of vocabulary

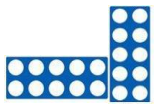
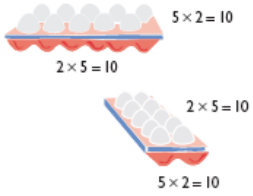
Appendix 1a Beck’s Tiers of Vocabulary Appendix 1b: Vocabulary book</td><td>Basic to subject specific (Beck’s Tiers):
count in ones, twos… tens…
array, groups of, equal groups
odd, even

Instructional vocabulary:
carry on, continue repeat what comes next?
find, choose, collect
use, make, build
tell me, describe, pick out, talk about, explain, show me,
read, write, record</td><td colspan="2">Basic to subject specific (Beck’s Tiers):
lots of, groups of ×, times, multiply, multiplied by multiple of once, twice, three times… ten times… times as (big, long, wide… and so on) repeated addition array row, column double, halve share, share equally

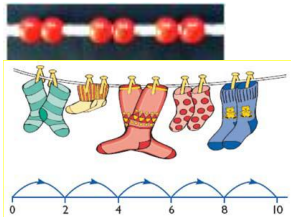
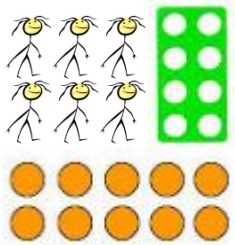
Instructional vocabulary:
carry on, continue, repeat, what comes next? predict describe the pattern describe the rule
find, find all, find different, investigate</td></tr>
<tr><td>NC 2014</td><td colspan="2">Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.</td><td colspan="2">Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs.</td></tr>
<tr><td></td><td colspan="2">Concrete, pictorial, abstract</td><td colspan="2">Concrete, pictorial, abstract</td></tr>
<tr><td>Developing Conceptual/ Procedural Understanding</td><td>Grouping

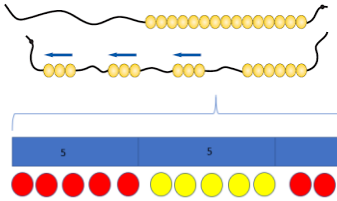
2 frogs on each lily pad

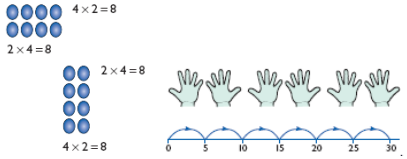
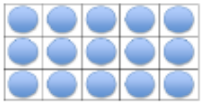
GROUPING ITP
Pictures to show 2 groups of 3 or 3 groups of 2 etc.</td><td>Arrays
(rectangular arrangements to show equal groups)
</td><td>Repeated addition

Introduce the x symbol once repeated addition is understood.</td><td>Commutativity

5 x2 = 2 x 5

</td></tr>
</table>

Multiplication KS1

<table>
<tr>
<td></td>
<td colspan="2">Doubles
</td>
<td></td>
<td>Grouping

5 frogs on each lily pad 5 x 3 = 15

Building tables

Build tables using counting stick- forwards and backwards and with missing jumps</td>
<td colspan="2">
5 + 5 + 5 + 5 + 5 + 5 = 30
5 × 6 = 30
5 multiplied by 6
6 groups of 5
6 hops of 5
Decision making
How many number sentences can you write to describe this array? Can you use addition, multiplication and division?

Explain your answers.</td>
</tr>
<tr>
<td>Known facts</td>
<td colspan="2">Count in multiples of twos, fives and tens.</td>
<td colspan="3">Recall and use x and ÷ facts for the 2, 5 and 10 x tables, including recognising odd and even numbers.</td>
</tr>
<tr>
<td rowspan="3">Essential Knowledge</td>
<td>Count in 2s</td>
<td>Doubles up to 10</td>
<td>2 x table</td>
<td colspan="2">Doubles up to 20</td>
</tr>
<tr>
<td>Count in 10s</td>
<td>Double multiples of 10</td>
<td>10 x table</td>
<td colspan="2">Doubles of multiples of 5</td>
</tr>
<tr>
<td>Count in 5s</td>
<td>Count in 2s, 5s and 10s</td>
<td>5x table</td>
<td colspan="2">Count in 3s</td>
</tr>
</table>