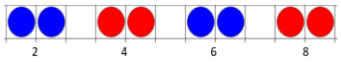
Multiplication KS1

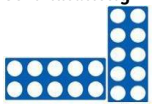
<table>
<tr><td>EYFS</td><td colspan="3">Reception: ELG 2021
Have an understanding of number to 10, linking names of numbers, numerals, their value, and their position in the counting order.
Subitise (recognise quantities without counting) up to 5.
Automatically recall number bonds for numbers 0-5 and for 10, including corresponding partitioning facts.
Automatically recall double facts up 5+5
Compare sets of objects up to 10 in different contexts, considering size and difference
Explore patterns of numbers within numbers up to 10, including evens and odds.</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

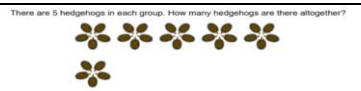
Instructional vocabulary:
carry on, continue repeat what comes next?
find, choose, collect
use, make, build
tell me, describe, pick out, talk about, explain, show me, read, write, record</td><td colspan="2">Basic to subject specific (Beck’s Tiers):
lots of, groups of ×, times, multiply, multiplied by 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

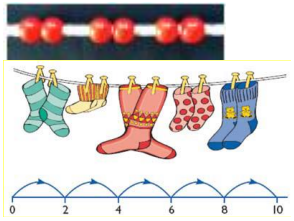
Instructional vocabulary:
carry on, continue, repeat, what comes next? predict describe the pattern describe the rule
find, find all, find different, investigate</td></tr>
<tr><td>NC 2014</td><td colspan="3">Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.</td><td>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

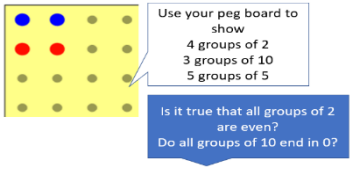
2 frogs on each lily pad
 
</td><td>Arrays
(rectangular arrangements to show equal groups)
 </td><td>Repeated addition

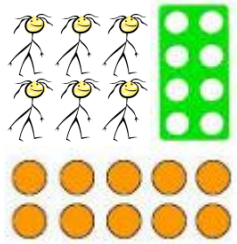
Introduce the x symbol once repeated addition is understood.</td><td>Commutativity
  </td></tr>
</table>

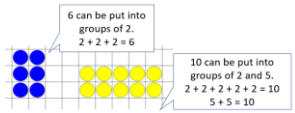
Multiplication KS1

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


Doubles


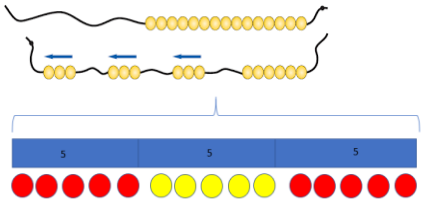


</td>
<td>


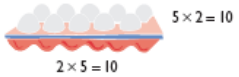


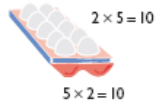
</td>
<td>
Complete
6, 8, 10, ...20
15, 20, 25.....50
60, 70, 80.....100

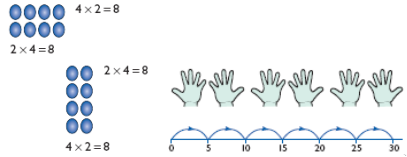
Grouping

5 frogs on each lily pad 5 x 3 = 15


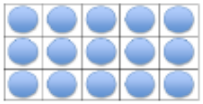
Building tables

Build tables using counting stick- forwards and backwards and with missing jumps
</td>
<td>




5 x2 = 2 x 5


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.

6. Write a story to go with this equation.
$6 \times 10 = 60$
7. Complete the calculations.
$7 \times 5 = \square$ $10 \times 4 = \square$ $9 \times 2 = \square$
</td>
</tr>
<tr>
<td>Known facts</td>
<td colspan="2">Count in multiples of twos, fives and tens.</td>
<td colspan="2">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>Doubles up to 20</td>
</tr>
<tr>
<td>Count in 10s</td>
<td>Double multiples of 10</td>
<td>10 x table</td>
<td>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>Count in 3s</td>
</tr>
</table>

Multiplication KS1