## Diagnostic Assessment Tool: Multiplication and Division

Name…………….……………… Year group …….. Date ………

|  |
| --- |
| Pupil profile: (notes and relevant information) |

|  |  |
| --- | --- |
| **Counting in steps**   * Can you count forward / backward in 2s, 10s?   Starting from zero (multiples)  Starting from a single digit number  Starting from any number   * Can you count forward/ backward in multiples of 5s? |  |
| **Doubling and halving**  What is double this number?  eg 3, 5, 7,10  What is half this number?  eg 4, 8, 10, 20  *What strategies does the child use?*  If this is half of the number can you tell me what the whole number was?  *(Could have half of the quantity ‘hidden’ under a cover)*  What is half of this whole shape?  (*paper shapes needed to enable pupils to fold or draw lines to show half)* |  |

The following are examples of calculations in a context, you will need to adjust the numbers in the calculation according to responses to previous questions.

|  |  |
| --- | --- |
| **Multiplication**  I have 4 sweets in one party bag, how many sweets would be in 2 bags?  (use other multiples, where known facts might be used and where children have to use other strategies)  Does the child:   * use objects to solve the calculation * use pictorial recording * write a number sentence to match the calculation needed * use repeated addition * count in multiples * use multiplication facts * use a numberline or other informal recording? |  |
| **Division**  If I have 6 cakes and share them between 2 people, how many will each person have? (sharing)  I have 6 cakes for a party and I need to put 2 cakes on each plate, how many plates will I need? (grouping)  Does the child:   * use objects to solve the calculation * draw a picture or other informal recording * use a number line * use repeated addition / subtraction * count in multiples * write a number sentence to match the calculation needed * use multiplication / division facts? |  |

|  |
| --- |
| Summary notes |