|  | EYFS progression map from birth to the end of Reception year  |  |   |  |   |   |   |
|--|---|--|---|--|---|---|---|
|  | Area of Learning Mathematics Number   |  |   |  |   |   |   |
|  | Concept:  |  |   |  |   |   |   |
|  | Composition   |  |   |  |   |   |   |
|  | Knowing numbers are made up of two or more other smaller numbers involves 'part-whole' understanding. Learning to 'see' a whole number and its parts at the same time is a key development in children's number understanding.<br>Partitioning numbers into other numbers and putting them back together again underpins understanding of addition and subtraction as inverse operations. |  |   |  |   |   |   |
| Part Typical progression within this concept                                 |   | oning numbers into other numbers and pu<br>Part–whole: identifying smaller numbers within<br>a number (conceptual subitising – seeing groups<br>and combining to a total)  | Inverse operations  | understanding of addition and subtraction<br>A number can be partitioned into different pairs<br>of numbers  | A number can be partitioned into more than<br>two numbers   | Number bonds: knowing which pairs make a given number   |   |
| Progression steps to<br>enable typical<br>progression within this<br>concept | Birth – 3   | I can group objects together (e.g. in a selection<br>of 5 items of crockery group all of the cups and<br>the plates)   |   |  |   |   | -   |
|  | 3-4 yrs   | I can split 3 objects into different groups (e.g. I<br>can give 3 bears one spoon each, I can give<br>mummy bear 2 spoons so she can feed baby<br>bear and herself but daddy bear can feed<br>himself)<br>I can split 5 objects into different groups  | I know when I have split a set of 3 objects into<br>groups, if I collect them back together there will<br>still be 3.<br>I know when I have split a set of 5 objects into<br>groups, if I collect them back together there will<br>still be 5.        |  |   |   |   |
|  | Reception   | I can split 10 objects into different groups   | I know when I have split a set of 10 objects into<br>groups, if I collect them back together there will<br>still be 10.   | I can partition 3 objects into different pairs of<br>numbers<br>I can partition 5 objects into different pairs of<br>numbers<br>I can partition 10 objects into different pairs of<br>numbers  | I can partition 5 objects into different amounts<br>of numbers (e.g. 1, 1, 1, 1, 1; 2, 1, 1, 1;)<br>I can partition 10 objects into different amounts<br>of numbers (e.g. 1, 1, 1, 1, 1; 2, 1, 1, 1;)   | I can remember the number bonds that total 2.<br>I can remember the number bonds that total 3.<br>I can remember the number bonds that total 4.<br>I can remember the number bonds that total 5.<br>I can remember some of the number bonds that<br>total numbers 6-10.<br>I know what the word double means.<br>I know the doubles for numbers 0-5 | ELG: Number<br>atomically recall<br>number bonds to 5<br>(including<br>subtraction facts)<br>and some number<br>bonds to 10,<br>including double<br>facts |
| Guidance from NCETM<br>progression document                                  | 1   | Children need opportunities to see small<br>numbers within a larger collection. 'Number<br>talks' allow children to discuss what they see. For<br>instance, with giant ladybirds: 'There are 5 spots<br>altogether. I can see 4 and 1, I can see 3 and 2,<br>and I can see 1 and 1 and 1 and 1 and 1.'<br>Encourage exploration of all the ways that 'five'<br>can be and look. Children are encouraged to look<br>closely at numbers to see what else they can see.<br>This reinforces the concept of conservation. | Children need opportunities to partition a<br>number of things into two groups, and to<br>recognise that those groups can be recombined<br>to make the same total. Encourage children to<br>say the whole number that the 'parts' make<br>altogether. | Children need opportunities to explore a range<br>of ways to partition a whole number. The<br>emphasis here is on identifying the pairs of<br>numbers that make a total. Children can do this<br>in two ways – physically separating a group, or<br>constructing a group from two kinds of things. | Children need opportunities to explore the<br>different ways that numbers can be partitioned,<br>i.e. into more than two groups. Situations to<br>promote this include increasing the number of<br>pots to put a given amount into, e.g. planting ten<br>seeds into three or more pots. | Children need opportunities to say how many<br>are hidden in a known number of things. For<br>example: 'Five toys go into a tent, then two<br>come out. How many are left in the tent?' The<br>child should respond that there are still three<br>toys in the tent.   |   |