

Numeracy Learning at Home

Secure within 100 – Building on 10

Information for Parents

On the back of this sheet, there is a grid of activities which you can do with your child to help them practise number skills. Doing these a little and often will build their understanding of number concepts, complement their work in school and prepare them well for future learning.

Background to this developmental stage

100 is 10 lots of 10. It is key that your child knows this as it will help them build on their understanding of 10. If they know $2+8=10$, they can easily understand that 2 tens and 8 tens make 10 tens ($20+80=100$). Rote counting up and down and skip counting (up and down in 2s, 3s, 5s, 10s) is really important to practice at this stage. Once your child can do this with confidence, they will be ready to start learning tables.

Adding and Subtracting mentally within 100 is a key skill and will enhance your child's understanding of number. Once they can do this securely, we will teach them to use an algorithm to add and subtract:

e.g.

33	45
<u>+29</u>	<u>-23</u>
_____	_____

HOWEVER, we will only do this once they can add and subtract mentally. Research suggests that introducing written vertical addition and subtraction too early can prevent secure understanding and so we strongly recommend **parents do not teach this method at home** but instead work on the ideas in the grid which will encourage the development of mental strategies and boost strong conceptual understanding.

At this stage, it's important that your child moves beyond counting by ones when doing a calculation and can count by 2s, 5s, 10s etc. However, it is often very helpful to use fingers to keep track of how many 2s, 5s, 10s etc we have counted.

Tips and Hints:

These tasks should be fun and enjoyable for you and your child.

- 10 minutes a day is enough.
- Don't carry on when your child gets bored.
- Don't get cross if your child can't do it - try a different task or smaller numbers.
- Don't feel worried if your child is stuck, just try something different.
- Don't worry if it seems easy - lots of practice is very important and you will find there are some numbers your child finds harder and needs more practice with.
- Keep it fun - you'll be surprised how excited your child will get over a small thing e.g. use legomen to count for a change or (for a treat) jelly beans!
- Involve older and younger siblings.
- Make sure your child doesn't think it is babyish to use fingers or objects to help with counting or working out. This is a good strategy and it promotes solid understanding.
- Use games on tablets or computer with care - some are very good but in others your child may appear to be doing well but is actually using a different clue to click the right answer and isn't developing number knowledge. We would always recommend your child does not use a screen for at least one hour before bedtime as the blue light can suppress the body's ability to produce melatonin and so prevent a good night's sleep.

<p>Play board games involving bigger numbers e.g. Monopoly or Top Trumps or which involving adding or subtracting e.g. Scrabble.</p>	<p>Find 100 objects which your child can use to count sets e.g.:</p> <ul style="list-style-type: none"> ○ Have a box of 100 little shells, put a handful on the table to count them. Encourage your child to sort them into groups of 10 first, count the tens then add on the ones e.g. 53 - make 5 piles of 10 which is 50 plus three left over makes 53. ○ Buy some lollipop sticks or match sticks from a craft shop - these are not expensive. Tie tens into bundles so that you can lay out tens and ones for your child to count or ask them to lay out a specific amount - write the amount beside it. ○ Lay out some bundles of 10 and ask your child to count them. Cover them with a piece of card. Add some more bundles. How many now (including the covered bundles)? This encourages your child to hold the covered number in their heads and count on. An extension of this is to put out some 10s bundles and some ones. Count them, cover them and add some more tens. How many now? ○ Lay a number of objects on the table e.g. 67 (use 6 bundles of 10 and 7 ones). Make sure your child counts how many there are. Hide some, can your child work out how many you are hiding? ○ Use ten pences and one pences to lay out amounts to £1 (100 pennies). ○ Give them an amount to share out e.g. 48 (4 bundles of 10 and 8 ones) to share between 2. What about 38 to share between 2? - let them split the extra tens bundle to understand what is happening. 	<p>Help your child recall number bonds to 100 (two numbers which add up to 100). You can use objects to work these out to begin with and then move on to trying to work them out mentally or to remembering them: 0+100, 10+90, 20+80, 30+70 and so on....</p> <p>Once this is secure, work on multiples of 5: 5+95, 15+85, 25+75 and so on....</p> <p>Then move onto all numbers: 99+1, 34+66 and so on.</p> <p>You can draw your child's attention to the rule that the tens numbers add to 9 tens and the ones numbers add to 10 making 10 tens (100) in total.</p>
<p>Play pairs - make cards with the numbers 0-100 on them. Spread them out on the table. Each player takes turns to turn two over - if they add to 100 they can keep them. The player with the most cards at the end wins. You can make the games shorter by using fewer cards but makes sure the cards you use are pairs to 100.</p>		
<p>Make a set of cards with sums on them (addition and subtraction). Write the answers on another set - challenge your child to match them up or use them to play pairs.</p>		
<p>Give them a number and ask them to halve it (use objects to help at first then work towards recall).</p>	<p>Ask lots of questions e.g.:</p> <p>There are 39 cherries in the bowl, how many more would make 62?</p> <p>There are 80 packets of crisps, how many left after we all eat 3 packets each?</p> <p>There are 62 sweets, how many can you and your brother have each? (What about if there are 63?)</p> <p>Let your child work these out mentally or use objects to help them. Don't worry about written methods or about whether they are doing it the 'right' way. Letting your child experiment with their own methods is allowing them to explore number concepts and this will help them develop strong understanding.</p>	<p>Do lots of counting - count up and down in ones, twos, fives, tens and threes. Don't always start at 1 e.g. start at 12 and count to 92 in 2s. Sing counting songs - be a bit inventive e.g. instead of 10 green bottles sing 100 green bottles and have 5 (or 2 or 3) fall off each time. This is a great activity for in the car.</p>
<p>Give them a number and ask them to double it (use objects to help at first then work towards recall).</p>		