

DYSCALCULIA: CHECKLIST

EARLY YEARS	YES	NO	?
<ul style="list-style-type: none"> • Difficulty in counting in order – may count randomly: 1,2,3,7,5,9... • Difficulty in remembering the names of numbers • Doesn't naturally associate numbers with the corresponding number of items (give me three) • Doesn't associate the final count to represent the total number or size of the collection • Has difficulty counting a collection of different objects • Difficulty in counting on from a number other than 1, goes back to 1 each time • Difficulty understanding concept of quantity: which is more/less? • Difficulty in understanding the concept of 7 being 1 more than 6, 8 being 1 more than 7 and so on • Difficulty in partitioning: that 7 is made up of 5+2 or 6+1 or 3+3+1 and so on • Relationships of numbers: those that are close on a number line are close in magnitude (e.g. 4 and 6), whilst those that are further away have a greater difference in magnitude (e.g. 1 and 9) 			
PRIMARY YEARS	YES	NO	?
<ul style="list-style-type: none"> • Continued errors in counting, particularly the 'teens' and across the decade • 'Teen' and 'ty' confusion • Has difficulty ordering numbers on a number line • Difficulty with prepositions: between, more, less, • May write numbers the wrong way round e.g. 23 instead of 32, or mis-interpret digits e.g. confusing 3 and 5, 2 and 5, 1 and 7, or reversing digits • Continued difficulty in understanding the concept of how many more/less? • May continue to use inefficient counting as a method for calculating: e.g. 3+4 is (1,2,3, + 1,2,3,4 = 1,2,3,4,5,6,7) • Returns to 1 each time rather than counts on from a number • Counting backwards, particularly across a decade, is a real difficulty • Difficulty counting in groups (e.g. of 2 or 3) • Has difficulty seeing the pattern or rule e.g. 23,33,43 			



<ul style="list-style-type: none"> • Difficulty in remembering number facts, e.g. multiples, factors • Difficulty in learning times tables • Estimation: often makes a wild guess • May confuse symbols such as + and x • Difficulty in learning number bonds, odd and even • Difficulty in deriving information from a known e.g. if $6+4=10$, $6+5$ must be 11 • Inaccurately remembering number facts • Difficulty in partitioning number, commutativity ($3+5=5+3$) and that addition is the opposite of subtraction • Applying rules too liberally without a thorough understanding: says eighteen, nineteen, twentyen... • Missing number notation is a difficulty e.g. $2 + ? = 5$, $? + 4 = 6$. Will particularly struggle with: $? - 5 = 3$ • Misconceptions may occur due to over-generalisation e.g. $2 + ? = 5$ ($? = 3$), $2 - ? = 5$ ($? = 3$) • Difficulty with understanding and interpreting place value (e.g. one hundred and two is written 1002) • Difficulty in following word problems • Inappropriate understanding of the notion of equivalence • Difficulty in understanding coin values and giving change • Difficulty in learning to tell the time • Difficulty in explaining their answer or method 			
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SECONDARY YEARS

At this stage it is clear when a pupil is experiencing difficulties in reasoning and understanding numerical operations. Mathematics relies upon the ability to use a range of strategies, make connections between operations and see the pattern or rule. If an individual continues to experience substantial difficulty in understanding basic numerical concepts, such as fractions and percentages, preferring to learn a rule, they should be assessed for dyscalculia

<ul style="list-style-type: none"> • Continued difficulties in calculating, relying upon inefficient method of counting • Difficulty in estimation, decimal place and significant figures • Difficulties in algebra due to difficulties in generalisations and understanding equivalence • Difficulty in multi-stepped activities due to memory difficulties • May find interpreting word problems tricky and not know what operation to assign to the problem • Continued difficulty in deriving information from the known e.g. $25 + 75 = 100$, $100-75 = 25$, $2.5+7.5 = 1.0$ and so on. 			
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<ul style="list-style-type: none"> • Using the most appropriate strategy for a particular context -relies upon inefficient strategies, such as counting • Difficulties in understanding and using money (coin values, giving change) • Difficulties in understanding decimal notation due to place value difficulty, standard form • Difficulty in application of mathematical concepts such as in measure and capacity • Time-related concepts difficult to understand • Problems with percentages, fractions and decimals continue to be problematic 			
BEYOND SECONDARY	YES	NO	?
<p>The impact of ongoing difficulties will impact many walks of life including:</p> <ul style="list-style-type: none"> • Limited ability when managing home finances and shopping • Limited ability to estimate time, read timetables etc • Restricted employment prospects to work that does not involve too much mathematics, such as required in engineering, plumbing, electrician, medicine, teaching, retail and so on • Reduced ability to measure items (weight, capacity, length and distance) restricting employment roles and self-help, such as cooking 			