

The Dyscalculia Checklist

This is an informal exercise for the teachers and parents who work with the student.

It identifies most of the key issues / behaviours that contribute to maths failure.

It enables the user to focus on these issues and give a ranking as to their level of severity for the student. In this way it can help in building a personalised intervention plan.

There is no 'score' to identify dyscalculia, though, obviously the higher the score and the more items that are a problem, and thus the more severe the learning difficulty.

Name: _____ DOB: ____ / ____ / ____ Date: _____

Does the learner ... 1 - not often 2 - sometimes 3 - always

1	2	3
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1. Have difficulty counting objects accurately. For example, lacks the ability to make 'one to one correspondence' when counting objects (match the number to the object) or does not organise objects to help monitor counting.

1	2	3
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2. Find it impossible to 'see' that four randomly arranged objects are 4 without counting.

1	2	3
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3. Have little sense of estimation for bigger quantities.

1	2	3
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4. Reverse the digits in numbers; for example, writes 51 for fifteen or 45 for fifty-four.

1	2	3
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5. Have difficulty remembering addition facts, which may be revealed by:

- a.** counting on for addition facts, for example, for $7 + 3$, counting on 8, 9, 10 to get the answer, or
- b.** counting all the numbers when adding, as for $7 + 3$ again, count 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

1	2	3
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6. Not 'see' immediately that $7 + 5$ is the same as $5 + 7$ or that 7×3 is the same as 3×7 .

1	2	3
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7. Find it difficult to progress from using concrete aids (fingers, blocks, tallies) to using only numbers as symbols.

1	2	3
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8. Find it much harder to count backwards compared to forwards

1	2	3
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9. Find it difficult to count fluently the less familiar sequences, such as: 1, 3, 5, 7, 9, 11 or 14, 24, 34, 44, 54, 64

1	2	3
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10. Know only the 2x, 5x and 10x (and 1x) multiplication facts.

1	2	3
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11. Count on to access the 2x and 5x facts

1	2	3
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12. Manage to learn other basic multiplication facts, but then forgets them overnight

1	2	3
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13. Make 'big' errors for multiplication facts, such as $6 \times 7 = 67$ or $6 \times 7 = 13$

1	2	3
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14. Doesn't recognise the relationships between addition and subtraction facts

1	2	3
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15. Doesn't recognise the relationships between multiplication and division facts

1	2	3
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16. Use tally marks for addition or subtraction problems

1	2	3
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17. Not group the tallies as in the 'gate' (H H H) pattern

1	2	3
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18. Not understand how to use place value when doing addition and subtraction problems

1	2	3
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19. Find it difficult to write numbers which have zeros within them, such as 'four thousand and twenty-one'

1	2	3
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20. Not know, nor understand, the underlying place value concept, when multiplying and dividing by 10, 100, 1000 and above

1	2	3
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21. Find it difficult to judge whether an answer is right, or nearly right (closely linked to estimation skills).

1	2	3
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22. Find estimating impossible for:

- a. Addition
- b. Subtraction
- c. Multiplication
- d. Division

1	2	3
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23. Forget: (these are short-term memory problems)

- a. the question asked in mental arithmetic
- b. instructions (which can cause the learner to be slow to start work in class)

1 2 3

24. Struggle with mental arithmetic (which can be a working memory problem)

1 2 3

25. 'See' numbers literally and not inter-related, for example, counts from 1 to 9, rather than subtracting 1 away from 10.

1 2 3

26. Think an item priced at £4.99 is '£4 and a bit' rather than almost £5.

1 2 3

27. Prefer to use formulas and procedures (even if difficult to retain in long-term memory), but uses them mechanically without any understanding of how they work.

1 2 3

28. Forget mathematical procedures completely or in part, especially as they become more complex, such as 'long' division.

1 2 3

29. Organise written work poorly, for example does not line up columns of numbers properly

1 2 3

30. Not see and pick up patterns or generalisations, especially ones that are new or challenge consistency, for example that $1/2$, $1/3$, $1/4$, $1/5$ is a sequence that is getting smaller.

1 2 3

31. Enter data into a calculator in the incorrect sequence.

1 2 3

32. Find analogue clocks difficult to read and understand.

1 2 3

33. Think that algebra is impossible to understand.

1 2 3

34. Work slowly, for example, attempt less questions than his/her peers.

1 2 3

35. Get very anxious about doing ANY maths.

1 2 3

36. Show reluctance to try any maths, especially unfamiliar topics. Avoids maths.

1 2 3

37. Become impulsive, rather than being calm and analytical, when doing maths, rushing to get it over with.

Total score