



Dyscalculia Screeners and Checklists

Screeners can help you identify the areas of strengths and difficulties in mathematical development a learner might have. Importantly: these are not diagnostic tools and cannot be used to tell whether a child has a specific learning difficulty in the domain of numeracy and mathematics, such as Developmental Dyscalculia. Please consult our leaflet on what to do when you think a child has developmental dyscalculia: <https://www.ucl.ac.uk/ioe/departments-and-centres/departments/psychology-and-human-development/add>

Screener	Main Features	Age Range/ Items	Our Verdict
Dyscalculia Checklist Questionnaire	<ul style="list-style-type: none"> ◆ Developed by Steve Chinn ◆ Informal exercise for teachers and parents ◆ The higher the score the more severe the learning difficulty ◆ Free to download 	<ul style="list-style-type: none"> ◆ Primary school ◆ 37 items 	<ul style="list-style-type: none"> ◆ Not standardised¹ so unclear how it relates to school measures and accurately identifies difficulties ◆ Still useful checklist for teachers
Numeracy Screener	<ul style="list-style-type: none"> ◆ Developed by University of Western Ontario's Numerical Cognition Lab by Prof Daniel Ansari and his team. ◆ A 2–4-minute test composed of two parts: <ol style="list-style-type: none"> 1. Symbolic (i.e., numerical digits) 	<ul style="list-style-type: none"> ◆ From senior kindergarten to grade 3 	<ul style="list-style-type: none"> ◆ Quick ◆ Informed by research evidence ◆ Only assesses magnitude, not all children with dyscalculia have difficulties with this

¹ Standardised means that the measure has been norm referenced and that you can see how well a student is performing against other young people of a similar chronological age.



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	<ul style="list-style-type: none"> 2. Non-Symbolic (i.e., arrays of dots) ◆ Measures a child's ability to understand numerical magnitude (quantity) ◆ Free to download 		<ul style="list-style-type: none"> ◆ Correlations between performance on the Numeracy Screener and arithmetic skills have been demonstrated and published in scientific literature ◆ Normed on children who are in the Canadian educational system so not clear how these norms relate to children in UK
<p><u>Dyscalculia Screener and Dyscalculia Guidance</u>²</p>	<ul style="list-style-type: none"> ◆ Developed by Brain Butterworth in 2003 ◆ Online screener requires minimum purchase of 5 licenses at \$7 each ◆ Focuses on simple reaction time and tests of capacity: <ol style="list-style-type: none"> 1. Dot Enumeration 2. Number Comparison (also known as Numerical Stroop) 	<ul style="list-style-type: none"> ◆ Age 6 to 14 ◆ 15 and 30 minutes depending on the age and ability of the pupil being tested 	<ul style="list-style-type: none"> ◆ Informed by research evidence ◆ Standardised in UK ◆ Online testing and scoring ◆ Cost attached to it

² For manual: http://sebastien.brunekreef.com/dyscalculie/Dyscalculia_Screener_Manual.pdf



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	3. Arithmetic Achievement test (addition and multiplication)		
<u>Panamath Test of Number Sense</u>	<ul style="list-style-type: none"> Developed by Justin Halberda at the Department of Psychological and Brain Sciences at the Johns Hopkins University, funded by US National Science Foundation (2011) Assesses non-symbolic dot comparison only Free online test 	<ul style="list-style-type: none"> Age 2 to old age 5 to 20 minutes 	<ul style="list-style-type: none"> Only assesses magnitude, not all children with dyscalculia have difficulties with this Although often reported as a screener, there is now considerable evidence that symbolic magnitude is a better predictor for mathematical learning difficulties than non-symbolic abilities Website doesn't always work
<u>Dynamo Maths</u>	<ul style="list-style-type: none"> Online screener Standardised dyscalculia screener for ages 6 to 11 and baselined at ages 6 to 9. It provides a profile of Number Sense strength and areas of need, supported by an Individual Support Plan signposted to Dynamo Intervention 	<ul style="list-style-type: none"> Age 6 to 11 	<ul style="list-style-type: none"> Cost attached to it: £14.75 per student in addition of £375.39 annual subscription. British Dyslexia Association (BDA) approved
<u>IDL Numeracy Screener</u>	<ul style="list-style-type: none"> Developed with input from Judy Hornigold 	<ul style="list-style-type: none"> Up to age 11 (Year 6) 	<ul style="list-style-type: none"> Undergoing standardisation



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Awareness of Developmental Dyscalculia: Uplifting Practice

Screener	Main Features	Age Range/ Items	Our Verdict
	<ul style="list-style-type: none">◆ Free of charge◆ Whole class administration◆ Focus on following areas:<ul style="list-style-type: none">◆ Reaction time◆ Number sense◆ Number value◆ Arithmetic◆ Visual memory◆ Auditory memory◆ Visual pattern memory◆ Number Stroop◆ Sequencing		<ul style="list-style-type: none">◆ Assesses wide range of mathematical abilities◆ Informed by research