



Sumdog Maths Diagnostic

Identify the needs of every child



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Sumdog was founded with a clear mission to help close the attainment gap. In order to support learners and provide teachers with the information they need to do just that, we offer a maths diagnostic test for all users.

The Sumdog diagnostic test has two purposes:

- 1) To provide a starting point for Sumdog's advanced adaptive learning algorithm to present maths questions when learners are playing games in 'training mode'.*
- 2) To identify strengths and key areas for development by tracking and demonstrating progress.



* For more information, see our document on Sumdog's adaptive practice function in the resource hub.

"One of the major benefits of this tool is the fact that Sumdog automatically creates an individualized learning journey for every pupil based on their performance on the diagnostic task. I can easily set tasks for my class and know that the questions my pupils face are chosen specifically for their level."

Primary Maths Teacher

How it works



The Sumdog diagnostic is presented outside of our games to focus learners and is designed to be completed within one 30 minute class session. The multiple choice maths questions in the diagnostic have been carefully chosen, reviewed and approved by teachers and educational consultants.

It is split into two parts:

- Part 1 - 15 questions focussed on numeracy. The result of this shorter test determines the level of questions that learners will receive in part 2.
- Part 2 - 40 questions from a range of maths topics across the breadth of the curriculum. These are a mixture of 20 questions from the curriculum year of the result of part 1, and a further 20 questions from the curriculum year below that result.



GETTING TO KNOW YOU
When you're done, you'll get a reward!

QUESTIONS TO ANSWER 15 TAKE YOUR TIME!		CORRECT ANSWERS 5 COINS EACH
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NEARLY DONE!
Just a few more questions, then you'll play a game!

QUESTIONS TO ANSWER 40 TAKE YOUR TIME!		CORRECT ANSWERS 5 COINS EACH
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Once both parts have been completed, each child is given a test score out of 40 and a diagnostic result. There are three possible results per level:

Starting:	They have demonstrated a secure knowledge of the previous year's maths level, and are beginning to grasp some of the current year group's maths curriculum.
Mid:	They have a secure knowledge of parts of the current year group's maths curriculum.
End:	They have a secure knowledge of the majority of the current year group's maths curriculum.



Once the diagnostic has been completed, the results for each child will be presented to the teacher in three reports.

1) Whole class stranded report

This report shows the number of questions the children in your class were asked and the number of correct answers in each curriculum strand.

REF#	PUPIL	DIAGNOSTIC RESULT	PRETEST SCORE	TEST SCORE	Number	Shape	Measure	Data and probability	TEST TAKEN
□	Ella Carter Year 5	END OF YEAR 4	14/18	38/40	25/32	5/5	4/4	5/5	Diagnostic 4.2 (15-03-2021)
□	Belle Clarke Year 5	END OF YEAR 2	11/18	16/40	7/32	2/4	4/4	2/4	Diagnostic 3.2 (15-03-2021)
□	Sarah Greenstein Year 5	MID YEAR 3	17/18	18/40	7/32	4/4	3/4	7/12	Diagnostic 4.2 (17-08-2021)
□	Euan Hall Year 5	END OF YEAR 2	21/18	17/40	7/32	5/4	4/4	2/4	Diagnostic 3.2 (17-08-2021)
□	Alex Harrison Year 5	MID YEAR 4	13/18	30/40	21/32	5/5	3/4	5/5	Diagnostic 4.2 (16-08-2021)
□	Elizabeth Johnson Year 5	MID YEAR 4	11/18	37/40	22/32	6/5	5/4	5/5	Diagnostic 4.2 (16-08-2021)
□	Belle Hedley Year 5	END OF YEAR 4	14/18	39/40	26/32	7/5	5/4	5/5	Diagnostic 4.2 (15-08-2021)
□	Mary Inrigie Year 5	END OF YEAR 2	11/18	17/40	11/32	4/5	1/4	0/4	Diagnostic 4.2 (15-08-2021)

2) Individual report

This is similar to the whole class report in that it shows the results in a stranded report but focuses more acutely on individual pupils, including the specific questions they were asked and the answers they chose.

Belle's Diagnostic Report

Sumdog's new diagnostic was introduced on August 8. Read about how it works.

Belle's diagnostic result
The diagnostic test was completed on 15 March 2021.

BELLE'S RESULT
End of Year 2

Diagnostic report
We chose the level of Belle's diagnostic questions based on the results of an initial numeracy test. [Find out more about how that decision was made.](#)

40	40	16	40%
QUESTIONS IN TEST	QUESTIONS ATTEMPTED	CORRECT ANSWERS	ACCURACY

Breakdown by strand

Number	7/32
Shape	2/4
Measure	4/4
Data and probability	2/4

[EXPORT PDF](#)

Question 3: Triangle? Triangle Square Circle Pentagon

Question 4: What object has 2 edges? Triangular pyramid Cylinder Cone Cube

Question 5: $16 + 4 = 20$, what else makes 20? 10 16 12 14

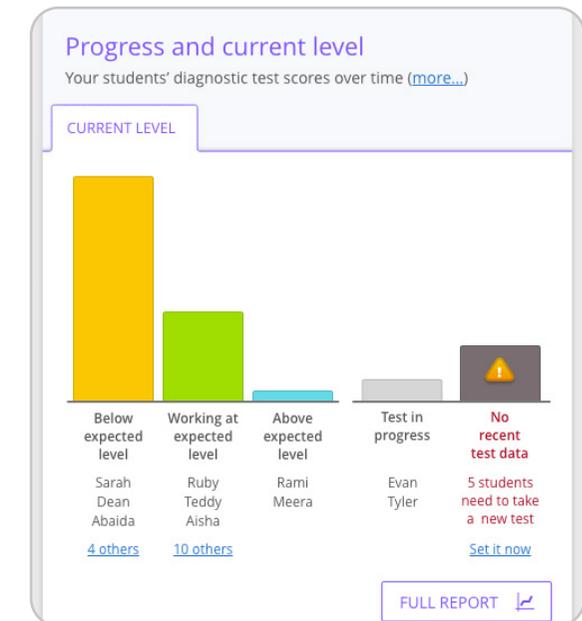
Question 6: $6 \times 2 = 12$ 18 12 6 14

Question 7: 11p 12p 10p 6p

Question 8: sixteen? 15 26 16 106

3) Current level chart

The current level chart gives teachers an 'at a glance' way to view their pupils' current level based on their most recent diagnostic test results. Premium subscribers will also be able to track progress more closely using attainment charts based on previous diagnostic tests.



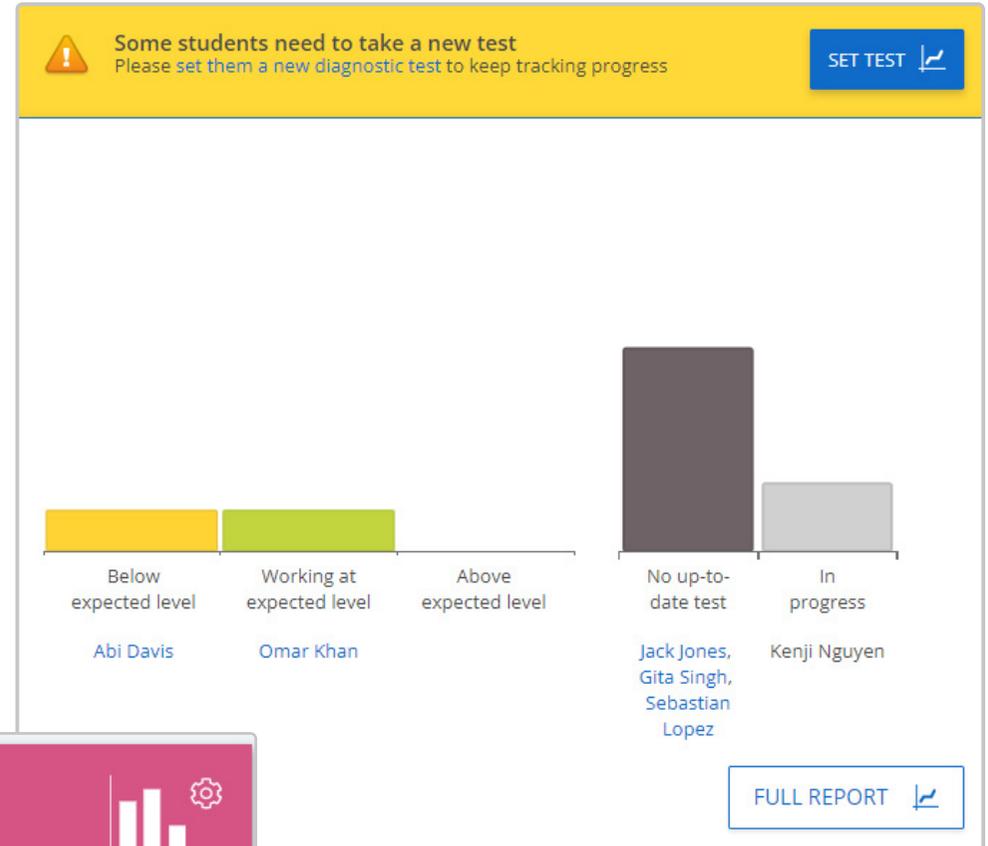


Resetting the diagnostic

How and when to reset

We recommend resetting the Sumdog diagnostic termly as this will allow you to track and monitor the progress of learners as they practice on Sumdog throughout the school year. You will automatically be prompted on the Teacher dashboard when it is time to reset your diagnostic, but you can do this at any time you choose from the 'Diagnostic results page'.

You can either reset for your entire class, or for specific pupils to give you reliable data to demonstrate attainment and progress. When resetting the diagnostic, you can also choose the curriculum year which you would like the first 15 questions (Part 1) set to for each individual learner (which in turn will affect the accuracy of the level of the Part 2 test).



Top Tip

If you would like to assess the progress of one or more pupils already working at the expected level of their year group, you can choose to reset their diagnostic and start them on the test for the year above to more accurately diagnose their working level.

NEW!

Diagnostic Results

See how your students were originally placed.

CHECK

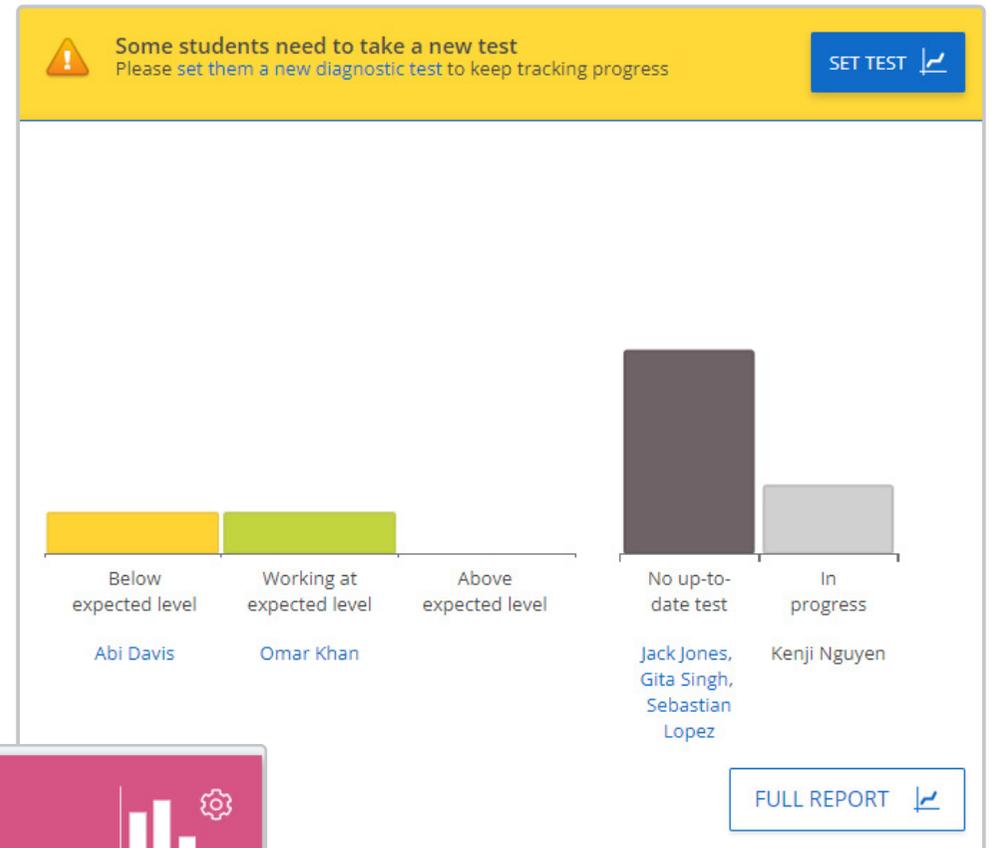


Why to reset

Resetting the diagnostic frequently ensures that the tracking and monitoring reports are populated with the latest data, providing a quick and easy way to monitor progress over time of your pupils. Sumdog Premium subscribers will be able to quickly switch between current and previous attainment charts; allowing easy analysis of diagnostic results from different dates and overall trends to evaluate progress.

Not only this, but once a reset diagnostic has been completed, your pupils' personalised learning journeys will be adjusted automatically if necessary to reflect the progress that they have made since starting to work on Sumdog. You can then be confident that the questions your pupils are being set by our adaptive algorithm are pitched at the correct level.

By regularly resetting and analysing the Sumdog diagnostic, you can make sure that both you and your pupils are getting the most out of Sumdog!



NEW!

Diagnostic Results

See how your students were originally placed.

CHECK



Have any questions about our diagnostic?
Call 0131 226 1511 or visit www.sumdog.com to find out more.