



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 level of the result of part 1, and a further 20 questions from the level 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

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

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 maths level, and are beginning to grasp some of the current maths level.
Mid:	They have a secure knowledge of parts of the current maths level.
End:	They have a secure knowledge of the majority of the current maths level.



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.

RESET	PUPIL	DIAGNOSTIC RESULT	PRE-TEST SCORE	TEST SCORE	NUMBER	SHAPE	MEASURE	PERCENTAGE	TEST TAKEN
<input type="checkbox"/>	Sarah Bailey	MID EARLY LEVEL 1*	6/12	12/12	9/12	2/12	2/12	75%	Diagnostic E.2 (15-06-2021)
<input type="checkbox"/>	Scarlett Brown	STARTING SECOND LEVEL	13/14	28/14	16/14	5/14	2/14	93%	Diagnostic 2.2a (01-05-2021)
<input type="checkbox"/>	Penny Byrne	MID SECOND LEVEL	7/14	18/14	14/14	2/14	2/14	86%	Diagnostic 2.2b (12-02-2021)
<input type="checkbox"/>	Lola Harris	MID SECOND LEVEL	10/14	26/14	23/14	5/14	4/14	79%	Diagnostic 2.2a (01-09-2020)
<input type="checkbox"/>	Ruby Kristen	MID FIRST LEVEL	7/14	22/14	19/14	1/14	5/14	71%	Diagnostic 1.2b (22-07-2021)
<input type="checkbox"/>	Belle Healey	MID FIRST LEVEL	6/14	13/14	7/14	1/14	3/14	21%	Diagnostic 1.2c (22-07-2021)
<input type="checkbox"/>	Freya Taylor	MID FIRST LEVEL	12/14	17/14	11/14	3/14	15/14	71%	Diagnostic 1.2b (22-07-2021)
<input type="checkbox"/>	Molly Williams	MID SECOND LEVEL	10/14	18/14	15/14	1/14	0/14	86%	Diagnostic 2.2b (07-08-2020)
<input type="checkbox"/>	Adam Wood	Reset to get data	-	-	-	-	-	-	-
<input type="checkbox"/>	Sam Wood	In Progress	-	-	-	-	-	-	-

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.

Penny's Diagnostic Report

Sundog's new diagnostic was introduced on August 9. [Read about how it works](#)

Penny's diagnostic result
The diagnostic test was completed on 12 March 2021.

DIAGNOSTIC RESULT
Mid Second Level

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

40 QUESTIONS IN TEST | 40 QUESTIONS ATTEMPTED | 18 CORRECT ANSWERS | 45%

Breakdown by strand

- Number: 14/14 (Green)
- Shape: 2/14 (Red)
- Measure: 2/14 (Green)
- Percentage: 1/14 (Red)

Penny's questions and answers

1. A rectangular doll house window is 10 cm tall and 8 cm wide. What is its perimeter?
 36cm (Correct), 18mm (Incorrect), 18cm (Incorrect)

2. Tom counted the windows on each building. Which building has 10 windows?
 House (10), School (55), Library (76), Shed (5), Hotel (100)

3. 12 ÷ 8 = ?
 96 (Incorrect), 816 (Incorrect), 09 (Incorrect), 26 (Incorrect)

4. 6 × 6 = ?
 36 (Incorrect), 1 (Incorrect), 6 (Incorrect), 2 (Incorrect)

5. Doesn't have all equal sides?
 Rhombus (Correct), Trapezium (Incorrect), Square (Incorrect), Rectangle (Incorrect)

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 assessment results. Premium subscribers will also be able to track progress more closely using attainment charts based on previous diagnostic assessments.

Progress and current level
Your students' diagnostic test scores over time ([more...](#))

CURRENT LEVEL

- Below expected level: Sarah, Dean, Abaida (4 others)
- Working at expected level: Ruby, Teddy, Aisha (10 others)
- Above expected level: Rami, Meera
- Test in progress: Evan, Tyler
- No recent test data: 5 students need to take a new test (Set it now)

FULL REPORT



Resetting the diagnostic

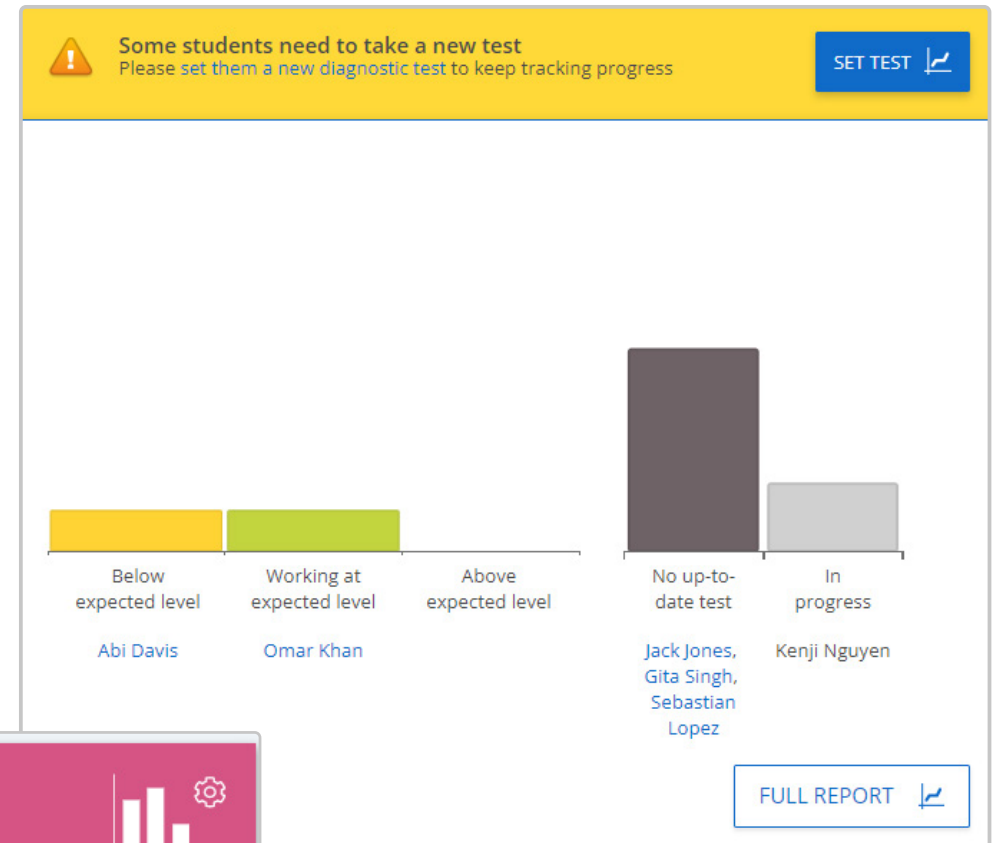
How and when to reset

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 level which you would like the first 15 questions (Part 1) set to for each individual learner (which in turn will affect

Top Tip

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



NEW!

Diagnostic Results

See how your students were originally placed.

[CHECK](#)

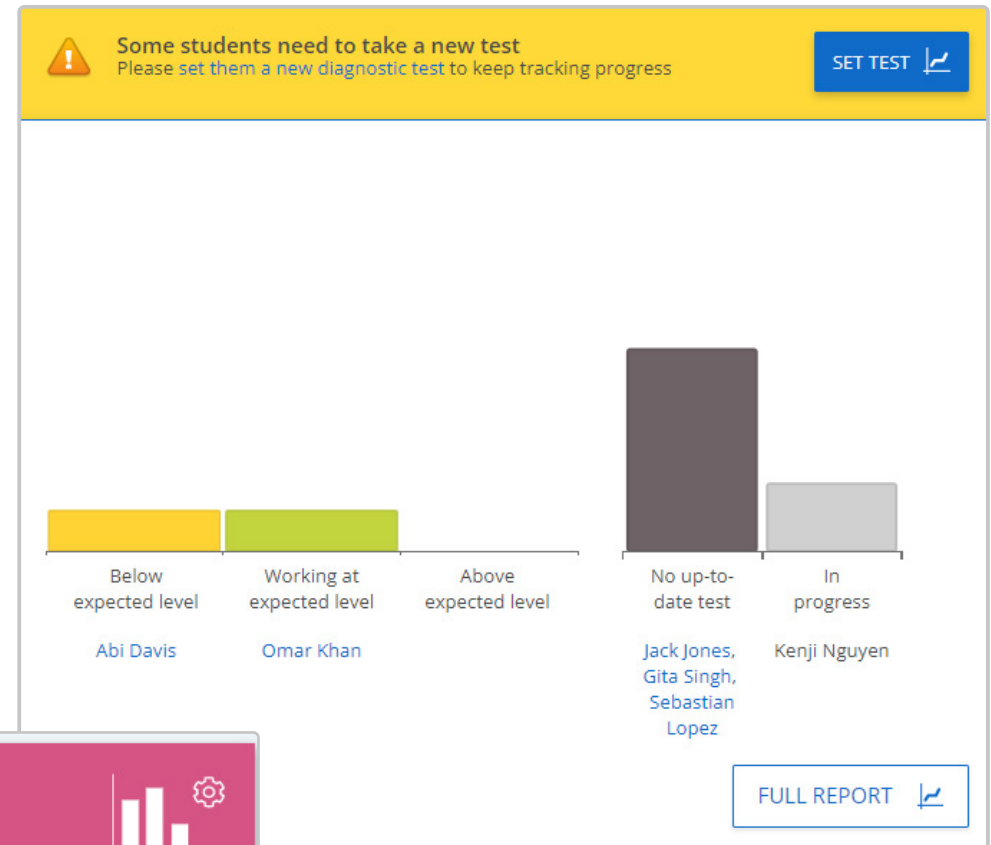


Why to reset

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.