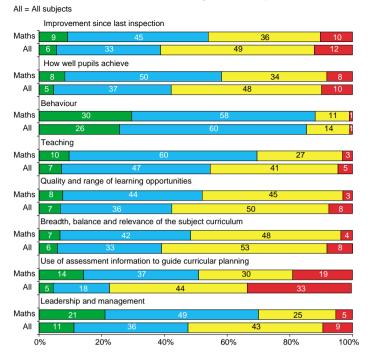


# Mathematics at a glance 2002/03

July 2004
Maintained primary and secondary schools in England

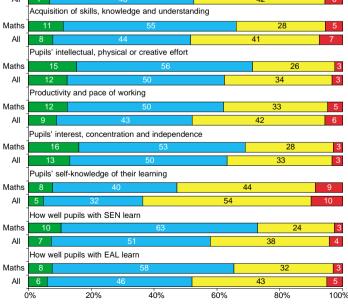
#### Overview of mathematics (percentage of primary schools)



#### Quality of aspects of learning (percentage of primary schools)

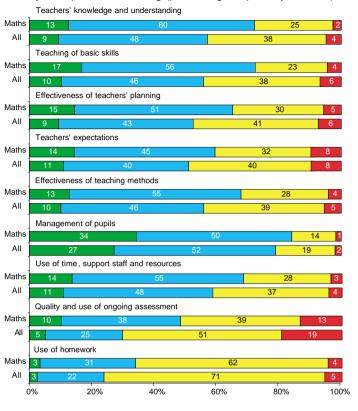
Learning

Maths

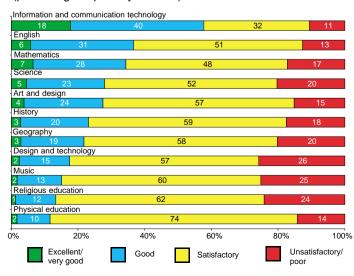


2002/03 inspection data based on full inspections only: not nationally representative These figures have been rounded and may not add up to 100%

#### Quality of aspects of teaching (percentage of primary schools)



## Effectiveness of the use of new technology (percentage of primary schools)

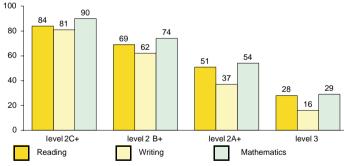


#### Main findings in primary schools - 2002/03

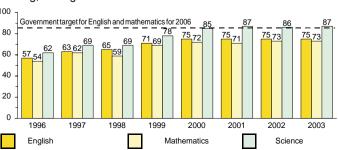
- Nine schools in ten have improved their provision for mathematics since the previous inspection; in over half, this improvement has been significant
- At the end of Key Stage 1, nine out of ten pupils attained the expected level 2 or better in National Curriculum tests for 7 year olds, the same figure as last year. There was a two percentage point drop in the proportion of 7 year olds reaching the more demanding levels 2B and 3.
- At the end of Key Stage 2, there was no change in the proportion of pupils (73%) attaining at least level 4 in the National Curriculum tests, but there was a one percentage point increase in the number reaching the more demanding level 5. The performance of boys and girls remained very similar.
- Pupils' achievement in mathematics is good or better in almost six schools in ten, continuing the levels of improvement shown last year.
- Pupils with special educational needs (SEN) and those with English as an additional language (EAL) make good progress in mathematics. The progress made by gifted and talented pupils is not as strong.
- In comparison with other subjects, mathematics continues to be a major strength in primary schools. It is among the best taught and most successfully managed subjects in the primary curriculum. The quality of teaching is good or better in nearly seven schools in ten and pupils have a positive attitude to mathematics in nine schools in ten.
- Despite this, pupils' attainment has continued to plateau with results in this year's National Curriculum tests showing little improvement on last year's levels. Improvements in teaching and learning have also slowed.
- The procedures for assessing pupils' progress in mathematics are generally good, although insufficient use is made of ongoing assessment to raise standards.
- Pupils' skills as learners are underdeveloped and they have insufficient knowledge of their own strengths and weaknesses and their progress in mathematics.
- The use of information and communication technology (ICT) to promote progress in mathematics has improved noticeably during the last year.
   However, the gap between the best and the weakest application of ICT in mathematics continues to be too great.

A full version of the 2002/03 report can be found on the Ofsted website (www.ofsted.gov.uk).

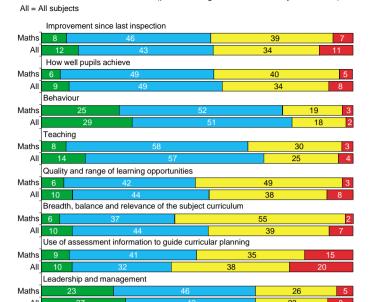
## Percentage of 11 year old pupils achieving level 4 and above in English, mathematics and science



## Percentage of 7 year old pupils achieving level 2 or above in reading, writing and mathematics



#### Overview of mathematics (percentage of secondary schools)



40%

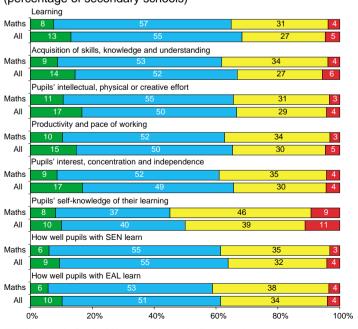
60%

80%

100%

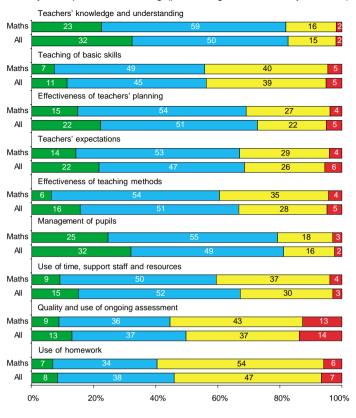
## Quality of aspects of learning (percentage of secondary schools)

20%

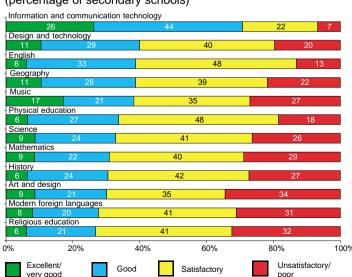


#### 2002/03 inspection data based on full inspections only: not nationally representative These figures have been rounded and may not add up to 100%

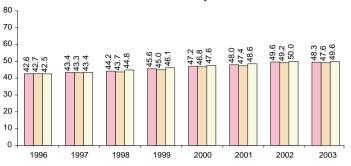
#### Quality of aspects of teaching (percentage of secondary schools)



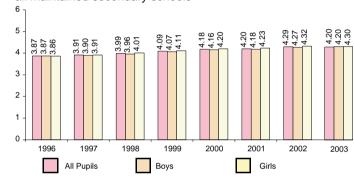
# Effectiveness of the use of new technology (percentage of secondary schools)



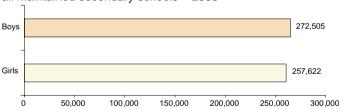
## Percentage of pupils obtaining A\*–C GCSE grade in mathematics: all maintained secondary schools



### GCSE average points score in mathematics: all maintained secondary schools



## Number of 15 year old pupils entered for GCSE mathematics: all maintained secondary schools – 2003



## GCSE results for mathematics: all maintained secondary schools – 2003

	A*	Α	В	С	D	E	F	G	U
All Pupils	2.4	7.8	16.9	21.2	16.9	16.6	9.8	4.2	3.5
Boys	2.4	7.7	16.2	21.3	16.4	17.1	10.0	4.3	3.8
Girls	2.4	8.2	17.8	21.2	17.1	15.8	9.5	4.0	3.3

## GCSE results for all subjects: all maintained secondary schools – 2003

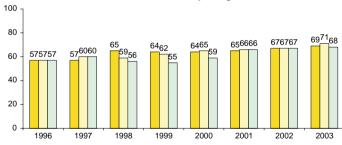
	A*	Α	В	С	D	E	F	G	U
All Pupils	3.7	10.4	17.2	23.8	18.3	12.5	7.4	3.7	2.4
Boys	2.9	8.5	15.4	23.2	19.3	14.0	8.7	4.4	2.9
Girls	4.4	12.3	18.9	24.4	17.3	11.0	63	2.9	1.9

#### Main findings for secondary schools - 2002/03

- Over 19 schools in 20 have improved their provision for mathematics since the previous inspection; in over half of schools this improvement has been significant.
- Standards in mathematics have risen at Key Stage 3. Seven in ten 14 year old pupils attained the expected level 5 in national tests, a 3% increase on last year's figure. Almost half of the age group achieved the more challenging level 6 or above, an improvement of 4%. There was little difference between the performance of boys and girls.
- The proportion of pupils gaining grades C and above at General Certificate of Secondary Education (GCSE) mathematics has fallen slightly to 48%. At Advanced Level (A Level), 53% of candidates gained grades A or B and there has been an increase in the proportion of students gaining grades A–E.
- Pupils' achievement in Key Stage 3 has improved significantly in the last year and is now good or better in almost two schools in three. Achievement is considerably weaker in Key Stage 4; it is unsatisfactory in one school in ten, considerably higher than in Key Stage 3 or post-16.
- The overall quality of teaching is good or better in approximately two thirds of schools but remains lower on average than many other subjects.
- The quality of learning for pupils overall is also good or better in approximately two thirds of schools. Pupils are generally well behaved and have a positive attitude to their studies, but their skills as learners are not sufficiently well developed.
- The quality and use of ongoing assessment remain a weakness in mathematics. They are unsatisfactory in one school in eight.
- Despite significant government funding, the use of information and communication technology to promote progress in mathematics remains a relatively weak aspect of provision. Its use is less effective than in many other subjects and is unsatisfactory in one school in three.
- The leadership and management of mathematics remain good or better in seven schools in ten. However, staffing difficulties, including vacancies and high turnover, continue to hamper progress in too many schools.

A full version of the 2002/03 report can be found on the Ofsted website (www.ofsted.gov.uk).

# Percentage of pupils attaining level 5 or above in English, mathematics and science tests at Key Stage 3



# Percentage of pupils attaining each level in English, mathematics and science tests at Key Stage 3

