

Aviation House  
125 Kingsway  
London  
WC2B 6SE

T 0300 123 1231  
F 020 7421 6855  
[enquiries@ofsted.gov.uk](mailto:enquiries@ofsted.gov.uk)  
[www.ofsted.gov.uk](http://www.ofsted.gov.uk)



17 October 2013

Mr R Allen  
Headteacher  
The Billingham Church of England Primary School  
Fen Road  
Billinghay  
Lincolnshire  
LN4 4HU

Dear Mr Allen

### **Ofsted 2013–14 subject survey inspection programme: mathematics**

Thank you for your hospitality and cooperation, and that of your staff and pupils, during my visit on 2 October 2013 to look at work in mathematics.

The visit provided valuable information which will contribute to our national evaluation and reporting. Published reports are likely to list the names of the contributing institutions but individual institutions will not be identified in the main text without their consent.

The evidence used to inform the judgements included: interviews with staff and pupils; scrutiny of relevant documentation; analysis of pupils' work; and observation of four lessons and other additional mathematics activities in small groups.

### **The overall effectiveness of mathematics is good.**

#### **Achievement in mathematics is good.**

- Standards in mathematics at the end of Year 6 are usually above average. The school's assessment information shows that, currently, pupils in Years 5 and 6 are well placed to achieve standards that are above average.
- The progress of pupils in Year 6 who left school in July 2013 was good overall. Those pupils known to be eligible for free school meals made faster progress than the other pupils. Although they had entered Year 3 approximately a year behind the expected level, by the end of Year 6 there was no gap.
- Pupils also make good progress in Key Stage 1 and the Early Years Foundation Stage. While standards are broadly average, they are rising each year.

- Pupils are being well equipped to be able to solve problems and to apply fluently their number skills when solving problems. It is apparent that they enjoy the challenge of working together to solve problems. For example, the Year 3 and 4 pupils worked very cooperatively on a challenging problem that involved placing treasure on the pirate ship without sinking it. They demonstrated good attitudes to learning that are replicated across the school.

### **Teaching in mathematics is good.**

- In most lessons, teachers plan challenging work that is pitched correctly at the right level for pupils. They then check carefully in lessons that pupils are making good progress. They are ably supported by well-trained teaching assistants who work with different groups to ensure learning is of a good quality.
- Pupils benefit from regular opportunities to consolidate their learning through well-prepared problem-solving activities that stretch their thinking and reasoning skills. As well as this, teachers ensure that pupils are developing a fluency in their understanding of number by reinforcing the links and relationships between numbers and operations. For example, pupils in Year 5 were able to explain confidently with examples the relationship between division and multiplication.
- Teachers' marking is helpful. Teachers give pupils examples to demonstrate how to solve a calculation when they make mistakes and additional short activities to check their understanding when they have completed activities successfully.
- Occasionally, teachers miss misconceptions in pupils' written work. This happens where an answer is marked as incorrect, but the comment written does not help the pupil to overcome the misunderstanding. This is generally because the teachers do not always analyse incorrect answers sufficiently well to identify the underlying misconceptions.

### **The curriculum in mathematics is good.**

- Children start in the Early Years Foundation Stage in an environment rich with opportunity to develop mathematical skills and understanding. From that point onwards, the school is successful in ensuring that pupils' mathematical development is secure so that, by the time pupils leave Year 6, they demonstrate fluency when working with numbers and the confidence to tackle problems methodically.
- A broad range of additional activities led by teaching assistants ensure that all groups of pupils, including more able pupils, disabled pupils and those who have special educational needs, make good progress. In addition, effective links with other subjects allow pupils to apply their mathematics skills.
- Apparatus is not used as well as it could be in Key Stage 1 mathematics lessons to help pupils understand new ideas. This is not the case in Key

Stage 2 and the Early Years Foundation Stage, where pupils regularly use apparatus to strengthen their understanding of mathematical ideas.

**Leadership and management of mathematics are good.**

- Teachers are well led. You and the mathematics coordinator, supported by the governing body, have established a good balance of training and checks on quality to hold staff accountable. This has resulted in the establishment of a climate of continuous improvement. Leaders have promoted successfully the importance of problem solving and reasoning and all teachers are rising to the challenge to ensure that this is at the heart of the mathematics curriculum.
- Your excellent grasp of pupils' performance has ensured that the gap in performance between different groups has been largely eliminated. You and the mathematics coordinator analyse carefully the impact of teaching and additional activities on the progress of groups of pupils and subsequently alter provision to best effect.

**Areas for improvement, which we discussed, include:**

- making sure that teachers always analyse mistakes in pupils' work so that they can give better help to pupils when overcoming misconceptions
- using apparatus better in Years 1 and 2 to develop pupils' conceptual understanding.

I hope that these observations are useful as you continue to develop mathematics in the school.

As explained previously, this letter will be published on the Ofsted website. It may be used to inform decisions about any future inspection. A copy of this letter is also being sent to your local authority.

Yours sincerely

**Tim Bristow**  
**Her Majesty's Inspector**