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Mrs S Walters
Headteacher
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Dear Mrs Walters

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 28 June 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 two lessons with brief visits to two other lessons.

The overall effectiveness of mathematics requires improvement.

Achievement in mathematics requires improvement.

- Children join the Early Years Foundation Stage with mathematical skills and abilities that are expected for their age. At the end of Key Stage 1 and by the time Year 6 pupils leave the school, attainment is average.
- Most groups of pupils, including those who need extra help, make progress in line with expected levels but too few make good progress. Of the Year 6 pupils who took national tests in 2012, the proportion making and exceeding expected progress were lower than that found nationally.
- Work in pupils' books and in the most recent assessments shows that almost all Year 6 pupils are on course to make expected progress in 2013. More pupils are working at the higher Level 5 and a greater proportion is set to have made more than expected progress in mathematics during Key Stage 2. Similarly, most pupils in Year 2 are working at higher levels than

last year. Recent improvements are evident in most classes but have yet to be sustained over time.

- Additional funding in the form of the pupil premium has been used appropriately to help eligible pupils by providing extra support in class, one-to-one tuition and additional teaching time. Too few pupils were known to be eligible for pupil premium support in 2012 to comment on their attainment without identifying them.
- The vast majority of pupils show positive attitudes to learning in mathematics lessons and their behaviour is good. Occasionally, when the pace of learning slows, a few pupils lose interest and go off-task.

Teaching in mathematics requires improvement.

- In the most effective lessons, teachers use their good subject knowledge and appropriate technical vocabulary to help pupils to provide clear, reasoned explanations of their ideas and reasoning. For example, pupils in Year 6 confidently looked for patterns and relationships in 'Pascal's Triangle' and suggested how the sequence could be extended. In other lessons, weaker aspects of adults' subject knowledge, such as referring to all calculation operations as 'sums', reinforce common errors and lead to misunderstanding.
- Teachers mostly set work for pupils that is matched to their needs and abilities, and use a variety of practical resources to support pupils' understanding of mathematical concepts. In Year 1, for example, pupils successfully used models, images and paper 'cups' to aid their understanding and to calculate answers to questions known to pupils as 'real-life stories'.
- The quality of teachers' marking of pupils' work is uneven across the school. The books of Year 5 and 6 pupils showed good examples of marking that enables pupils to learn from their mistakes. Teachers ask questions of pupils that help them to take their understanding to the next level. However, not all teachers' marking lets them know how their mathematical thinking might be developed.

The curriculum in mathematics requires improvement.

- Teachers' planning is predominantly based on a published scheme, supplemented by a variety of other schemes and a range of resources. A whole-school policy ensures progression in methods of calculation throughout the school. Pupils are increasingly provided with opportunities to use their knowledge and understanding of mathematics when learning about other subjects.
- Although pupils regularly solve routine problems in the form of short statements, opportunities for pupils in all year groups to apply their mathematical understanding in more investigative problem-solving approaches are limited. Older pupils are able to use conjecture and convincing arguments to explain patterns and relationships in mathematics.

Leadership and management of mathematics require improvement.

- Leaders at all levels, including the governing body, understand that mathematics teaching in the past has not been good enough to ensure that all pupils make sufficient progress. The older Key Stage 2 pupils have experienced disruption in teaching staffing in previous years. You have been decisive in tackling weaknesses in teaching, improving the mathematics curriculum and ensuring that these older pupils have received better quality teaching. Consequently, they are making progress at a faster rate.
- The subject leader monitors the mathematics curriculum carefully by checking teachers' planning regularly and looking at pupils' work. Frequent 'pupil-progress meetings' with staff to look at their assessment information are effective in identifying those pupils in danger of falling behind or who are not making good enough progress. As a result, such pupils are provided with the extra help they need to catch up.
- You and the mathematics subject leader have a good awareness of the quality of teaching in mathematics throughout the school. The evaluations of the lessons you both jointly observed with me were accurate and clearly identified for staff the key strengths and areas for improvement. Professional training for staff has focused on the introduction of a new mathematics scheme of work. The staff have worked together well as a team to improve their skills and are keen to learn from each other.

Areas for improvement, which we discussed, include:

- building on recent improvements in teaching and thereby raising pupils' achievement in mathematics, by ensuring that all staff:
 - give all pupils regular opportunities to develop different approaches to problem solving
 - provide all pupils with clear guidance, orally in lessons and when marking their work, that lets them know how their thinking might be developed
- providing guidance for staff to strengthen their subject knowledge in mathematics.

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

Sarah Warboys
Additional Inspector