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Mr M Finch
Headteacher
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Dear Mr Finch

Ofsted 2014–15 subject survey inspection programme: mathematics

Thank you for your hospitality and cooperation, and that of your staff and pupils during my visit with David Carter HMI on 19 November 2014 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; and analysis of pupils' work. We observed parts of 12 lessons and three intervention sessions, several jointly with senior leaders.

The overall effectiveness of mathematics is good.

Leadership and management of mathematics are good.

- The deputy headteacher is a knowledgeable, enthusiastic subject leader for mathematics and a strong role model of good practice in teaching mathematics. The training she has provided for staff, including on the new national curriculum, reflects her expertise. Her evaluation of lessons observed jointly with me showed mathematical insight into the strengths and areas for development in teaching and learning. Your evaluations following joint observations were similarly accurate.
- Senior leaders monitor the school's work in mathematics through activities including observation of lessons and scrutiny of pupils' work. However, records show that these have been neither frequent enough nor focused sufficiently on mathematical detail to ensure points for improvement are pinpointed and taken forward promptly. Moreover, no checks that the new curriculum is being taught consistently well have taken place yet: several staff would benefit from help with teaching approaches and resources.

- Senior leaders analyse data on pupils' attainment and progress against targets, some of which are not as ambitious as they might be. Half-termly progress meetings are held with each teacher and information fed back to the each year group's team leader. Greater clarity is required on how the team leaders might be best equipped to support staff when planning lessons jointly and in teaching the new curriculum effectively.
- Governors also conduct monitoring activities and are keen to be well informed, for instance a governor joined staff at the training on the new mathematics national curriculum.

The curriculum in mathematics is good.

- The school has introduced the new national curriculum in Years 3 to 5 as required, having encouraged all teachers during 2013/14 to take account of forthcoming changes in order that pupils would be ready for the new curriculum. However, evidence from lesson observations and pupils' work shows that not all of the teachers are using approaches and resources that enable pupils to understand the mathematics they are learning.
- Medium-term plans give appropriate coverage of the new curriculum but do not emphasise the development of mathematical reasoning. Problem solving is included but not as an integral part of each topic. Some teachers require guidance on how to deepen pupils' understanding and develop their reasoning and problem-solving skills.
- Recent liaison with the infant school has the potential to secure better progression in different strands of mathematics, for example in developing pupils' grasp of place value and mental and written calculation strategies.
- Good communication between staff on the foci for intervention sessions aids their effectiveness. The school is developing sensible ways to respond quickly to gaps and misconceptions arising in pupils' learning.

Teaching in mathematics is good.

- The quality of teaching varies. Over time, it has usually ensured that pupils make good progress during their four years at the school. Currently, teaching is strongest in Year 6. Where teaching is weaker, insufficient attention is given to problem solving and reasoning and too much time is spent on repetitive exercises that do not deepen pupils' understanding.
- Strengths of the teaching include teachers' clear explanations, supported by images and models, which ensure that pupils understand concepts and why methods work. Misconceptions are anticipated and spotted quickly. Interesting activities and exercises challenge pupils to think, with opportunities to discuss and articulate their reasoning. Teachers' skilled questioning promotes thinking, with good use of mathematical vocabulary.
- Weaker elements of the teaching include explanations that focus on 'how' rather than 'why', sometimes supplemented by unhelpful rules, rather than ensuring pupils understand important concepts. Teachers do not always identify pupils' important errors quickly enough when they are working on exercises. Some teachers do not assess pupils' prior learning accurately

and therefore do not pitch or sequence work well, causing difficulties for pupils. Some weaknesses stem from teachers' inexperience in teaching particular topics, particularly those new to the curriculum for their class.

- Teachers mark pupils' work regularly and in detail, but the effectiveness of the marking is inconsistent. The best marking distinguishes between significant misconceptions and other errors and checks subsequently that pupils have overcome them, sometimes by expecting corrections to be completed or by setting a follow-up question.

Achievement in mathematics is good.

- Pupils join the school having achieved highly in national assessments at age seven. Attainment in national Key Stage 2 tests has consistently been significantly above national averages with a steady trend of improvement that peaked in 2013. Early analysis of the 2014 results shows that not enough of the more able pupils made more-than-expected progress. The school's data for the current Year 6 cohort suggest that more pupils will reach the highest level in the 2015 tests.
- The achievement of disadvantaged pupils has improved considerably in the last three years. In 2014, their attainment was the equivalent of one term's progress behind their Year 6 classmates and was closer still to the average attainment of all pupils nationally who are not disadvantaged.
- Pupils' behaviour is excellent. Their positive attitudes to learning mathematics contribute to their good achievement. They persevere equally well when given challenging work, when they don't understand, or when working through dry exercises. They are ready to discuss and reason about mathematics, even though not all have regular experience of this.

Areas for improvement, which we discussed, include:

- improving support for staff in implementing the national curriculum by:
 - providing guidance on effective approaches to teaching key topics, including choice of appropriate models, images and practical apparatus as well as exercises that challenge and deepen understanding
 - ensuring that problem solving is an integral part of learning in each topic and increasing the emphasis on mathematical reasoning
- strengthening the effectiveness of monitoring to support improvement in teaching and the curriculum in mathematics, increasing its frequency and timeliness and ensuring a clear focus on subject-specific detail.

I hope 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

Jane Jones

Her Majesty's Inspector