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Mrs H Shaw Headteacher Shotton Primary School Grange Terrace Shotton County Durham DH6 2JP

Dear Mrs Shaw

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 4 March 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: discussions with you, the deputy headteacher in his role as mathematics leader, and the Early Years Foundation Stage leader; scrutiny of relevant documentation; analysis, jointly with the mathematics leader, of work in mathematics of a sample of pupils in Years 1, 3 and 5; and observation of parts of seven lessons, six jointly with you and one with the mathematics leader.

The overall effectiveness of mathematics is good.

Achievement in mathematics is good.

- From low starting points in the Nursery, pupils make very good progress to reach, in Year 6, at least the level expected for their age. In the national test in 2013, the school's average points score was the highest in the last five years. Half of the Year 6 pupils were working at a level more typical of pupils two years older. Although the overall performance of pupils eligible for pupil premium funding was about two terms' progress behind their peers, it matched the national average for similar pupils.
- In 2013, the Year 6 pupils' progress at Key Stage 2 was well above the national average. Of the pupils eligible for pupil premium funding, 60% made more than expected progress. However, the school accepts that such good results have been due to concerted efforts to boost performance in

Year 6 rather than the product of consistently good progress in all year groups.

- The school's data indicate rising standards at the ends of the Reception year and Year 2 although with still a significant gap to bridge. In previous years, the majority of children started Year 1 without the mathematical knowledge expected for their age. This is changing; daily sessions led by adults for the Nursery and Reception children focus on number, shape, space and measures. A group of Nursery children confidently counted the pennies needed to buy sweets costing six pence and Reception children showed a growing understanding of how to record 'take away' calculations using appropriate symbols and some mental counting.
- The strong emphasis throughout the school on basic skills shows in pupils' understanding and use of mathematical terms and in their often prompt recall of number facts and multiples. Work in books shows pupils know mathematical procedures and how to solve number problems expressed in words. There is less evidence of the systematic development of their confidence and reasoning skills in carrying out mathematical investigations. In some sessions, pupils struggled to explain their thinking.

Teaching in mathematics is good.

- Teachers' planning adheres to the school's guidance documents, especially in the agreed methods regarding progression in calculation. All classrooms have displays to support pupils' learning, emphasising the vocabulary of the current mathematical focus and the steps to use when solving a problem. Teachers mix paper-based tasks and practical activities, such as weighing and measuring ingredients to make pancakes or solving as many number problems as possible in a given time. However, pupils too often start at the same point – the more able pupils simply doing more, rather than tackling harder work.
- In some sessions seen, the pupils benefited from rehearsing procedures but adults were often too quick in moving on and missed opportunities to check the accuracy of answers and to probe pupils' understanding. Where learning for all pupils was good, the adults routinely reviewed pupils' progress, asked pupils to explain and reminded them of what they had done previously that was relevant. Year 2 pupils, for example, having identified what was missing from block graphs they had produced the day before, went on to compile graphs with labelled axes.
- Teachers' marking of pupils' work varies in quality and approach. It does not always identify clearly how well pupils have met the target or what they might do better next time. That said, there are examples of strong, helpful marking and mathematical dialogue between adult and pupil.

The curriculum in mathematics is good.

A curricular strength is the emphasis on promoting recall of number facts and accuracy in the use of the four rules of number. The introduction two years ago of a commercial programme, with links to computerised challenges, has recently been supplemented by the staff's own programme 'Five a week', daily short sessions for each year group covering aspects of number. Anecdotal evidence indicates the combination is proving to be effective in accelerating pupils' progress in number from Year 1 onwards.

- You accept that much is needed to strengthen and widen the curriculum if it is to be outstanding. The prime need is to ensure that pupils have systematic opportunities to investigate and solve problems across the breadth of mathematics. Staff are starting to use the outdoors and to link mathematics with other subjects. In the Nursery and Reception classes, staff are building up resources to promote children's mathematical understanding as part of play and adult-led activities indoors and out.
- The school has a good programme of support for pupils who are not making the progress they should. Support staff play a key role in working with groups of pupils and in leading other activities and clubs.

Leadership and management of mathematics are good.

- In the short time since your appointment, you have worked with the mathematics leader to refine the use of assessment to give a clearer overview of mathematical achievement in each class and year group. This has heightened staff's awareness of the lines of accountability.
- Judgements about teaching and the school's self-evaluation were accurate with development points that echo the key findings of this inspection. You and the mathematics leader see the implementation of the new National Curriculum as a chance to retain what works well while developing new aspects of practice.
- The action plan for mathematics has a focus on raising achievement but does not identify clearly enough the specific aspects of mathematics where performance is weaker for cohorts, groups or the whole school. As a result, the expected benefits from planned developments are unclear.

Areas for improvement, which we discussed, include:

- sharpening action planning to identify exactly how actions will lead to improved outcomes for pupils in specific aspects of mathematics
- providing regular opportunities for pupils to carry out mathematical investigations and to explain and justify what they do
- strengthening marking of pupils' work so that pupils gain a clear picture of how well they have done and what will result in improvement next time
- enriching provision for the youngest children indoors and out.

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.

Yours sincerely Sonja Øyen Her Majesty's Inspector