Aviation House 125 Kingsway London WC2B 6SE

T 0300 123 1231 F 020 7421 6855 enquiries@ofsted.gov.uk www.ofsted.gov.uk



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Mrs H Wilson Headteacher Middlestone Moor Primary School Rock Road Spennymoor County Durham DL16 7DA

Dear Mrs Wilson

Ofsted 2011–12 subject survey inspection programme: science

Thank you for your hospitality and cooperation, and that of your staff and pupils, during my visit with John Meinke Additional Inspector on 9 February 2012 to look at work in science.

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 six lessons.

The overall effectiveness of science is outstanding.

Achievement in science

Achievement in science is outstanding.

- Pupils begin school with lower than typical age-related skills, but from the outset in Nursery and Reception, learn rapidly. They are expertly taught to develop initiative and independence, so that by the time they complete primary school, they have made outstanding progress and their attainment in science is above average.
- Pupils love learning at this school, not just in science, because teachers and support assistants construct interesting yet challenging learning activities; as a result, pupils thrive, throwing themselves into the tasks with gusto and determination, in all classes. They are given enough time to get to the end of their investigations successfully, and so enjoy the satisfaction of a job well done.

■ Written work shows systematic improvement in quality over time, and there are many examples of pupils using science as the purpose for their writing, both in fiction and non-fiction.

Quality of teaching in science

The quality of teaching in science is outstanding.

- High-quality planning by teachers leads to an excellent match of task and challenge for pupils. Planning is underpinned by very good assessment, recording and evaluation of pupils' learning in previous lessons.
- Pupils have many opportunities to demonstrate a high degree of independence, because teachers have high expectations of what pupils can achieve given proper training. Teachers and support staff establish a confidence-building classroom ethos, by respecting and valuing pupils' views; 'we make sure they want another go at contributing'.
- Teachers often teach 'in character' to make the lesson even more imaginative. They seize every opportunity to extend pupils' literacy skills by encouraging to pupils write and speak at length about their science work.
- Marking is consistent and thorough, although in some cases could give more time for pupils to respond to advice.

Quality of the curriculum in science

The quality of the curriculum in science is outstanding.

- The curriculum is corporately designed to encourage pupils' independence, communication skills and writing abilities, from the Early Years Foundation Stage onwards. The school calls this a 'creative curriculum' which certainly describes how it feels to study it as a pupil, but it is also securely founded in the National Curriculum, with detailed mapping of the science content into various topics. Schemes of work are rigorously monitored to ensure full coverage, with action taken on a weekly basis to close any gaps.
- Built into the heart of science topic work are thought-provoking questions, designed to get pupils to reflect on science and its impact in the wider world. For example 'if the world is so beautiful, why is everyone worried about it?' This deliberate addressing of social, spiritual, moral and cultural aspects is an exceptionally strong feature.
- A strong testimony to the quality of learning through this richly varied approach is the extent and exceptionally high quality of pupils' work on display throughout the school. Science features prominently in every class, and on corridors, with written work, models, three-dimensional displays, graphs and results of experiments everywhere including pictures of pupils in action. It is not just science that benefits from this approach, but the combination of excellent teaching of literacy with very rich science investigations which makes a substantial contribution to the overall high science outcomes for pupils.

- Pupils experience a wide range of trips, visitors, and a number of sciencerelated after-school clubs such as gardening club and the nature and environment club.
- The curriculum is also fun, for pupils and staff; for example a Year 2 class had been set the task of thinking about and writing down (in full sentences) 'Ten things you might find in a Witch's pocket.' Their answers were equally imaginative; 'doors to other worlds' being just one mysterious suggestion!

Effectiveness of leadership and management in science

The effectiveness of leadership and management in science is outstanding.

- The subject leader is one of the team of senior staff that design the curriculum, and is meticulous in the detail that ensures full coverage of content and skills. The school is in regular contact with local university education department staff, the local science learning centre, and local authority officers. This high level of professional training and discussion is shared across the school, so all staff are empowered to contribute to schemes of work, good ideas for lessons, and also know of current issues in science education nationally.
- You embody the belief that all pupils can attain high standards, irrespective of their circumstances when they are taught well by committed staff who know each of their pupil's individual learning needs. By setting up rigorous but straightforward, regular checks on progress, and a culture of shared evaluation through to classroom teachers, there is no opportunity for pupils to slip behind. That culture of high expectations is shared by all staff, who in turn thoroughly enjoy teaching science, looking to make lessons interesting and challenging for all pupils.
- Physical resources are very well managed, and in plentiful supply, so that all pupils can get their hands (and feet, sometimes!) on practical investigations that work.

Areas for improvement, which we discussed, include:

providing more systematic opportunities for pupils to respond to the good marking and feedback.

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

As explained previously, a copy of 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

Brian Cartwright Her Majesty's Inspector