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Mr M Tromans  
Headteacher  
Nelson Junior and Infant School  
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Dear Mr Tromans

### **Ofsted 2012–13 subject survey inspection programme: mathematics**

Thank you for your hospitality and cooperation, and that of your staff and pupils, during my visit on 7 February 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; observation of three lessons and short visits to three other lessons.

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

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

- Pupils make good progress in mathematics. They start school with attainment that is well below average, but by Year 6 their attainment is broadly average. This good progress is made by all groups of pupils irrespective of their gender or ethnic background.
- Pupils enjoy the subject. They describe their lessons as 'fun', and especially enjoy the short problems and challenges that occur at the start of lessons.
- Year 4 pupils worked together well in small groups on an activity in which they explored, justified or disproved various statements. They laid out their answers clearly on posters. The way they discussed, and the nature of the discussion as to whether statements were always true, sometimes true, or false contributed very well to their spiritual, moral, social and cultural development.

- Pupils' work is well presented in their books. It shows a good combination of practice of computational skills with investigative and problem-solving work.
- A group of more able Year 6 pupils are working on harder material. With a teaching assistant, they successfully discussed how to approach a problem: 'If 55% of a quantity is £275, what is the quantity?' These pupils were also confident in their understanding and use of fractions to a high level.

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

- Teachers plan their lessons to include a good mix of investigations, practical work and problem solving alongside a strong emphasis on accurate arithmetic skills.
- In a Year 4 class, the teacher was outstandingly successful in adjusting activities so that pupils of all abilities were challenged. He started the lesson with an open question that allowed for a wide set of responses. He made sure that the most able pupils gave more developed answers.
- Teachers are enthusiastic in their approach to mathematics. As a result pupils also have positive attitudes to the subject.
- Teachers mark books carefully and regularly. They point out misconceptions and errors and offer further challenges.
- Teaching assistants and other adults make an effective contribution to some lessons. At times, however, they are not sufficiently briefed to lead a group of pupils well in their learning.
- In the Early Years Foundation Stage, adults develop pupils' mathematical language well and provide a rich range of mathematical activities. They deal sensitively with pupils' misconceptions.

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

- Pupils experience a range of mathematics that covers the expectations of the National Curriculum well. Good opportunities to explore and investigate in mathematics are combined with good skills in computation.
- Particular weeks during the year have a special focus in teachers' planning on using and applying mathematics. Teachers use these weeks to make sure that pupils' skills in solving problems and investigating are developed. The school has a mathematics trail which further raises the profile of mathematics.
- Some application of mathematics takes place through other subjects in topic work. However, this is not as well developed as the exploration and development that takes place in mathematics lessons.
- Good use is made of information and communication technology to enrich teaching. Pupils have access to a website to give them more practice at home, or in a school club if they do not have home access. Their use of this website for such homework is monitored closely.

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

- The subject leader and other senior leaders monitor the progress of pupils thoroughly. Where pupils fall behind the progress that is expected, a personal action plan is put in place for improvement. Where appropriate, additional one-to-one or small group teaching is provided.
- The subject leader is well informed of recent developments in mathematics. He provides professional development for teachers, which includes teaching alongside them in their classes to model aspects of teaching.
- The school has a good calculation policy that ensures coherence in the approach to calculation as pupils move through the school. Parents have access to sessions after school where these approaches are explained.
- The subject leader monitors pupils' books and teachers' planning at regular intervals. He has some opportunities to observe mathematics being taught. However these opportunities are not enough for him to check how well developments in mathematics teaching are being implemented by other teachers.
- The 'Pupil Premium' funding, designed to enhance the progress of disadvantaged pupils, is used well. Extra tuition is given to these pupils when assessment shows an area of weaker understanding.

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

- ensuring that the briefing and preparation of teaching assistants and other adults who help in the teaching of mathematics is consistently good
- extending the application of mathematical skills more fully into other subjects
- providing more opportunity for the subject leader to monitor and evaluate developments in mathematics teaching across the school.

I hope that these observations are useful as you continue to develop mathematics 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

**Robert Barbour**  
**Her Majesty's Inspector**