Aviation House 125 Kingsway London WC2B 6SE T 0300 123 1231 F 020 7421 6855 enquiries@ofsted.gov.uk www.ofsted.gov.uk



15 December 2011

Mrs C Marshall Headteacher Ivy Lane Primary School Ivy Lane Chippenham Wiltshire SN15 1HE

Dear Mrs Marshall

# **Ofsted 2011–12 subject survey inspection programme: mathematics**

Thank you for your hospitality and cooperation, and that of your staff and pupils, during my visit on 29 November 2011 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 two lessons; and brief visits to other lessons.

The overall effectiveness of mathematics is good.

## Achievement in mathematics

Achievement in mathematics is good.

- Attainment in Year 6 has risen from below average in 2008 to above average in 2011. This marked improvement is the result of new approaches to teaching mathematics which have given pupils greater understanding of important concepts. Consequently, they are becoming increasingly proficient in applying their skills and understanding in different contexts.
- All groups of pupils are making good, and in some cases outstanding, progress in relation to their different starting points. The more able pupils do particularly well, so that the percentage of pupils who reach Level 5 is well above the national average. Some pupils who find mathematics more difficult do not always spend long enough learning tricky concepts, such as

aspects of fractions, in order to fully understand them. They then lack the confidence to work independently and rely on adult support.

Most pupils are well motivated and thoroughly enjoy mathematics lessons. They work together supportively and discuss their ideas with enthusiasm, especially when sharing different problem-solving strategies. Year 5 pupils particularly enjoyed calculating various percentages of ingredients when designing 'Marvellous Mocktails'.

#### **Quality of teaching in mathematics**

The quality of teaching in mathematics is good.

- Teaching was good in all the lessons observed. Teachers mostly plan activities that build carefully on pupils' previous learning and make effective links between different aspects of mathematics so that pupils can see 'the big picture'. Learning is almost always set in real-life contexts and this makes it meaningful and relevant for pupils. In addition, pupils of all ages use a wide range of mathematical equipment so that they can easily visualise key concepts or use concrete apparatus to work out problems.
- Learning progresses in lessons at a brisk pace, perhaps a little too brisk on occasions for a few less able pupils. Nevertheless these pupils are supported well through additional short bursts of one-to-one teaching or small group work. In lessons, they are generally effectively supported by well-briefed teaching assistants who keep detailed records of their progress to share with teachers. The use of daily logbooks ensures rigorous two-way communication between teachers and teaching assistants which informs planning for the next lesson.
- All staff place great emphasis on using precise mathematical vocabulary and take every opportunity to reinforce pupils' understanding of the meaning of mathematical terms. Pupils are expected to explain their reasoning using appropriate terminology.

#### Quality of the curriculum in mathematics

The quality of the curriculum in mathematics is good.

- The curriculum is well planned to ensure progression in learning key skills and concepts as pupils move through the school. The school has recently successfully narrowed the focus in teaching calculation skills to avoid confusing pupils. Pupils have frequent opportunities to use and apply their skills and knowledge in a variety of challenging tasks. Wherever possible, teachers make links with other subjects so that pupils learn the importance of mathematics in everyday life. For example, measurement and using data are often taught in practical science lessons, and pupils have excellent opportunities to apply their skills in cookery.
- The 'Year of Mathematics' in 2010 provided pupils with an exciting array of activities with a mathematical bias, including circus skills, a theatre production and opportunities to learn from visitors such as a forensic scientist and an accountant.

- 'Numeracy Passports' are used effectively to improve pupils' mental mathematics skills.
- Technology is used well as a tool to enhance learning, both by teachers and pupils. Pupils particularly enjoy taking part in 'Mathletics' competitions.

# Effectiveness of leadership and management in mathematics

The effectiveness of leadership and management in mathematics is good.

- You have established a successful team approach to the leadership of mathematics which makes effective use of the skills of key staff and governors. Your decision to recruit more staff with expertise and qualifications in mathematics has greatly strengthened the school's capacity to achieve its ambitious targets.
- Regular 'pupil progress meetings' provide you and class teachers with detailed information about the progress of individual pupils. This is used well to determine where additional support may be needed. Your own and your deputy's formal observations of teaching, together with the subject leader's 'drop-ins', discussions with staff and pupils, and scrutiny of pupils' work provide a comprehensive overview of the strengths and weaknesses in teaching and learning across the school. The knowledgeable link governor provides good levels of challenge and support. A detailed action plan shows exactly where efforts are being concentrated.
- A comprehensive programme of professional development, enhanced by the judicious use of external expertise, has increased the subject knowledge of all staff and driven improvement at a good pace.

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

ensuring that lower attaining pupils develop thorough understanding of key concepts before moving on to more challenging work in order to increase their confidence and ability to work independently.

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

Carole Skinner Additional Inspector