

## Northumberland County Council

#### **Reviewed: September 2017**

### **Mathematics Policy**

#### INTRODUCTION

This document sets out how Mathematics (hereafter referred to as Maths) is taught at the Northumberland Pupil Referral Unit (PRU). It uses the Ofsted categories for assessing overall effectiveness of maths in a school. Our aims are simple:

#### Provide outstanding maths provision

- 1) Provide pupils with consistently good and outstanding teaching.
- 2) Enable pupils of all abilities to achieve well and make good progress.
- 3) Help pupils to enjoy and understand maths, using and applying maths to a wider range of interesting and challenging problems.

#### Contents

- Pupils Achievement
- Teaching
- Curriculum
- Subject Leadership

#### PUPIL ACHIEVEMENT

#### Aims

It is our aim to ensure that all pupils progress in maths and make good progress. Achievement is defined as what the children achieve by the end of their time at the PRU. Progress is defined as how far they have come from their starting point. Our aim is for all pupils to make at least one sub-level of progress by the time they leave us.

#### **Groups of Pupils**

We recognise that children come to maths with different starting points, different strengths and different attitudes. However, it is important that all pupils are helped to make good progress.

It is therefore the pupils' maths teacher and the subject leader's role to identify challenging but achievable targets for pupils, enabling them to progress and achieve well throughout their time here. Pupils who are below national, age related expectations will be identified and provided with extra support in order to achieve well. This extra support may be targeted group work within lessons delivered by a teacher or teaching assistant. It may be that children are taken in small groups out of class with children of similar abilities, to give them targeted support. All targets are specific to each individual pupil and work is tailored to afford them the best possible opportunities to succeed in achieving those targets.

This support also applies to pupils who are performing above national expectations. In these instances, further opportunities will be afforded to pupils which encourage development and offer progression.

#### **Targets for Pupils**

Targets in maths will be consistent throughout the PRU. Targets that enable pupils to achieve the next stage in their learning will be made visible to students and reviewed at regular intervals.

#### Achievement in Maths

Ofsted have specific criteria detailing what good and outstanding achievement in maths looks like. These criteria can be seen in the 'Maths Subject Specific Guidance' in the maths folder. Staff will be aware of these and tailor teaching accordingly. The maths leader will audit staff using these criteria at the beginning and end of each academic year. Continuing professional development will be provided for staff where necessary, based on these criteria. These descriptors can be found in Appendix A.

#### TEACHING

#### **Our Aims**

We aim to provide consistently good or outstanding maths teaching at the PRU. It will be the role of the subject leader, with the support of the head teacher, to ensure this is happening. Maths is taught daily in lessons which have a structure and length appropriate to the age and stage of development of the pupils (typically 45 minutes). Ofsted identifies five elements that would be expected to be in outstanding lessons.

#### **Conceptual Development**

Developing pupil's understanding of mathematical concepts. For example, teaching the number 32 as being made up of 2 units and 3 tens.

#### Progress

Pupils should be making good or outstanding progress in lessons over time. In order for this to happen, teachers need to be aware of the specific learning needs of their class, and plan accordingly.

#### **Misconceptions**

Teachers should be picking up misconceptions from pupils and teaching these. So, for example, when carrying out the calculation  $32 \times 43 =$ , lots of children think that the answer would be (30x40) + (2x3)=. Outstanding teaching involves picking up misconceptions and directly addressing them, so pupils' learning can move forward.

#### **Problem-Solving**

Problem solving is at the heart of maths. There are many types of mathematical problems, and at the PRU we aim to build resilience in pupils to solving a wide range of mathematical problems.

#### Mathematical Language

It is vital that children learn the correct mathematical language for concepts. While it is not always possible to address all of these in every lesson, we will strive towards using these ideas to provide good and outstanding teaching, enabling pupils to enjoy maths and make good or outstanding progress.

#### Lesson Structure

It is important that there is consistency across the school in how maths teaching is delivered. If there is consistency in approach, pupils will understand what is expected of them in lessons, and thrive on the best practice that is shared.

The agreed structure for a maths lesson is below. There will be times when this is not appropriate, but this structure will be followed as a general rule.

- **Lessons** are planned so that learning happens over more than one lesson, using the review, teach, practice and apply cycle (*see appendix A*)
- **Brief starter** a mental/oral starter (about 5-10 mins) that will be part of the sequence of work or addressing an area that pupils need further development on. This may not be appropriate where students are of mixed ability and work has been set according to learners' individual needs, and pupils are following individual programmes of work.
- Teaching input there must be some teaching input (through demonstration, modelling and discussion) so pupils get the benefit of teacher's specialist knowledge. This should include questioning and interaction so the teacher can help pupils to build conceptual understanding and prepare them for their independent working time. Teachers will make use of a variety of visual, auditory and kinaesthetic resources and use correct vocabulary. Within KS3 pupils will, in general be grouped according to more able and less able, within which work will be further differentiated as required and in line with pupils' individual learning needs. All pupils are set work based on a particular maths skill, relative to their individual targets and learning needs.
- **working time** pupils will work individually, in groups of ability, mixed ability pairs or groups according to the task. It may be that pupils are working independently from the teacher or teaching assistant, or in a group being assisted by the teaching assistant.
- plenary The Plenary is an opportunity to bring the whole class together and reflect on their learning. This could be at the end but could also be at a different point in the lesson. It may be that certain groups of, or individual pupils are involved in a plenary while the rest continue to work on the given task. The plenary should include some kind of using and applying task: this might be a test question or a contextualised task, or an opportunity for pupils to extend their learning. It may be that this is given individually, in the form of a problem solving exercise, which requires a pupil to use and apply the mathematical knowledge he/she has gained during the lesson.
- **ICT** is used to scaffold and reinforce taught material and offers KS1,2 and low ability KS3 pupils an opportunity to apply what they have learnt. It is also used to address misconceptions affording pupils an alternative way of accessing material that they have initially had difficulty understanding.

Within KS3, pupils will access ICT within some lessons and according to the particular maths skill currently being studied.

#### **Cross-Curricular Links**

It is clear that if maths is embedded in a context and used to solve problems across the curriculum then pupils will understand that maths isn't just about learning procedures and memorising facts, but is a vital component of everyday life.

Therefore, maths skills will be embedded, where possible, across other subjects, and other subjects embedded in maths. In medium term planning, teachers will plan in explicit links between maths and other subjects, ensuring that maths skills are used in lessons other than maths.

#### Marking

It is important that maths work is marked regularly, to enable pupils to make good progress. Marking must identify what the pupil did well and provide them with the next steps. This will be done in line with the Northumberland PRU marking policy.

#### Practical Resources/Models and Images

It is important that we provide pupils with models and images to help them understand mathematical concepts. For example; the model of the number line helps them to imagine taking away or finding the difference and a number square can help them to count on from a number. Every class has a mathematical 'toolkit' appropriate to key stage, which the pupils will be able to use to help them progress in maths. These toolkits will contain:

- protractors (KS3 only)
- trundle Wheel (KS3 only)
- compass (KS3 only)
- metre sticks
- double sided 100 squares
- Place Value counters
- tables poster
- multiplication squares
- fraction tiles
- geometry solids set
- 2D shape set
- positive/negative number line

Other mathematical resources will be kept in the cupboard in RED Group, used and replaced where necessary. It is the teacher's responsibility to use these kits and keep them in good condition and ask the subject leader for any new resources.

#### CURRICULUM

#### Approach

The new National Curriculum has been arranged into eight blocks, each lasting between one and two weeks with the eight blocks covered once a term. Teaching will be based on data from tests carried out at point of entry to the PRU, providing pupils with work that will match their needs. This will ensure that any pupils on longer term placements spend the allocated time on each block, and that the whole curriculum is being covered.

#### **Problem Solving**

It is our aim that 'problem solving and investigative approaches are central to learning for all pupils (Ofsted outstanding criteria). Therefore teachers will place a high value on problem solving and investigation, combining with number work and understanding.

#### Links with agencies/community

The school will pursue all possible links with other agencies and the wider community to improve pupil's mathematical experience in school. The maths leader will attend termly cluster meetings to ensure best practice is shared between other schools.

#### **Spiritual Moral Social Cultural Links**

A yearly 'maths fun day' will be planned by the coordinator to ensure that maths contributes to pupils' spiritual, moral, social and cultural development. Selected pupils from each group will spend the day collaborating and solving problems and puzzles. Links between maths and other subjects will be explicitly made. For example; when studying Hinduism the pupils will look at the maths behind Rangoli patterns.

#### SUBJECT LEADERSHIP

#### **Subject Leader Responsibilities**

The main responsibilities of the maths subject leader, with the support of the head teacher, will be to ensure that 'Best practice is spread effectively in a drive for continuous improvement'. The specific responsibilities are detailed below:

- Share good/outstanding practice when the subject coordinator completes (at least once each half term) a learning walk, with an agreed purpose the feedback will share good and outstanding practice, ensuring that everyone learns from everyone else.
- **Review and maintain maths action plan** the maths action plan will be formally reviewed annually and the previous year's action plan will inform the next years plan.
- **Provide support for all staff, both subject knowledge and pedagogy** the subject leader will attend local termly update meetings and engage in private reading/research.
- Monitor the effectiveness of the maths policy and action plans the maths leader will monitor the subject in a variety of ways. They will undertake ½ termly walks specifically focused on maths improvement. They will monitor work and plans, with a specific improvement focus.
- Ensure staff have up to date knowledge of maths education the subject leader will provide, or know how to secure provision, for CPD which is focused on the needs of the whole staff, or the needs of specific staff members.

\_\_\_\_\_ Chair

\_\_\_\_\_ Date

## **Mathematics Survey Visits**

# Generic grade descriptors and supplementary subject-specific guidance for inspectors on making judgements during visits to schools

Subject feedback letters, following survey visits, normally contain separate judgements on:

- achievement
- quality of teaching
- quality of the curriculum
- effectiveness of leadership and management
- overall effectiveness in the subject.

In coming to these judgements, inspectors will use the relevant criteria and grade descriptors from the 2009 Section 5 evaluation schedule (up-dated in September 2010), as they can be applied to individual subjects. These descriptors are set out in the left-hand columns in the following pages. Alongside them (for achievement, teaching, the curriculum and leadership and management) are supplementary, subject-specific descriptors which provide additional guidance for mathematics. These descriptors should be applied in a way which is appropriate to the age of pupils involved. Except where otherwise indicated, descriptors are intended to used on a 'best fit' basis.

It is important to note that this guidance is intended only to inform the judgements made by specialist inspectors carrying out subject survey visits. It is not for use on Section 5 whole-school inspections.

## Achievement in Mathematics

	Generic	Supplementary subject-specific	
1	Outstanding Achievement is likely to be outstanding when:  attainment is above average or high and learning and progress are outstanding or attainment is high and learning and progress are good	Pupils understand important concepts and are able to make connections within mathematics. They develop a broad range of skills in using and applying mathematics. They show exceptional independence and take the initiative in solving problems in a wide range of contexts, including the new or unusual. They think for themselves, and are prepared to persevere when faced with challenges, showing a confidence that they will succeed. They embrace the value of learning from mistakes and false starts. When investigating mathematically, they reason, generalise and make sense of solutions. Pupils show high levels of fluency in performing written and mental calculations and mathematical techniques. They use mathematical language and symbols accurately in their work and in discussing their ideas with others. They develop a sense of passion and commitment to the subject.	
2	Good Achievement is likely to be good when:     attainment is above average and learning and progress are good or     attainment is average and learning and progress are good or outstanding. or     attainment is low but there is convincing evidence that outstanding learning and progress are helping pupils' attainment to improve strongly. On rare occasions learning and progress may be good, but outstanding for some groups of pupils and improving overall.	Pupils understand some important concepts and can make some connections within mathematics. They develop a range of skills in using and applying mathematics. They are able to work independently, and sometimes take the initiative in solving problems in various contexts. Many show a developing ability to think for themselves, and are willing to try when faced with challenges. They are willing to learn from mistakes and false starts. When investigating mathematically, most are able to reason, generalise, and make sense of solutions. Pupils are generally fluent in performing written and mental calculations and mathematical techniques. Their use of mathematical language and symbols is mostly accurate when presenting their work and in discussing their ideas with others. They enjoy the subject and can explain its value.	
3	<ul> <li>Satisfactory</li> <li>Achievement is likely to be satisfactory when:         <ul> <li>attainment is average, above average or high and learning and progress are satisfactory</li> </ul> </li> <li>or         <ul> <li>attainment is low but improving strongly and learning and progress are good. Or, there is convincing evidence that learning and progress are satisfactory but improving securely and quickly.</li> </ul> </li> </ul>	Pupils use techniques correctly, often through emulating the teacher's methods, but their understanding of the underpinning concepts is insecure. Pupils develop some skills in using and applying mathematics. They are able to solve routine problems set in various contexts. Pupils are generally dependent on procedural prompts from examples, resources or staff and tend to seek help rather than persevere when faced with challenges. Many lack confidence and like to avoid making mistakes. When investigating mathematically, they can sometimes reason and make simple generalisations. Pupils are reasonably accurate in performing written and mental calculations and mathematical techniques, though sometimes slowed by hazy recall of number facts or over reliance on calculators. They often use mathematical language and symbols imprecisely. Most are ambivalent about the subject but recognise its value.	
4	Inadequate Achievement is likely to be inadequate if either: <ul> <li>learning and progress are inadequate</li> <li>attainment is low and shows little sign of improvement, and learning and progress are no better than satisfactory with little or no evidence of improvement.</li> </ul>	Pupils' lack of understanding impedes progress. Pupils develop insufficient skills in using and applying mathematics. They have difficulty in solving problems other than the most routine. The accuracy of their mental and written work is affected by weak knowledge of number facts and incorrect use of mathematical techniques. They give up too readily, or wait for others to provide answers. Their lack interest in the subject is reflected in the low quality and limited quantity of their work.	

# Quality of teaching in Mathematics

1	Teaching in the subject is at least good and much is outstanding, with the result that the pupils are making exceptional progress. It is highly effective in inspiring pupils and ensuring that they learn extremely well. Excellent subject knowledge is applied consistently to challenge and inspire pupils. Resources, including new technology, make a marked contribution to the quality of learning, as does the precisely targeted support provided by other adults. Teachers and other adults are acutely aware of their pupils' capabilities and of their prior learning and understanding, and plan very effectively to build on these. Marking and dialogue between teachers, other adults and pupils are consistently of a very high quality. Pupils understand in detail how to improve their work and are consistently supported in doing so. Teachers systematically and effectively check pupils' understanding throughout lessons, anticipating where they may need to intervene and doing so with striking impact on the quality of learning.	Teaching is rooted in the development of all pupils' conceptual understanding of important concepts and progression within the lesson and over time. It enables pupils to make connections between topics and see the 'big picture'. Teaching nurtures mathematical independence, allows time for thinking and encourages discussion. Problem solving, discussion and investigation are seen as integral to learning mathematics. Constant assessment of each pupil's understanding through questioning, listening and observing enables fine tuning of teaching. Barriers to learning and potential misconceptions are anticipated and overcome, with errors providing fruitful points for discussion. Teachers communicate high expectations, enthusiasm and passion about their subject to pupils. They have a high level of confidence and expertise both in terms of their specialist knowledge and their understanding of effective learning in the subject. As a result, they use a very wide range of teaching strategies to stimulate all pupils' active participation in their learning together with innovative and imaginative resources, including practical activities and, where appropriate, the outdoor environment. Teachers exploit links between mathematics and other subjects and with mathematics beyond the classroom. Marking distinguishes well between simple errors and misunderstanding and tailors insightful feedback accordingly.
2	Teaching in the subject is consistently effective in ensuring that pupils are motivated and engaged. The great majority of teaching is securing good progress and learning. Teachers generally have strong subject knowledge which enthuses and challenges most pupils and contributes to their good progress. Good and imaginative use is made of resources, including new technology to enhance learning. Other adults' support is well focused and makes a significant contribution to the quality of learning. As a result of good assessment procedures, teachers and other adults plan well to meet the needs of all pupils. Pupils are provided with detailed feedback, both orally and through marking. They know how well they have done and can discuss what they need to do to sustain good progress. Teachers listen to, observe and question groups of pupils during lessons in order to reshape tasks and explanations to improve learning.	Teaching develops pupils' understanding of important concepts as well as their proficiency in techniques and recall of knowledge, equipping pupils to work independently. It helps pupils to see that topics are connected and form a 'big picture'. Many opportunities are provided for problem solving in various contexts, discussion and investigation, although these are not always integral to learning. Teachers focus on pupils' understanding when questioning, listening and observing. Barriers to learning and misconceptions are tackled well. Teachers have a clear understanding of the value of their subject which they communicate effectively to pupils, often with enthusiasm. They have a good level of specialist expertise which they use well in planning and teaching their subject. As a result, they use an appropriate range of resources and teaching strategies, including practical activities and, where appropriate, the outdoor environment. They make some links between mathematics and other subjects and with mathematics beyond the classroom. Marking identifies errors and misunderstanding and helps pupils to overcome difficulties.
3	Teaching in the subject may be good in some respects and there are no endemic inadequacies. Pupils show interest in their work and are making progress that is broadly in line with their capabilities. Teachers' subject knowledge is secure. Adequate use is made of a range of resources, including new technology, to support learning. Support provided by other adults is effectively deployed. Teaching ensures that pupils are generally engaged by their work and little time is wasted. Regular and accurate assessment informs planning, which generally meets the needs of all groups of pupils. Pupils are informed about their progress and how to improve through marking and dialogue with adults. Teachers monitor pupils' work during lessons, pick up general misconceptions and adjust their plans accordingly to support learning.	Teaching focuses primarily on developing pupils' skills in mastering techniques and answering routine questions rather than understanding the underlying concepts. Accurate explanations give a piecemeal approach to learning a topic so that pupils are not helped to see the 'big picture'. Opportunities for problem solving are generally restricted to routine cases or are uneven, for example problems occur at the end of exercises so that not all pupils meet them. Pupils have some opportunities to investigate and discuss. Questioning tends to be closed rather than probing. Some barriers to learning and misconceptions are identified and tackled. Teachers understand the value of their subject which they communicate to pupils. They have adequate subject expertise which they use in their planning and teaching. As a result, they use a range of resources and teaching strategies, though one approach may dominate, for example, exposition by the teacher and practice by the pupils. They occasionally make links between mathematics and other subjects and with mathematics beyond the classroom. Marking is generally accurate and sometimes helps pupils to overcome difficulties.
4	<ul> <li>Expectations in the subject are inappropriate. Too many lessons are barely satisfactory or are inadequate and teaching fails to promote the pupils' learning, progress or enjoyment.</li> <li>Assessment in the subject takes too little account of the pupils' prior learning or their understanding of tasks and is not used effectively to help them improve.</li> </ul>	Teachers are not able to engage pupils' interest in the subject and do not monitor their progress adequately. Weaknesses and gaps in the teacher's knowledge of mathematics or how pupils learn the subject hamper lesson planning, the choice of resources, or the quality of teachers' explanations so that, as a result, pupils make too little progress. Pupils have too few opportunities for problem solving, investigation or discussion. A narrow view of the subject isolates it from other subjects and the outside world. Marking is too irregular, inaccurate or unhelpful to pupils.

## The curriculum in Mathematics

1	The curriculum in the subject provides memorable experiences and rich opportunities for high-quality learning and wider personal development. The subject curriculum may be at the forefront of successful, innovative design. A curriculum with overall breadth and balance provides pupils with their full entitlement and is customised to meet the changing needs of individuals and groups. The subject's contribution to relevant cross-curricular themes including, as appropriate, literacy, numeracy and ICT, is mainly outstanding. As a result, all groups of pupils benefit from a highly coherent and relevant curriculum which promotes outstanding outcomes.	The imaginative and stimulating subject curriculum is skilfully designed to match to the full range of pupils' needs and interests and to ensure highly effective continuity and progression in their learning and in the qualification pathways they follow, including into further study. Problem solving and investigative approaches are central to learning for all pupils. Clear guidance for teachers on activities and approaches that promote conceptual understanding, including the use of ICT, ensures all pupils benefit and experience breadth and depth in learning across the mathematics curriculum. Intervention and support are focused and finely tuned to pupils' individual needs so that they make rapid progress. Excellent links are forged with other agencies and the wider community to provide a wide range of enhancement and enrichment activities to promote pupils' learning and engagement with the subject.
2	The curriculum in the subject provides well-organised, imaginative and effective opportunities for learning and a broad range of experiences which contribute well to the pupils' development. The curriculum is adjusted effectively to meet the needs of most groups and a range of pupils with highly specific needs. The subject makes a good contribution to relevant cross-curricular themes including, as appropriate, literacy, numeracy and ICT. Enrichment opportunities in the subject are varied, have a high take-up and are much enjoyed.	The curriculum is broad, balanced and well informed by current initiatives in the subject. It is designed to match to a range of pupils' needs and interests, and ensure effective continuity and progression in their learning in the subject and in the qualification pathways they follow, including into further study. All pupils have opportunities to solve problems and investigate although the extent to which these are integral to their learning may vary. Guidance for teachers on activities and approaches that promote conceptual understanding, including the use of ICT, supports pupils' experiences across the breadth and depth of the mathematics curriculum. Intervention and support are focused on pupils' individual needs so that they make good progress. Good links are forged with other agencies and the wider community to provide a range of enhancement and enrichment activities to promote pupils' learning and their engagement with the subject.
3	The curriculum in the subject is adequately matched to pupils' needs, interests and aspirations and provides adequate preparation for the next stage of their lives, whatever their starting points. Provision for potentially vulnerable pupils is satisfactory. The subject's contribution to cross-curricular themes including, as appropriate, literacy, numeracy and ICT, is at least satisfactory.	The curriculum provides adequate coverage of the mathematical content but pays less or uneven attention to the development of the key process skills. It provides for a range of pupils' needs and interests and ensures adequate progression in their learning. They acquire mathematical qualifications, but the choice and timing of these may not suit pupils' individual needs or promote further study. All pupils have some opportunities to solve problems and investigate. Guidance for teachers on activities and approaches that promote conceptual understanding, including the use of ICT, is limited or not implemented consistently so that pupils' experiences across the mathematics curriculum vary. Intervention and support lead to some improvements in progress or confidence in answering test questions. Some links are forged with other agencies and the wider community, although the range of activity provided to enhance and enrich pupils' interest and learning may be quite limited.
4	The curriculum has significant shortcomings in meeting the needs of pupils, or particular groups of pupils, and makes insufficient contribution to their learning, enjoyment or development.	The curriculum does not ensure pupils' entitlement to the subject, for instance in using and applying mathematics, and does not secure progression in their learning. Too many pupils do not attain a relevant mathematical qualification or follow pathways that adversely affect their future opportunities, for example stopping studying mathematics after passing GCSE early at grade C. There is little by way of enhancement or enrichment activity in the subject.

# Effectiveness of leadership and management in Mathematics

1	Subject and senior leaders and managers are conspicuously successful in establishing a strong sense of purpose which involves work towards meeting or sustaining ambitious targets in the subject for all pupils. Morale is very high and belief in success runs through all staff involved with the subject. Rigorous and extensive monitoring, searching analysis and self-challenge lead to exceptionally well-focused plans for the subject. Actions taken are implemented with precision and managed thoroughly. As a result, the quality of teaching in the subject is at least good and leaders and managers at all levels are taking highly effective steps to drive up the quality of teaching still further. Consequently, achievement in the subject for all pupils is at least good.	Leadership is informed by a high level of subject knowledge, subject- specific pedagogy and vision. There is a strong track record of insightful innovation which is carefully evaluated. Subject reviews, self-evaluation and improvement planning are well-informed by current best practice in mathematics education. Subject leadership inspires confidence and whole-hearted commitment from pupils and colleagues. There are effective strategies to delegate subject responsibilities where appropriate and to share good practice and secure high quality professional development in the subject. Outstanding support and guidance on teaching and the curriculum is provided for the teachers, including any non-specialists and the less experienced. The subject is at the cutting edge of initiatives within the school.
2	Subject and senior leaders and managers consistently communicate high expectations to staff about securing improvement in the subject. They galvanise the enthusiasm of staff and channel their efforts to good effect. Leaders and managers routinely make good use of a range of rigorous monitoring activities relating to teaching, other provision and outcomes. They have an accurate picture and understanding of strengths and weaknesses in the subject. Planning is founded on robust evidence and good-quality data. It is tackling key areas of weakness, including those in teaching, systematically and building on areas of strength. As a result, teaching is at least satisfactory and improving. Target-setting is realistic and challenging. Consequently, achievement in the subject is generally good, or there is substantial evidence that it is improving strongly.	Leadership is well informed by current developments in mathematics education. Subject reviews, self-evaluation and improvement planning are clearly focused on raising attainment and improving the provision for the subject. There is a shared common purpose amongst those involved in teaching the subject with good opportunities to share practice and access subject training. Appropriate support and guidance on teaching and the curriculum is provided for the teachers. The subject engages with wider whole-school priorities effectively.
3	Subject and senior leaders and managers are motivated to seek further improvement and are effective in focusing efforts on priorities in the subject. They monitor accurately the progress of all pupils and the quality of teaching and learning. Self evaluation is broadly accurate. Target-setting in the subject is based on accurate assessment information but is only adequately challenging. Suitable plans are in place aimed at improving areas of weakness in the subject and effective steps are being taken to secure high-quality teaching. Expectations are sufficiently high to bring about outcomes which are broadly satisfactory and improving or, if lower, there is substantial evidence that they are improving strongly.	Leadership is aware of current developments in the mathematics education. Subject reviews, self-evaluation and improvement planning reflect a sound understanding of the strengths and priorities for improvement. There is some sharing of good practice, with modest access to subject-specific professional development. Support and guidance on teaching and the curriculum is provided informally or on request rather than aiming to develop systematically the practice of all teachers.
4	<ul> <li>Subject and senior leaders and managers are not taking effective steps to embed their ambition for the subject.</li> <li>Or</li> <li>Target-setting in the subject is not used effectively to raise expectations and improve outcomes.</li> <li>Or</li> <li>Subject and senior leaders and managers do not drive and secure improvement.</li> <li>Or</li> <li>Subject and senior leaders and managers are not taking effective steps to secure satisfactory and better teaching.</li> </ul>	Leadership is not well-informed about current initiatives in mathematics education. Key statutory requirements for the subject are not met. Self- evaluation is weak so that leaders do not have an accurate view of the quality of provision and outcomes. Opportunities for professional development in the subject are limited and, as a result, some staff lack the confidence and expertise to deliver it effectively.

Outstanding	Overall effectiveness in the subject is likely to be outstanding when:
(1)	Achievement in the subject is outstanding, or achievement is good and outstanding leadership and management underpin the capacity for sustained improvement in the subject. At least one, of teaching or the curriculum in the subject, is outstanding, and neither is less than good.
Good (2)	Overall effectiveness in the subject is likely to be good when: Achievement in the subject is good, and good leadership and management provide secure evidence of capacity for sustained improvement in the subject. In exceptional circumstances, leadership and management may be satisfactory. At least one, of teaching or the curriculum in the subject, is good, and neither is less than satisfactory.
Satisfactory	Overall effectiveness in the subject is likely to be satisfactory when:
(3)	Achievement in the subject is at least satisfactory, and satisfactory leadership and management ensure adequate capacity for improvement in the subject. Teaching and the curriculum in the subject are at least satisfactory.
Inadequate (4)	Overall effectiveness in the subject is likely to be inadequate if any of the following are inadequate:
	<ul> <li>Achievement in the subject</li> <li>Capacity for improvement, as evidenced by inadequate leadership and management of the subject</li> <li>Teaching or the curriculum in the subject</li> </ul>