

Immediate release  
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## **ARK SCHOOLS MATHS MASTERY PROGRAMME WINS MAJOR GRANT FROM EDUCATION ENDOWMENT FOUNDATION**

The leading academy schools operator, ARK Schools, has been awarded a major grant by the Education Endowment Foundation (EEF) to further develop and roll out its **Mathematics Mastery programme**, an innovative and highly effective approach to teaching children maths based on Singapore maths teaching. The £600,000 grant will enable ARK to launch the programme and related professional development training to improve maths teaching in at least 50 disadvantaged primary and secondary schools.

The funding will enable ARK Schools to write a UK mathematics mastery programme based on the experience of teaching the pilot programme in ARK's academies. ARK intends to complete the development of its primary modules for use from Sept 2012 and its secondary modules for use from September 2013. In parallel ARK is developing professional training and implementation support for schools outside the ARK network.

The **Mathematics Mastery** programme is a new approach to teaching mathematics from reception through to Year 9. It is based on the curricula principles of the most consistently high performing nations over the past 30 years, adapted by ARK to the needs of its pupils. ARK's pioneering approach is designed to ensure that every child can achieve excellence in mathematics. It will ensure that pupils are well prepared to be highly successful in their Key Stage 4 and beyond.

ARK's primary schools began to use the **Math in Focus** study programme in 2010, (based on the curriculum used in Singapore - ranked number one in the world in maths). The course gives pupils a deep understanding of maths by employing a concrete, pictorial and abstract approach so that children understand what they are doing rather than just learning routines. The teaching of critical thinking skills is embedded into the programme, enabling pupils to solve problems that would be considered years ahead of them in many UK schools.

In secondary schools, ARK's approach emphasises **cumulative mastery** of the essential knowledge and skills in mathematics.

- Pupils study fewer areas of learning in each term and in each year, but develop a greater understanding of whole number, fractions, geometry and statistics. Fewer key areas of learning mean that teachers can focus on high quality delivery, supported by a rigorous scheme of work.
- The first half of each academic year focuses primarily on mastery of number and algebra. This is then applied to the study of geometry and statistics in the second half of the year.
- Pupils' understanding, calculating and problem solving skills are developed simultaneously.

ARK Schools Director of Mathematics, Helen Drury, said: "We are delighted to win this grant. As well as seeing really impressive results, teachers using **Mathematics Mastery** are helping their pupils gain real depth of understanding of mathematical concepts. The approach has strengthened the understanding even of pupils who previously had difficulty with maths and has generated real enthusiasm among primary and secondary pupils.

"Over the next nine months we will further develop the programme for its wider roll out in 2012. We are now keen to hear from primary and secondary schools who are interested in adopting the programme from next year.

Ends

For further details please call Lesley Smith at ARK Schools on 0203 116 0715 or 07825 981294 or Sam Talbot-Rice on 0203 116 0800.

Note to editors

## **Mathematics in ARK Schools**

To meet ARK's high aspirations for every pupil, ARK Schools is developing a new approach to teaching mathematics from reception through to Year 9. The approach is based on the curricula principles of the most consistently high performing nations over the past 30 years, adapted to the needs of our pupils.

This is a pioneering approach to teaching mathematics in England to ensure that every pupil has the opportunity to achieve excellence in mathematics. It will ensure our pupils are well prepared to be highly successful in their Key Stage 4 study of mathematics and beyond.

### **PRIMARY**

In 2010 we began to use the ***Math in Focus*** study programme (based on the curriculum used in Singapore - ranked number one in the world in maths). The course provides pupils with a deep understanding of maths by employing a concrete, pictorial and abstract approach so that they understand what they are doing rather than just learning routines. The teaching of critical thinking skills is embedded into the programme – one of the strengths of Singapore Maths is the use of model drawing to represent problems, enabling pupils to solve problems that would be considered years ahead of them in the UK.

### **SECONDARY**

The ARK approach to mathematics will differ from the current UK national curriculum in that it emphasises **cumulative mastery** of the essential knowledge and skills in mathematics.

The key aspects are:

- Pupils study fewer areas of learning in each term and in each year, but will develop a greater understanding of whole number, fractions, geometry and statistics. Fewer key areas of learning each year means that teachers can focus on quality delivery, supported by a rigorous scheme of work.
- The first half of each academic year focuses primarily on mastery of number and algebra. This is then applied to the study of geometry and statistics in the second half of the year.
- The development of understanding, calculating and problem solving skills are not competing for time, but are developed simultaneously.

### **BEYOND ARK**

EEF funding will enable the establishment of an ARK-supported organisation to develop materials and training for challenging inner-city schools beyond the network to adopt mathematics mastery. This includes creating resources and teacher guidance for every lesson, so that professional development becomes an integral part of every teacher's day-to-day work, as well as designing and delivering training and coaching to primary and secondary teachers and leaders to ensure the mastery approach is optimally implemented.

ARK will be opening the scheme to 30 primary schools from September 2012 and 20 secondary schools from September 2013. We are looking to work with EEF target schools in challenging urban areas (those that are not reaching government floor targets for attainment or progression).