

ANTHONY REDDY

provides a package of three linked workshops which together ensure firm foundations and understanding of the Number System at Level 2 and then show how to secure clear progression in written calculation from Year 3 to Year 6.

WORKSHOP ONE - Wednesday 12 October 2011

Ref: 4022

SECURING LEVEL 2 IN MATHEMATICS

- practical ideas, models, images & jottings to aid understanding -

WORKSHOP TWO - Tuesday 10 January 2012

Ref: 4028

SECURING LEVEL 3 IN MATHEMATICS

- "Level 3 is the key to mathematical progress -

WORKSHOP THREE - Wednesday 29 February 2012

Ref: 4032

SECURING LEVEL 5 IN MATHEMATICS

- examining how to understand and meet the needs of mathematically able pupils -

Anthony says:

- ❖ "Securing Level 2 training (Workshop One) will demonstrate a series of key models and images that together with quality teaching will really help to benefit children's ability to think mathematically."
- ❖ "At Year 2 we aim to get as many children as possible to Level 2. By Year 6 we're aiming for Level 4 and hopefully Level 5. But to give a child the necessary skills to actually make that progress and to have both a sense of number and the ability to perform basic number calculations Level 3 'is the key.'" (Workshop Two)
- ❖ Workshop Three: "should enable participants to organise and plan quality activities to extend their more able mathematicians. They should feel confident in adapting ideas from published schemes and other sources to ensure challenge and depth...."

Please note: you are seriously advised not to miss these!

Please see inside for workshop details. If you wish to make a booking for one or more, please complete and return the Faxback Registration Form on the last page.

PLACES ARE LIMITED SO EARLY APPLICATION ADVISED.

WORKSHOP ONE - SECURING LEVEL 2 IN MATHEMATICS

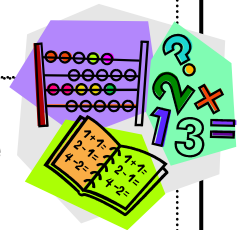
Wednesday 12 October 2011 9:30 am – 3:30 pm

Ref: 4022

In the **Renewed Framework for Mathematics** there is a clear progression in written calculation from Year 3 to Year 6. Before this, however, there are specific skills, facts, knowledge and understanding which are vital to ensure that children leave KS1 with a secure grasp of number. Many children struggle to understand place value, key vocabulary, inverse operations and many of the calculation 'jotting' strategies. They often pick up common misconceptions which severely harm their progress.

Purpose of Workshop:

- to discuss the key teaching and learning concepts of Level 2 mathematics
- to examine visual resources, practical models and images, and the use of ICT to aid mathematical understanding for children working in KS1
- to discuss and develop knowledge of how children move from basic mathematical skills and concepts into an understanding of number
- to analyse key misconceptions of children in KS1, and how these can be overcome
- to discuss and practise a range of approaches to KS1/Level 2 jottings



MORNING SESSION (9:30-12:30)

- What makes a Level 2 mathematician – early approaches to understanding the number system and KS1 place value
- Calculation at Level 2 – number facts, jottings and mental strategies for addition and subtraction

12:30 LUNCH

AFTERNOON SESSION (1:15-3:30)

- Models, images and activities to embed Level 2 mathematics – multiplication, division, fractions and problem solving in KS1
- There will be practical activities, resource demonstrations, interactive ICT programmes, visual stimuli and many more useful ideas
- There will also be a demonstration and discussion of how to teach 'jottings' and what the most effective written approaches are for children working at Level 2

WORKSHOP TWO - SECURING LEVEL 3 IN MATHEMATICS

Tuesday 10th January 2012 9:30 am – 3:30 pm

Ref: 4028

Purpose of Workshop:

The workshop is designed to enable participants:

- to explore the key skills and concepts that children need to understand in order to be a secure Level 3 mathematician
- to practise a range of ideas and activities to increase a child's sense of number and number confidence
- to develop quality mental and written calculation strategies within Level 3
- to see how Level 3 mathematics underpins the rest of the KS2 maths curriculum

MORNING SESSION (9:30-12:30)

Session One:

- What makes a Level 3 mathematician?
- Why is Level 3 the key?
- Number Fun at Level 3 – improving mathematics through song!
- Developing mental calculation and recall strategies
- Quality ICT resources to support mental maths

Session Two

- Figurehead Fred!
- Mental or written – how and what to choose/crucial mental methods
- Key issues in Level 3 calculation strategies
- Subtraction – making a difference!
- Effective use of the number line for addition and subtraction
- Alternative approaches for subtraction – 'expanding' children's thinking

12:30 LUNCH

AFTERNOON SESSION (1:15-3:30)

Session Three

- Multiplication messages and models
- Inverses – models and images linking multiplication and division
- Division – delightful or dreaded, dynamic or deadly?
- Find the 'hunk' – how to make 'chunking' relevant, useful and enjoyable
- Closing messages – being a 'key' teacher!

Not only will participants understand the vital importance of Years 3 and 4 in developing children's key skills and concepts and how their future as mathematicians depends on this happening, they will also gain extended insight and understanding of the 'what' and the 'how' this quality provision can be achieved.

WORKSHOP THREE - SECURING LEVEL 5 IN MATHEMATICS

Wednesday 29 February 2012 9:30 am – 3:30 pm

Ref: 4032

Purpose of Workshop:

- To understand the key aspects of Level 5 mathematics in KS2 and 3
- To discuss and understand the features and needs of mathematically able pupils
- To differentiate problem solving for the more able through challenges and extensions
- To be able to adapt specific problems to make them wider, deeper and more mathematically involved
- To understand and revise the different types of mathematical problem
- To discuss problems involving rules and generalisations

MORNING SESSION (9:30-12:30)

Aiming for Level 5 – Deepening Mathematical Understanding

- Welcome and introduction / key message of the day
- Quick starter – ICT for the more able
- Overview of Level 5 from Year 6 to Year 7
- Introductory activity for adults
- The Gauss problem
- Features of mathematically more able pupils
- Provision for more able pupils in mathematics
- Developing activities to broaden Level 5 understanding
 - problem solving extensions – all year groups
 - moving into algebra
 - consecutive numbers – from lower KS2 to upper KS2 and beyond
 - using recording to aid explanation

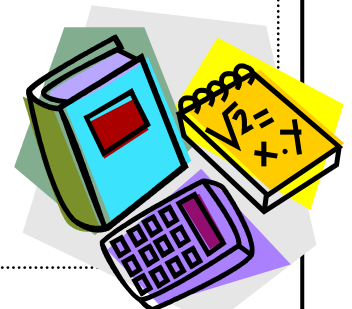
12:30 LUNCH

AFTERNOON SESSION (1:15-3:30)

Embedding Level 5 – further mathematical development through websites, resources, games and magic!

- Quality websites for the mathematically able
- NRICH – activities, resources and ideas for Level 5 reasoning
- How can I always win? 'Nim' and 'Digital Oxo' – rules and generalisations
- Large scale group problem solving – the 'Leisure Complex' problem (if time_)
- Brain Academy (NACE) – devising a more able maths club
- Free CD of resources and activities!

3:30 Review & Close



ANTHONY REDDY

Anthony is an experienced Senior Mathematics/ISP Consultant who has been involved in delivering high quality mathematics across several Local Authorities since 1999. He is a qualified Key Stage 1 Moderator, a regular lecturer and marker for the University of Manchester PGCE course and was a member of the government working party on the Renewed Framework for Mathematics. Besides overseeing and leading the Framework rollout for a series of local authorities in the north, Anthony's expertise is much in demand elsewhere. He now works throughout the country as an independent consultant on a mission to 'revitalise mathematics teaching' using a variety of enterprising strategies balanced by a common-sense approach to planning and delivering quality lessons. His growing reputation is also taking on an international dimension!

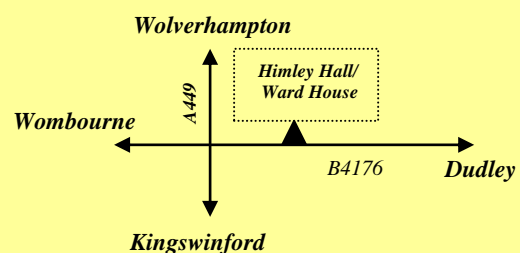
Workshop Fee:

£170pp for each workshop
(to include lunch & refreshments)

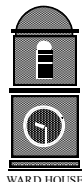
Special Offer:

Apply for a place on each
of the three workshops for **£450**

VENUE: Himley Park, DUDLEY . DY3 4DF



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01384 817861**



Please assume your application has been successful unless you hear to the contrary.

*** IF YOU HAVE NOT RECEIVED A PACK 7 DAYS PRIOR TO THE EVENT, PLEASE CONTACT THE COLLEGE ***

Send one person on each workshop for a
Special discounted price of £450
When a place on each workshop is requested

Please tick:

| | | |
|---|---|--------------------------|
| Workshop One – Securing Level 2 in Mathematics (ref: 4022) | Weds 12th October 2011 | <input type="checkbox"/> |
| Name: | Post: | |
| Workshop Two – Securing Level 3 in Mathematics (ref: 4028) | Tues 10th January 2012 | <input type="checkbox"/> |
| Name: | Post: | |
| Workshop Three – Securing Level 5 in Mathematics (ref: 4032) | Weds 29th February 2012 | <input type="checkbox"/> |
| Name: | Post: | |

ORGANISATION:

Address:

Post Code:

Tel No: Fax No:

Email:

METHOD OF PAYMENT (Please tick appropriate box):

| | |
|---|--|
| 1. Cheque made payable to: Dudley MBC <input type="checkbox"/> | 3. Invoice school direct <input type="checkbox"/> ORDER No: |
| 2. Internal Trading (DUDLEY ONLY) <input type="checkbox"/> | Cost Code: |

Invoice Address (if different from above):

Terms & Conditions: Applicants will be charged in full if they cancel within 10 working days of the Workshop; a £25 admin fee will be charged for cancellations at any other time. Substitutions can be made any time if prior notice is given. Exceptionally, the College reserves the right to amend any programme when faced with circumstances beyond its control.

I agree to abide by the terms and conditions stated above

Signature: **Date:**