

Beeslack ASG

Maths policy

August 2011

'To face the challenges of the 21st Century, each person needs to have confidence in using mathematical skills, and Scotland needs both specialist mathematicians and a highly numerate population.'

(Building the Curriculum 1)

Aims of teaching Maths

We aim to create a rich and stimulating environment providing experiences to engage learners of all ages, interests and abilities. Wherever possible we will use cross-curricular links and contextual opportunities.

Maths is a tool for everyday life, allowing us to make sense of the world around us and become:

- Successful learners
- Confident individuals
- Responsible citizens
- Effective contributors

Links to Curriculum for Excellence

Maths experiences will provide opportunities to develop the principles of CfE:

- Challenges and enjoyment
- Breadth
- Progression
- Depth
- Personalisation and choice
- Coherence
- Relevance

Learning and Teaching

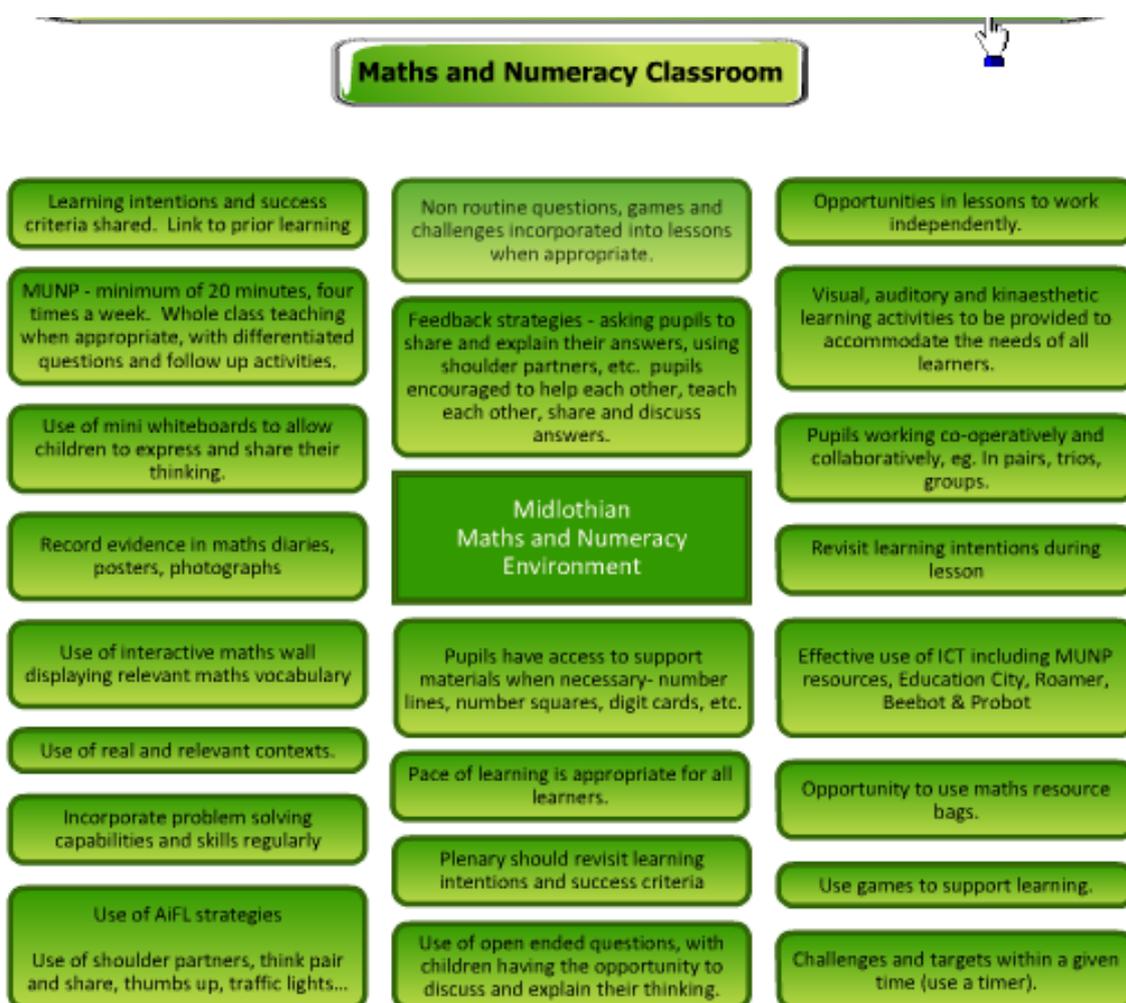
The Maths outcomes are designed to stimulate children's interest and promote creativity and innovation. We aim to deliver carefully planned, well-paced learning and teaching activities using a mix of approaches including:

- Planned active learning with opportunities to observe, explore, investigate, experiment and play
- Development of problem-solving strategies (See Appendix 1)
- Development of mathematical thinking skills (See Appendix 2)
- Use of relevant contexts, indoors and outdoors, familiar to young people's experiences (See Appendix 3)
- Appropriate, effective use of technology
- Building on the principles of Assessment is for Learning
- Collaborative and independent learning
- Making links across the curriculum through thematic work
- Sharing their understanding and explanation of thinking through discussion
- ASG will use consistent approaches to teach aspects of Maths (See ASG posters)

Structure of Lessons

1. Recap on previous knowledge
2. Sharing Learning Intention and Success Criteria.
3. Teaching/ Learning Experience/ Activity
4. Plenary/ Assessment

Midlothian's Numeracy and Mathematics GLOW group has produced the table below with advice on the classroom environment.



Planning

Within the Maths curriculum, some outcomes have been identified as Numeracy and some are specifically Maths.

Planning Maths

PRIMARY

- Year Plans should show some elements of Maths being taught in a context. Some will be taught as discrete subjects.
- Each group has an overview of Maths at the appropriate level.
- Classes use Midlothian planners per group for each area of Maths.
- Staff should record which areas are to be covered by highlighting in the appropriate term colour and then dating when experienced. (See appendix 4)
- Quick start activities are a good way to revisit topics regularly.

SECONDARY

- Staff should use the annual calendar in conjunction with teaching notes. Planning should be done a topic at a time.
- Agreed approaches must be used to support transition from class to class.
- Reference should be made to real life, historical developments and other areas of the curriculum where possible.
- Pupils should take responsibility for keeping their record sheets up to date.

Planning Numeracy

PRIMARY

- Numeracy will be planned through MUNP (Midlothian Understanding Numeracy).
- Each group has a coloured- coded MUNP overview.
- Numeracy will be taught every week and classes should have a Numeracy session at least 3 times a week.
- Staff should record which areas are to be covered by highlighting in the appropriate term colour and then dating when experienced. (See appendix 4)

SECONDARY

- Embedded with the maths curriculum.
- Weekly practice to develop skills in mental calculation.
- Collaboration with other areas of the curriculum is to be encouraged.

Presentation

The ASG schools will use:

- Squared Maths jotters
- Follow the ASG presentation policy (See appendix 5)

Assessment

Primary

Classes will be given the appropriate evaluation exercise at the end of session to identify areas of need.

Secondary

Differentiated homework for every topic give fast feedback on pupils progress. Formal assessments take place at Christmas and Easter.

Tracking

Primary

Individual schools will use their own tracking formats to record results of formal evaluations to collate and track pupil progress, ensuring pace and challenge.

Secondary

Data from these formal assessments are collated and used to track pupil progress.

Marking

AiFL strategies should be used including peer and self marking. Teacher comments should refer to the Learning Intention and Success Criteria.

Homework

Primary

Maths/ Numeracy homework should be given as appropriate This can be a practical task as well as written work.

Secondary

Homework is issued at the end of each topic and is marked by staff. Informal homework can be issued in line with Department Policy (see Maths Department Handbook).

Parental Involvement

Parents are issued with an ASG booklet which provides detail of presentation, processes and has an overview of Numeracy and Maths.

Transfer of Information

P7 teachers will pass on the following information:

- Group names with levels e.g. 2C
- MUNP overview per group which has been highlighted and dated
- Maths overview per group which has been highlighted and dated

Appendices

1. Problem Solving Strategies

Find a Pattern
Make a Table/ Model
Work Backwards
Guess and Check
Draw a Picture
Make a List
Use Logical Reasoning/ Be organised
Try a simpler case
Eliminate

2. Mathematical Thinking Skills

Sorting objects by different traits (colour, shape, or texture)
Using words to describe things and what they are used for
Identifying and copying simple patterns
Using words to talk about position (over, under, in, top, bottom, etc.) and order (first, next, last etc.)
Counting objects
Using words to communicate an understanding of numbers and relationships (more, less, equal, etc.)

3. Examples of relevant contexts

Reference should be made to real life, historical development and other areas of the curriculum where ever possible. e.g. If a class is studying Romans, they can learn about Roman numerals.

4. Term Highlight Colours

Term	Colour
Aug- Oct	Yellow
Oct- Dec	Blue
Jan- Apr	Green
Apr- Jun	Orange