

Kuwait International **English School**



Primary Department **Numeracy Policy**

Using the Programmes of Study from the National Curriculum and the White Rose Maths Scheme, it is our aim to develop:

- a positive attitude towards mathematics and an awareness of the fascination of mathematics
- competence and confidence in mathematical knowledge, concepts and skills
- an ability to solve problems, to reason, to think logically and to work systematically and accurately.
- initiative and an ability to work both independently and in cooperation with others
- an ability to communicate mathematics
- an ability to use and apply mathematics across the curriculum and in real life
- an understanding of mathematics through a process of enquiry and experiment

SCHOOL POLICY AND THE NATIONAL CURRICULUM

At KS1 and KS2 teachers use the White Rose Maths Scheme to ensure that all parts of the National Curriculum Programme of Study are taught.

Through careful planning and preparation we aim to ensure that throughout the school children are given opportunities for:

- √ practical activities and mathematical games
- √ problem solving
- √ individual, paired, group and whole class discussions and activities
- √ open and closed tasks
- √ a range of methods of calculating eg. mental, pencil and paper and using a calculator
- √ working with computers as a mathematical tool

Our school scheme of work is a working document and as such is composed of ongoing plans produced on a week by week basis.

CROSS-CURRICULAR ISSUES

Throughout the whole curriculum opportunities exist to extend and promote mathematics. Teachers seek to take advantage of all opportunities, particularly linking to topics.

TEACHERS' PLANNING AND ORGANISATION

The approach to the teaching of mathematics within the school is based on three key principles:

- ✓ **mathematics every day**
- ✓ **a clear focus on direct, instructional teaching and interactive oral work with the whole class and group**
- ✓ **an emphasis on mental calculation**

Each class organises a daily lesson of between 45 and 60 minutes for mathematics. Lessons are planned using the KIES planning format.

SPECIAL EDUCATIONAL NEEDS

Children with SEN are taught within the daily mathematics lesson and are encouraged to take part when and where possible.

Where applicable children's IEPs incorporate suitable objectives from the NNS Framework and teachers keep these objectives in mind when planning work.

When additional support staff are available to support groups or individual children they work collaboratively with the class teacher. Feedback is given to the teacher by support staff at the end of each session.

Within the daily mathematics lesson teachers not only provide activities to support children who find mathematics difficult but also activities that provide appropriate challenges for children who are high achievers in mathematics.

EQUAL OPPORTUNITIES

In the daily mathematics lesson we support a larger number (in some cases a whole class) of children with English as an additional language in a variety of ways. eg. Repeating instructions, speaking clearly, emphasising key words, using picture cues, playing mathematical games, encouraging children to join in counting, chanting, finger games, rhymes etc.

PUPILS' RECORDS OF THEIR WORK

All children are encouraged to work tidily and neatly when recording their work. When using squares one square should be used for each digit.

MARKING

Work in mathematics can generate a great deal of marking and it is recognised that it is not always desirable to mark every piece of work. The children should be encouraged to self-mark and peer mark on a weekly basis using the triangle system. Where appropriate children should be encouraged to check computational exercises with a calculator.

The quality of marking is crucial. A simple `.' to show an error (*not a cross*) accompanied by an indication of where the error occurred.

Next steps should be indicated where possible.

ASSESSMENT AND RECORD KEEPING

Teachers are expected to make regular assessment of each child's progress and to record these systematically. The following is the school policy for assessment in mathematics:

Informal Tests of Mental Arithmetic

This involves 20 mixed questions given orally every 1-2 weeks, depending on the Key stage. This is followed immediately by discussion with the whole class so that any misconception can be put right and the merits of different methods discussed.

Informal Tests of Mental Arithmetic

The children should be given weekly times table test on a table they have been focusing on in class (this should be done during the mental starters).

Formal Assessment

A scrutiny of children's recorded work over the previous six weeks should help to review how well children have taken in the topics taught and identifies any remaining misconceptions. A record of each child's attainment against key objectives should be recorded in the teachers **Daily Plan Book using** the triangle system.

DIFFERENTIATION

At KIES, we implement a 'core,' 'challenge' and 'extension' approach to differentiation. Planning should include differentiated tasks and questions for the less experienced (core), experienced (challenge) and the more experienced (extension). SEN and Gifted and Talented children may require further differentiation outside of these groups.

This should always be incorporated into all mathematics lessons and can be done in various ways:

- Stepped Activities which become more difficult and demanding but cater for the less able in the early sections.
- Common Tasks which are open ended activities/investigations where differentiation is by outcome.
- Resourcing which provides a variety of resources depending on abilities eg. counters, cubes, 100 squares, number lines, mirrors.
- Grouping according to ability so that the groups can be given different tasks when appropriate. Activities are based on the same theme and usually at no more than three levels.

HOMEWORK

It is our school policy to provide parents and carers with opportunities to work with their children at home. These activities may only be brief, but are valuable in promoting children's learning in mathematics.

Activities are sent home on a regular basis and should link with the learning that has taken place in class that week.