

Appendix 8: Curriculum statement for Mathematics

Introduction

The main principles of mathematics at Ashwell School are that pupils should be actively engaged in the subject and enjoy experiencing the mathematics curriculum in a variety of ways. It is important that children receive a balanced education across all aspects of mathematics to enable them to gain a competence and confidence in their understanding of this subject, and in their ability to apply their knowledge and communicate mathematical ideas.

Organisation

From the Nursery onwards children at Ashwell School experience mathematics activities on a daily basis, although the exact duration and organisation of individual lessons may vary. The subject is taught in mixed ability classes although children may be grouped by ability where appropriate.

Teaching and Learning

Ashwell School has a whole school approach to the organisation of lessons. Mathematics lessons may consist of three parts:

- An **oral and mental starter** designed to sharpen and develop mental skills. It may focus on the skills required in the remainder of the lesson but may be unrelated to the content of the main teaching activity.
- A **main teaching activity** where the teacher is focussed on direct teaching of the whole class or groups of children. Following some teaching input pupils are involved in mathematical activity. They may be working as a whole class, in groups or pairs, or working individually.
- The **plenary** designed to reinforce the learning objective of the lesson, to identify progress, sort out misconceptions and discuss the next steps in the children's learning. There may be mini-plenaries throughout the lesson to focus the children and develop learning.

During the lesson it is recognised that the interaction between teacher and pupils and pupil and pupil is extremely important and that it is through answering questions, contributing to discussion and explaining their thinking that children best develop their understanding.

Every opportunity is taken to incorporate mathematics into other subjects, where appropriate.

Differentiation.

In every class the range of ability will be accommodated through carefully planned work appropriate to the stage of mathematical development of each child. However, all the children will be engaged in mathematics relating to a common theme. Occasionally, it may be considered that a child's needs can only be met by an individualised programme of work that may not follow the main theme within the lesson.

Planning

There are standard planning pro-formas for both medium and short term planning.

Long and Medium term planning:

This is based on the Statutory Framework for Early Years and the HfL Domain Progression documents which lay out the learning objectives within each area of mathematics. These are carefully followed, but teachers have discretion to decide on the length and timing of individual units of work to meet the particular needs of each class.

Short Term Planning:

A weekly plan is produced by each teacher detailing the mental/oral starter, the main activity and the plenary for each lesson. It also includes planned differentiation.

It is recognised that planning should reflect short term assessment and while the objectives for each week's mathematics teaching may be determined, the precise content of daily mathematics lessons may change as each week progresses.

Assessment and Record keeping

See 'Assessment and Record Keeping' policy.

Role of ICT

ICT is used in various ways to support teaching and motivate children's learning. ICT includes the use of computers and audio-visual aids.

Children throughout the school have regular lessons using computers which include the use of software and internet sites involving mathematical concepts.

Resources

The central resource contains a range of mathematical equipment to be used across all age groups but classes have their own stock of regularly used resources.

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