Introduction

The project Mental Maths and Problem Solving is divided into 15 units of one hour each. It provides a scheme of work for both Mental Maths and Problem Solving in year 5. Some photocopiable resources are also included.

Maths is involved in all learning. It is used in every subject at school and pupils need Maths in their everyday lives. Maths trains the mind to develop a logical way of thinking and it strengthens the powers of reasoning. It is a unique universal language.

Every lesson in the project links Mental Maths strategies to Problem Solving, so that, the teacher will need both lesson plans in order to deliver the programme.

This project provides structured activities with balanced progression. In addition, I show details of the different strategies learners need to use to solve the different types of problems that I created. It provides a framework for the analysis of problems in everyday life and the development of appropriate solutions, from the basic to those which are quite complex. The problems are set in the contexts of a range of other subjects, many of which involve the learners in collaborative, task-based learning.

This project was developed using CLIL methodology. It includes a wide range of cross-curricular links for learning about Maths including Geography and Music, for the development of communication through role-play, development of cognitive skills through problem solving strategies (sequencing, associations, analysis…), progressively demanding subject content (from one step calculations to geometry), support for the language of learning (operations to problems), support to differentiation, as well as use of visuals and diagrams to present the content and cultural links for maths in the local environment

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