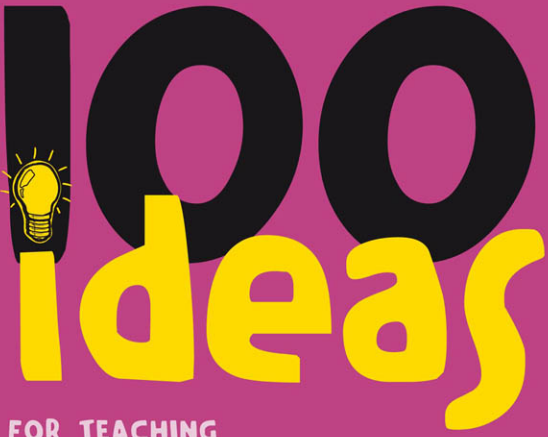

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SECTION 2 **Investigations and longer activities**

SECTION 3 **Measures and time**

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INTRODUCTION

The aim of this book is to provide a resource for teachers and support staff which will supplement and enhance the primary mathematics syllabus. It is hoped that users will be able to select activities which will fit alongside their scheduled syllabus as well as use some of the ideas as ongoing consolidation of previously covered areas.

Essentially, all the ideas have been used successfully in the primary classroom situation. There is an element of friendly competition in many, most encourage cooperation in pairs or groups and all are intended to be enjoyable. It is hoped that users will find among these ideas, many repeatable favourites of both the children and themselves.

MATHS COVERAGE

I have tried to include as wide a range from the common primary mathematics syllabus as possible but there is a weighting towards concepts of number. Confidence in the way numbers are used and work together breeds willingness and enthusiasm to investigate and create further. If the idea title does not give a clue to the area covered then there is a brief reference at the start of each entry.

DURATION

Almost half the ideas are suited to short sessions of activity, perhaps at the beginning or end of a lesson. However, they could be combined to provide a 'circus' of activities over a longer period of time. Many can be easily adapted for a longer session, if appropriate, and any short game can be played a number of times.

GROUP SIZE

Recommendations for group sizes are given for each idea but it will be seen that many suggest, simply, 'any'. Some activities will lend themselves more to a smaller group but this does not mean they cannot be adapted to a much larger number or even a whole class. Whereas it could be said that any idea will work better with adult

supervision, very many of these activities can be largely self-sufficient after initial guidance.

DIFFERENTIATION

The great majority of the activities are adaptable within the primary age and ability range. Where this is unlikely to be possible, a recommendation towards a broad age group is given. Brief notes on differentiation possibilities are included.

RESOURCES

No elaborate resources are required for any of the ideas. Any equipment needed is likely to be found in the primary classroom. Some ideas require preparation but this involves very little time and effort and, once prepared, the materials can be used repeatedly. Most of the activities require little or no preparation at all.

SECTION 1

Short number activities and games

Ideas 1–48 are ideal for lesson starters or early finishers. They can also be used within a 'circus' of activities for a longer period. All should be used in the context of enjoyment and fun. Many of the games could be particularly suitable for older children to play with younger ones, rather as paired reading operates.

IDEA 1

ADD AND TAKE

KEY AREA
Addition and subtraction

RESOURCES
Pack of playing cards
Whiteboards and pens (optional)

GROUP SIZE
Partners, larger groups or whole class

- Remove the court cards from a pack of playing cards and shuffle the remaining cards.
- Divide the pack into two reasonably equal piles, face down, and explain that as soon as the top two cards are turned the numbers shown must be added and, also, the difference between them calculated as quickly as possible. Practise a few turns to demonstrate.
- Answers can be recorded on paper or a whiteboard and solutions then revealed after each one, or after a series if used as a quiz.
- This also works well in a group as a friendly knock-out game where the answers are called as soon as they are calculated. Once a child has answered, she/he must not call another answer until everyone else has achieved one. In the interests of maintaining self-esteem, keep the pressure to a minimum and always include a second, third or fourth round where individual members can challenge themselves to improve their own response time.

DIFFERENTIATION

- Younger or lower ability children could concentrate on either just adding or just taking away; the higher value cards should be removed along with the court cards.
- Use multiplication and division of the numbers instead of addition and subtraction, remembering that some pairs of numbers will have remainders when divided.
- Use all four rules together.
- Try an add/take variation where the two numbers are first added together and then subtracted from 20. In this case the only number required to be called or recorded is the final solution.