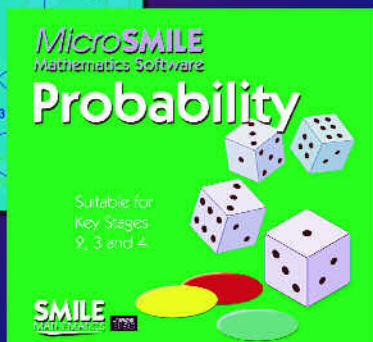
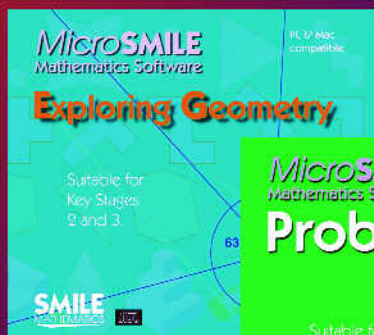


# SMILE Mathematics

## MicroSMILE software and printed resources

2004

Suitable for Key Stages 2, 3, 4 and beyond



**SMILE**  
MATHEMATICS

# Introduction

Welcome to the SMILE Mathematics complete catalogue 2004. This year, we have combined our software and printed resources in one catalogue to make it easier for you to evaluate our wide range of products and training provision.

*"SMILE can always be relied upon to produce exciting new software."*

TES

We have four new software packs for 2004: **Exploring Geometry** (page 10) consists of fifteen short programs introducing and developing geometrical concepts. We are also launching new versions of our popular **Properties of Number** (page 6), **Co-ordinates** (page 11) and **Mathematical Puzzles** (page 14), all of which have enhanced interactivity and graphics. Support materials are included in all our software packs.

Additional information on our software resources is available to download from our website as an interactive document called 'MicroSMILE Software Information'. This document includes brief descriptions of the programs in each pack as well as overviews of our complete range of software by pack, topic area and by National Curriculum level.

*"...useful resources for busy classroom teachers..."*

Primary Maths and Science

We've also developed a new interactive resource for 2004.

**Discussing Data** (page 9), includes a CD ROM and activity book to develop students' data handling skills. The activities are ideal for use as lesson starters or plenaries to introduce or support data handling projects.

The SMILE team is delighted to be able to continue to support teachers' professional development by extending our training provision, details of which can be found on page 25.

*"The SMILE team has a long pedigree of producing high-quality, challenging and motivating software to support the learning of mathematics."*

MicroMath

SMILE Mathematics is committed to producing high quality resources that are clearly focused on mathematical content and that provide a stimulating learning experience for students. We would be delighted to receive your feedback about our products or any ideas for future resources: please email your comments to us at: [info@smilemathematics.co.uk](mailto:info@smilemathematics.co.uk).

SMILE Mathematics is a Registered Retailer with Curriculum Online.



**All products that display this Curriculum Online symbol are eligible for purchase with eLearning credits.**

# Contents

## Software Contents

### Number

Numeracy	2
Ratio	4
Enriching Number	4
Properties of Number (new version)	6
Sense of Number	6

### Data Handling

Probability	8
-------------	---

### Shape, Space and Measures

Exploring Geometry (new)	10
Co-ordinates (new version)	11
Symmetry & Transformations	11
Angle Estimation	12
Movement	12
Graphing	13

### Thinking Skills

Mathematical Puzzles (new version)	14
Investigations	14

Software Order Form	26
---------------------	----

## Printed Resources Contents

### Number

Fraction Playing Cards	3
Decimal Playing Cards	3
Equivalence Playing Cards	3
Number Playing Cards	3
Ratio Makes Sense	5
Fractions, Decimals & Percentages	
Make Sense Vols 1 & 2	5
Multiplication Makes Sense	5
Spreadsheets Make Sense	5
Calculating	7
Multiplication Jigsaw	7
Hundred Fit	7

### Data Handling

Real Data	9
Discussing Data (new)	9

### Shape, Space & Measures

Materials to Teach Time	13
Graphs	13

### Thinking Skills

Reasoning	15
Problem Solving Activities	15
Problem Solving Posters	16

### Mental Maths

Maths in Your Head	17
Reckonings	17
Imaginings	17

### Whole Class Teaching

Wealth of Worksheets	18
Whole Class Mathematics	
Projects	18

### Collaborative Learning

Multiplication Games	19
Fractions Galore	19
Conversions	20
Towers	20
Multicultural Mathematical	
Activities	21

### Maths Clubs

Activities for Maths Clubs	
Levels 3 to EP	22

### Primary/Secondary Transition

Bridging Units	23
Numeracy at Home	23

### Assessment

End of Level Reviews	
Levels 3 to EP	24

SMILE Materials	24
-----------------	----

INSET	25
-------	----

Printed Resources Order Form	28
------------------------------	----

## Numeracy v 1.00



**AddsUpTo** allows students to apply their knowledge of number bonds up to 19. A number of strategies can be used. *(N.C. Level 3–5)*

**Darts** simulates a darts game with students completing all the necessary mental calculations. *(N.C. Level 3–4)*

**Magic** challenges students to unscramble magic squares with the numbers swapped. In order to do this students will need to add and subtract numbers mentally. There is also the facility to make their own magic squares. *(N.C. Level 3–6)*

**Matching Fractions** challenges students to collect sets of equivalent fractions. In order to do this they will need to devise strategies for recognising equivalent fractions in their numerical form. Visual support is provided for students who find this difficult. *(N.C. Level 4–5)*

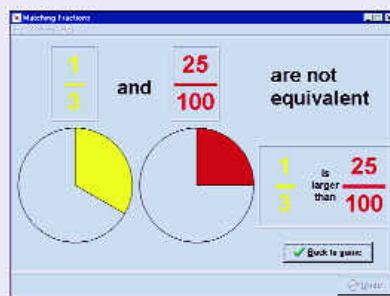
**NumberLines** provides students with opportunities to develop their estimation skills and strategies. Informal mental use of addition, subtraction, ratio, etc. can also be expected. *(N.C. Level 2–5)*

**NumberLinesD** is a variation on NumberLines which involves decimals. There are 4 levels of difficulty. Level 4 is very challenging. *(N.C. Level 4–6)*

**Ordering Fractions** helps develop students' understanding and ability to order fractions by size. Visual support is provided for those students who find this difficult. *(N.C. Level 5–6)*

## System Requirements:

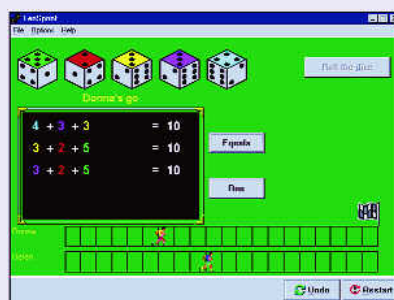
Windows 95, 98, 2000, NT or XP.



Matching Fractions

**Tenners** provides practice at multiplying and dividing by 10, 100 and 1000. This is followed by a game which challenges them to use this skill and other strategies. *(N.C. Level 5–6)*

**Tensprint** provides reinforcement of number bonds of 10. Students are involved in a 200m race in which they move forward by making tens from a selection of dice. *(N.C. Level 1–3)*



Tensprint

## Fractions, Decimals, Equivalence & Number Playing Cards

These four packs of playing cards help pupils to develop their fluency with fractions, decimals and percentages. The Fraction and Decimal packs contain 52 cards which represent 13 different fractions/decimals written in 4 ways. The Equivalence pack contains 52 cards which represent 13 different numbers written as a fraction, decimal, percentage and a picture. The Number pack is an invaluable resource for use in any mathematics classroom. Excellent for CountDown type activities. Suggested games are included with the packs.

**Suitable for Key Stages 2 & 3.**

### Fraction Playing Cards



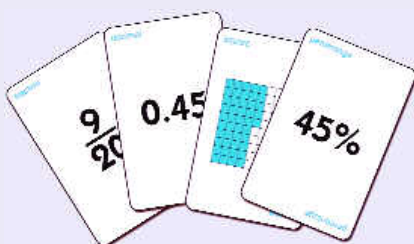
**Cost: £3.50 + £0.61 VAT**

### Decimal Playing Cards



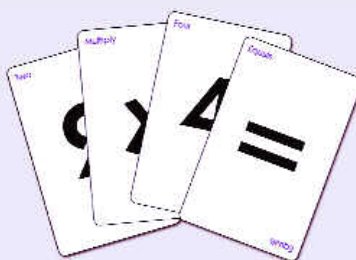
**Cost: £3.50 + £0.61 VAT**

### Equivalence Playing Cards



**Cost: £3.50 + £0.61 VAT**

### Number Playing Cards



**Cost: £3.50 + £0.61 VAT**

## Ratio v 1.02



### System Requirements:

Windows 95, 98, 2000,  
NT or XP.

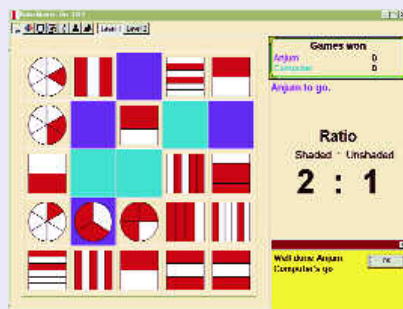


**Money Share** helps students decide which ratios can be used to divide a given number of coins. (*N.C. Level 4–5*)

**Paint Mix** is a game in which students mix two colours of paint in a target ratio. (*N.C. Level 5–6*)

**Ratio Buster** provides students with practice in answering various ratio problems in context. (*N.C. Level 5–6*)

**Ratio Match** is a 3 in-a-line game in which students identify shapes divided in a given ratio. (*N.C. Level 4–5*)



Ratio Match

The Ratio CD includes additional classroom support materials to encourage collaborative learning.

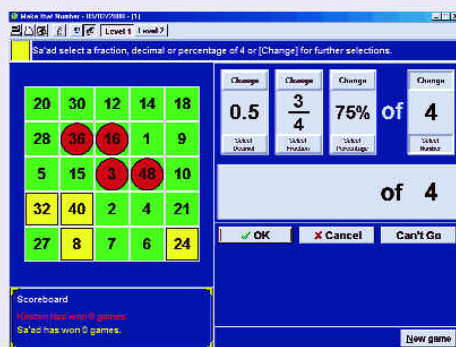
## Enriching Number v 1.0



**Equivalent Pairs** is a matching game that helps students to recognise the equivalence between fractions, decimals and percentages. (*N.C. Level 4–5*)

**Make That Number** focuses on finding fractions, decimals and percentages of given amounts. The context is a 3-in-a-line game with students able to play against each other or the computer. (*N.C. Level 5–6*)

**Maximum Remainder** is a game focusing on mental division. (*N.C. Level 4–6*)



Make That Number

## The Makes Sense Series

Each A4 book within the series focuses on a different mathematics topic. The activities are appropriate for a range of learning styles.

- Fully photocopiable
- Comprehensive teachers' notes
- Easily incorporated into any scheme of work
- Ideal for whole class differentiated topic work



*“Smile Mathematics Makes Sense Series provides useful resources for busy classroom teachers”*

*Primary Maths and Science*

## Ratio Makes Sense

12 differentiated activities covering NC levels 4 to 7.

Suitable for Key Stages 2, 3 & 4

**Cost: £15.00**

## Spreadsheets Make Sense

21 differentiated activities covering NC levels 4 to Exceptional Performance.

Suitable for Key Stages 2, 3 & 4

**Cost: £15.00**

## Multiplication Makes Sense

15 differentiated activities covering NC levels 2 to 6.

Suitable for Key Stages 2 & 3

**Cost: £15.00**

Multiplication Table Booklets.  
(Free with Multiplication Makes Sense while stocks last)



## Fractions, Decimals and Percentages Make Sense

### Volume 1

13 differentiated activities covering NC levels 2 to 4.

Suitable for Key Stages 2 & 3

**Cost: £15.00**

### Volume 2

19 differentiated activities covering NC levels 5 to 7.

Suitable for Key Stages 2, 3 & 4

**Cost: £15.00**

## Properties of Number v 3.0



Six programs with a focus on positive integers:

**Numbers** is a resource program which allows students to explore sequences displayed on grids of varying size. The sequences include even, odd, triangle, prime, square and cube numbers, multiples, factors and powers. *(N.C. Level 3 onwards)*

**Multiples** is a variation of Numbers with a focus on multiples. *(N.C. Level 4 onwards)*

**Factors** is a variation of Numbers with a focus on factors. *(N.C. Level 4 onwards)*

## Sense of Number v 1.0



**Box** helps students develop an understanding and confidence with place value by ordering two and three digit numbers. *(N.C. Level 2–3)*

**BoxD** is a variation on Box which introduces numbers to three decimal places. *(N.C. Level 4–5)*

**BoxN** is a variation on Box which introduces negative numbers. *(N.C. Level 4–5)*

**Guess** helps students develop an understanding and confidence with place value by finding a mystery two or three digit number. *(N.C. Level 2–3)*

**GuessD** is a variation on Guess which includes decimal places. *(N.C. Level 3–4)*

**GuessN** is a variation on Guess which includes negative numbers. *(N.C. Level 4–5)*

## System Requirements:

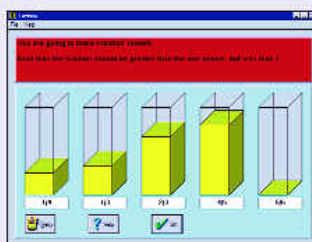
Windows 95, 98, 2000, NT or XP.



**Define** challenges students to define a number uniquely by selecting from a list of statements involving number properties. *(N.C. Level 5-6)*

**Identify** challenges students to identify a number by selecting from a list of questions involving number properties. *(N.C. Level 5-6)*

**Factor Challenge** is a game against the computer which develops students' understanding of factors. *(N.C. Level 5-7)*



Towers

**Magnify** uses continual zooming in on the number line to help develop students' appreciation of decimal notation and place value. *(N.C. Level 4–5)*

**Minimax** encourages students to explore the effects of large and small digits on the four operations; addition, subtraction, multiplication and division. *(N.C. Level 3–4)*

**Towers** challenges students to order fractions between upper and lower bounds. *(N.C. Level 5–6)*

**Wall** challenges students to accurately build a fraction wall. *(N.C. Level 3–4)*



Calculating

## Calculating

This A5 24 page book is crammed full of activities to challenge students when using a calculator. Suitable for Key Stages 2, 3 & 4.

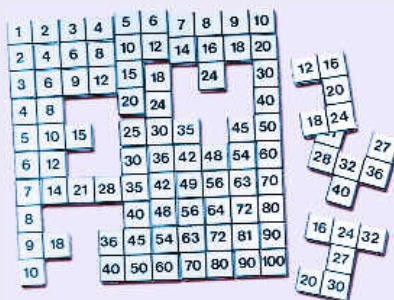
**Cost: £3.50**

## Multiplication Jigsaw

This challenging puzzle will encourage students to recognise and explore patterns within a multiplication square. The task is to assemble the nineteen pieces to make a multiplication square.

Suitable for Key Stage 2.

**Cost: £4.00 + £0.70 VAT**



Multiplication Jigsaw

## Hundred Fit

This double-sided puzzle is based upon two different arrangements of the numbers 1 to 100, using two different rules, to form a 10 x 10 square. Students are challenged to find the rules for how the patterns of numbers have been generated. They then use these rules to extend the pattern and complete the puzzle.

Suitable for Key Stages 2 & 3.

**Cost: £3.50 + £0.61 VAT**



Hundred Fit

## Probability v 1.0



**Hidden Contents** challenges students to identify the contents of a bag containing coloured balls using experimental probability. (N.C. Level 5–6)

**Loaded Dice** challenges students to identify which of two dice has been loaded to make it biased. (N.C. Level 5–6)

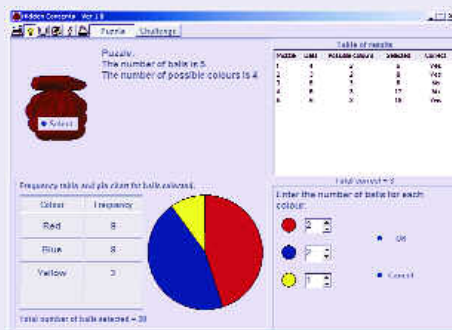
**Pinball** is a resource program which allows students to simulate an experiment. Students compare the distribution of the balls with theoretical probabilities. (N.C. Level 4 onwards)

**Probability Match** is a game in which students identify cards which match a given probability. (N.C. Level 4–6)

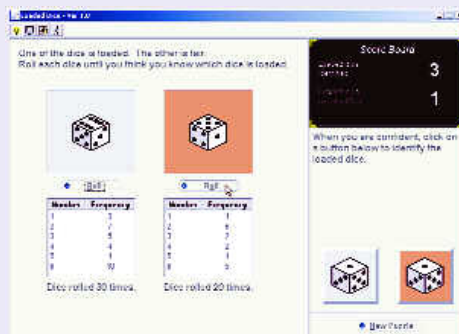
**Routes** is a resource program which allows students to simulate an experiment. Students compare the distribution of the balls with combined probability events. (N.C. Level 5 onwards)

### System Requirements:

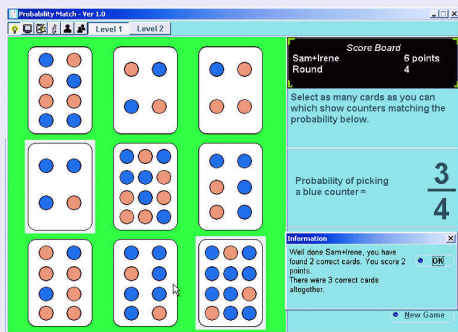
Windows 95, 98, 2000,  
NT or XP.



Hidden Contents



Loaded Dice



Probability Match

## Real Data



This pack consists of a book with six projects and photocopiable student resources, and a CD containing complete, real, relevant and easy to use data files. Also included on the CD is a searchable Handling Data Reference file, giving immediate guidance on relevant terms and techniques. The themes of the six projects are Average Student, Environment, Fast Hand, Sport, Transport and World Statistics and within each there are six levelled hypotheses enabling teachers to develop a differentiated approach. Ideal for professional development.



Suitable for Key Stages 3 & 4

**Cost: £50 + £8.75 VAT**

**Includes CD ROM**



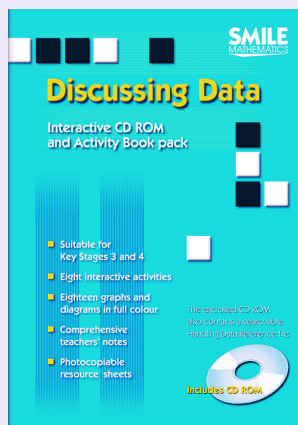
## Discussing Data



NEW

This pack is made up of an interactive CD ROM and accompanying activity book. The activities in both have been specifically designed to be used for whole class teaching at Key Stage 3 to develop students' data handling skills, particularly analysing and interpreting data, through discussion.

The CD contains eight interactive Excel files, eighteen full colour versions of the graphs or diagrams accompanying each activity in the book and a searchable Handling Data Reference file. The activity book contains eighteen activities with comprehensive teachers' notes and eighteen student resource sheets.



Suitable for Key Stages 3 & 4

**Cost: £30 + £5.25 VAT**

**Includes CD ROM**



## Exploring Geometry v 1.0

Fifteen short programs introducing and developing geometrical concepts.



MAC & PC  
COMPATIBLE

NEW

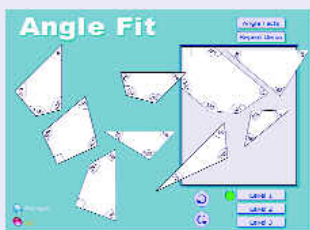
### System Requirements:

Windows 95, 98, 2000,  
NT or XP. Mac OS  
8.6 to 9.xx, OSX 10.1  
or later



These programs can be used flexibly in the classroom, either as lesson starters, main activities, plenary sessions or consolidation. They are particularly suited for use with data projectors and interactive whiteboards.

**Angle Fit** consolidates the angle sum of triangles, quadrilaterals, angle on a straight line and about a point. (N.C. Level 4)



**Building Pentominoes** is a challenge to find all the pentominoes. (N.C. Level 4)

**Enlarging Pentominoes** explores enlargement. (N.C. Level 5–6)

**Polygon Names** consolidates properties of polygons. (N.C. Level 4–5)

**Quadrilateral Names** consolidates properties of quadrilaterals. (N.C. Level 4–5)

**Rotational Symmetry** is an introduction to this topic. (N.C. Level 4)

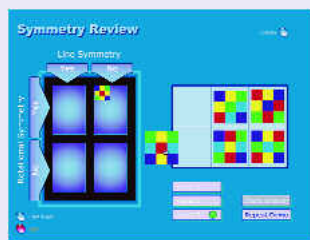
**Shape Names** consolidates properties of a variety of shapes. (N.C. Level 4–5)

**Similar Triangles** is an introduction to similarity. (N.C. Level 5)

**Square Jigsaw** is a challenge in spatial reasoning. (N.C. Level 7)

**Symmetry Match** is an introduction to line symmetry. (N.C. Level 3–4)

**Symmetry Review** consolidates line and rotational symmetry. (N.C. Level 5–6)



**Tessellating Pentominoes** explores regular and irregular tessellation. (N.C. Level 5)

**Wiggly Tessellations** demonstrates how to create an irregular shape which will tessellate. (N.C. Level 4)

**2D Quiz** reviews two dimensional geometry. (N.C. Level 4–7)

**3D Quiz** reviews three dimensional geometry. (N.C. Level 4–7)

## Co-ordinates v 3.0



**NEW Version**

### System Requirements:

Windows 95, 98, 2000,  
NT or XP.



**3 in a Line** is a strategy game which involves moving counters using co-ordinates to determine position. *(N.C. Level 3–4)*

**Elephant** develops an understanding of co-ordinates in one or all four quadrants. It can be used as an introduction to the concept of loci or as an intuitive introduction to Pythagoras' Theorem. *(N.C. Level 5–6)*

**Lines** is a strategy game where students use co-ordinates to place counters on a grid. They win if they place four in a line horizontally, vertically or at an angle. *(N.C. Level 4–6)*

**Locate** challenges students to find the co-ordinates of a point. The scaling of each axis can vary independently. *(N.C. Level 3–4)*

**Rhino** develops an understanding of co-ordinates in one or all four quadrants. It can be used as an early introduction to the concept of loci. *(N.C. Level 4–6)*



Lines



MAC & PC  
COMPATIBLE

### System Requirements:

Windows 95, 98, 2000,  
NT or XP.  
Mac OSX 10.1 or later



## Symmetry & Transformations v 1.0

**Transform** is a resource program. Students can investigate the effect of reflections, rotations, translations and enlargements on 2-D shapes in the plane. *(N.C. Level 3 onwards)*

**Add a Square** challenges students to complete a series of shapes and to identify their lines of symmetry. *(N.C. Level 4)*

**Remove a Square** is a variation on Add a Square in which students make symmetrical shapes. *(N.C. Level 4)*

**Centre Point** provides students with a series of

carefully levelled tasks in which they identify the centre of rotation. *(N.C. Levels 5–6)*

**Mirror** consists of 3 activities which consolidate and build on understanding of line symmetry. *(N.C. Level 3–5)*

**Tiles** is a creative mathematical design tool in which students explore how reflection and rotation can be used to produce decorative patterns. *(N.C. Level 4 onwards)*

**Rangoli** enables students to create traditional Indian designs using a series of reflections. *(N.C. Level 4–6)*



Rangoli

## System Requirements:

Windows 95, 98, 2000,  
NT or XP.



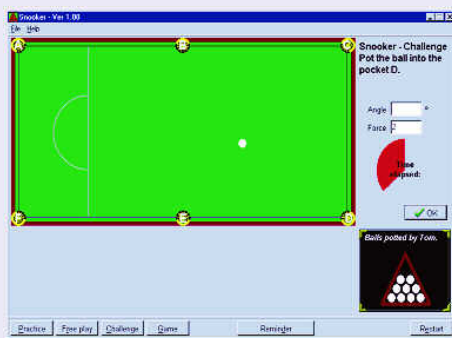
## Angle Estimation v 1.00



**Angle 90°** focuses on drawing and estimating angles between 0° and 90°. (N.C. Level 3–4)

**Angle 360°** focuses on drawing and estimating angles between 0° and 360°. (N.C. Level 4–5)

**Snooker** consists of 4 activities which motivate students to use their angle estimation skills in order to pot snooker balls into pockets of their choice or generated by the computer. (N.C. Level 4–5)



Snooker

## Movement v 2.00



**3-D Maze** challenges students to escape from a 3-dimensional maze. A grid map is available for help, but students are only shown the walls of the maze that they have already visited. (N.C. Level 4–8)

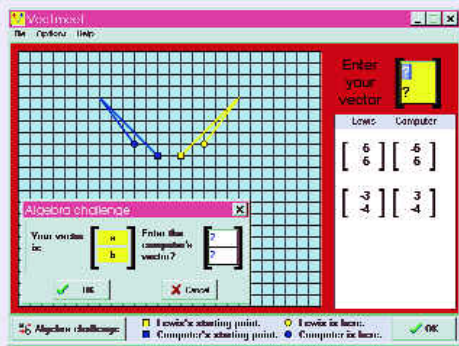
**Maze** challenges students to find their way through one of ten predetermined 2-dimensional mazes. (N.C. Level 1–2)

**Pilot** focuses on points of the compass and on mental visualisation. Students have to imagine a turning compass and use this to navigate their boat to a series of flags. (N.C. Level 4–6)

**Queens** is a resource program based on the chess piece. It allows students to investigate placing queens on different size boards. (N.C. Level 4–8)

**Racegame** simulates a grand prix race in which students use vector notation to steer cars around one of three race tracks. (N.C. Level 5–7)

**Vectmeet** develops students' understanding of transformations through vectors. The program includes an algebra challenge which encourages students to find algebraic descriptions for the various geometric transformations. (N.C. Level 6–EP)



Vectmeet

## Graphing v 9.1.1a



### Linear Graphs and Inequalities

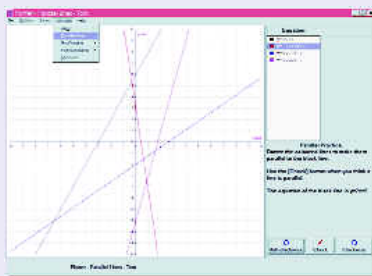
**Plotter** allows students to explore features of linear graphs. Contains 5 structured activities.

(N.C. Level 6–8)

**Regions** allows students to explore features of linear inequalities and regions. Contains 2 structured activities. (N.C. Level 7–8)

### System Requirements:

Windows 95 or 98 only.



Parallel Lines

## Printed Resources

## Shape, Space & Measures

### Materials to teach time

#### Time Tiles, 12 Hour Bingo and 24 Hour Bingo

These three activities are highly motivating resources to support students who have difficulty in telling the time. Each activity is self checking. Good for promoting collaborative learning. Teachers' notes included.



Time Tiles

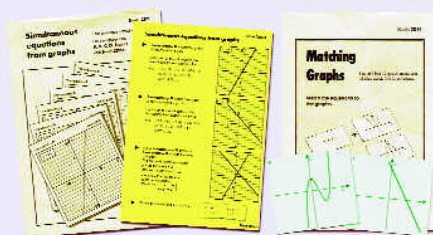
Suitable for N.C. Levels 2 to 4

Cost: £10.00 + £1.75 VAT

### Graphs

#### Dipsticks, Graph Matching, Matching Graphs and Simultaneous Equations from Graphs

Four practical activities which help students to make the connections between graphs and scales, mappings, equations and solving simultaneous equations. Excellent for group work and language development. Ideal for Gifted and Talented resources. Teachers' notes and answers included.



Suitable for N.C. Levels 6 to 8

Cost: £10.00 + £1.75 VAT

## NEW Version

### Mathematical Puzzles v 3.0

Six programs which promote problem solving skills.



Available from  
June 2004

### System Requirements:

Windows 95, 98, 2000,  
NT or XP. Mac OS  
9.1, OSX 10.1  
or later.



**Boat** is a challenging transportation problem.

(N.C. Level 4 onwards)

**Frogs** challenges students to swap the positions of green and red frogs. (N.C. Level 4 onwards)

**Hanoi** simulates the ancient Towers of Hanoi problem. (N.C. Level 6 onwards)

**Hats** involves moving pairs of red and green hats in order to get all of one colour together.

(N.C. Level 4 onwards)

**Jugs** simulates a range of measurement problems.

(N.C. Level 5 onwards)



Frogs

**Nim** is a game which is played against the computer on a number of levels. A sophisticated strategy is required in order to win.

(N.C. Level 6 onwards)

### Investigations v 1.01

Four programs which develop problem solving and mathematical thinking skills.



### System Requirements:

Windows 95, 98, 2000,  
NT or XP.

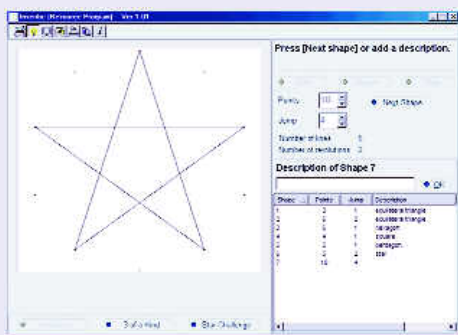


**Inscribe** allows students to explore shapes made by jumping between points on a circle.

**Points** challenges students to find and test a rule for the number of lines drawn when each point on a circle is joined to every other point.

**Spirals** allows students to explore shapes made by moving and turning using a sequence of lengths and a fixed angle.

**Trellis** challenges students to find and test a rule for the number of wires needed to complete a pattern in a frame. They also explore the number of



Inscribe

holes passed through and the finishing corner for the first wire.

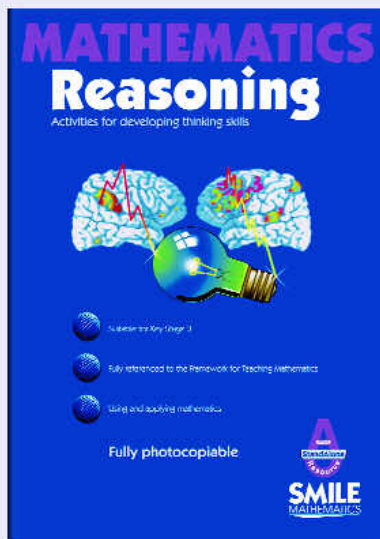
## Reasoning

Reasoning contains 27 activities, fully referenced to the yearly teaching programmes from the Framework for Teaching Mathematics Year 7, 8 and 9. Each activity has been assigned to a particular year group to help departments integrate Using and Applying Mathematics and Thinking Skills into their Key Stage 3 Scheme of Work.

- Promotes comprehensive development of Thinking Skills
- Teachers' notes for each activity
- Provides manageable differentiation

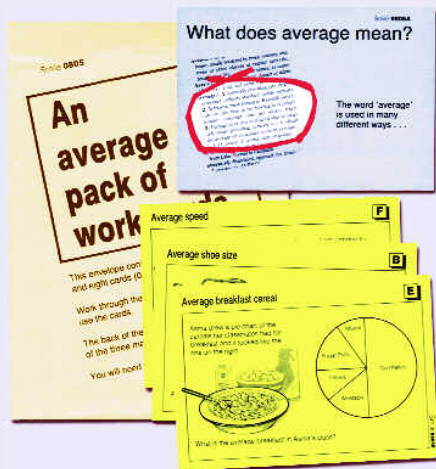
Suitable for Key Stage 3

Cost: £25.00



## Problem solving activities

An Average Pack of Workcards, Problems and Ratio Problems



Three thought-provoking packs containing a wide variety of problems involving algebra, ratio and averages. Excellent for promoting discussion and mathematical reasoning. Ideal for Gifted and Talented resources. Teachers' notes and answers included.

Suitable for N.C. Levels 6 to 8

Cost: £8.00 + £1.40 VAT

## Problem solving posters

### Locate the Error, Puzzling Walk, Blocked and 3 in 1 Maze Posters

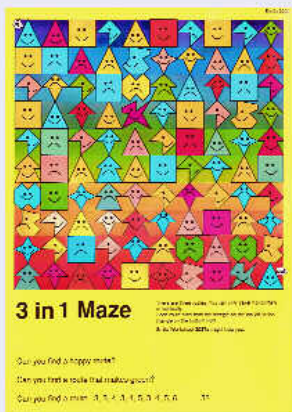
These four attractive posters each provide thought-provoking situations. These activities are ideal for Gifted and Talented students. Solutions included.



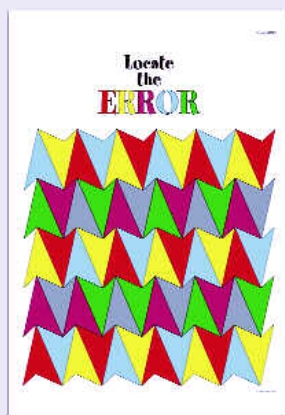
(420mm x 594mm)



(420mm x 594mm)



(420mm x 297mm)



(420mm x 297mm)

Suitable for N.C. Levels 4 to 8

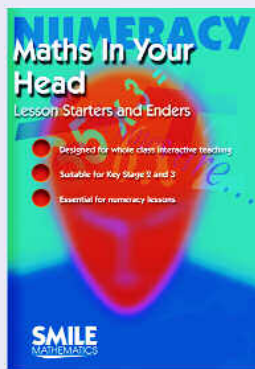
Cost: £12.00 + £2.10 VAT for all four posters

## Maths in Your Head

Whole class lesson starters and ends. This A4 book contains 20 successful whole class activities for developing fluency with mental mathematics. Comprehensive teachers' notes. Photocopiable resource sheets are provided. Will add variety and liveliness to the classroom environment.

Suitable for Key Stages 2 & 3

**Cost: £6.50**



## Reckonings

Whole class lesson starters and ends. This A4 book contains 20 successful whole class activities for developing fluency with mental mathematics. Each activity is accompanied by a comprehensive description with suggestions on classroom management. Photocopiable resource sheets are provided.

Suitable for Key Stages 2 & 3

**Cost: £6.50**

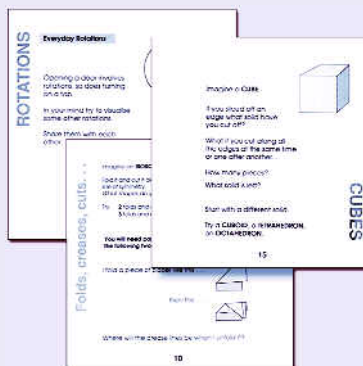


## Imaginings

A booklet containing over 30 different activities covering a range of levels to encourage mental imagery skill. A valuable resource for whole class lesson starters and ends. Excellent for encouraging precise language within shape and space.

Suitable for Key Stages 2, 3 & 4

**Cost: £3.00**



## Wealth of Worksheets

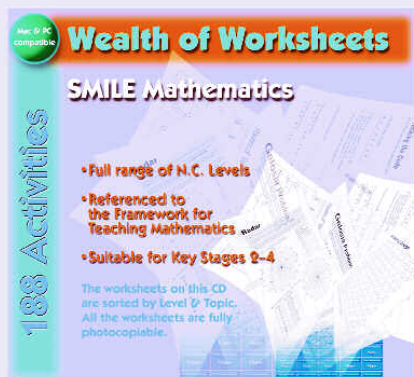


The 188 activities on this CD provide a diverse range of resources. The CD is Mac/PC compatible. The worksheets are easily sorted by Topic and Level and include a full set of answers. Activities can be printed individually or by group.

- Full range of N.C. levels
- Referenced to the Framework for Teaching Mathematics
- Fully photocopiable

Suitable for Key Stages 2, 3 & 4

**Cost: £49.00 + £8.58 VAT**



### System Requirements

#### PC

486/66 Mhz or higher Windows™ '95+, or NT

#### MAC

Power Macintosh MAC OS 8.1 or higher

#### General

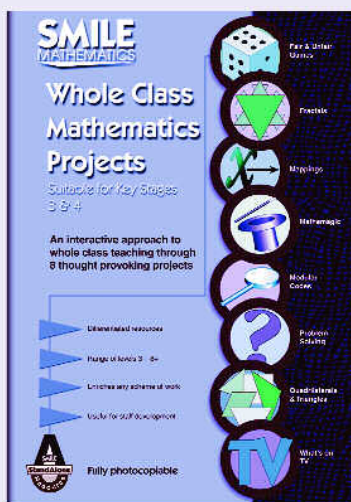
16 bit colour monitor (800 x 600) minimum.

## Whole Class Mathematics Projects

This 88 page book provides a powerful tool for whole departments seeking to enhance the range of teaching skills in the classroom and enrich students' experience of mathematics.

The 8 projects are structured as a number of working sessions, each of which incorporates direct whole class teaching, collaborative group work and a plenary session.

Each project has comprehensive teachers' notes and answers and is fully photocopiable within the purchasing establishment. Ideal for professional development.

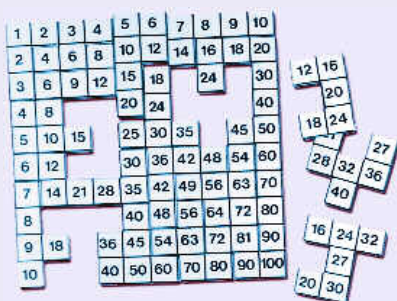


Suitable for Key Stages 3 & 4

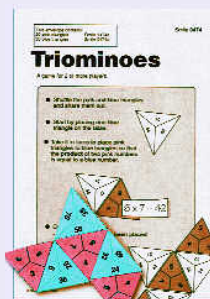
**Cost: £25.00**

## Multiplication games

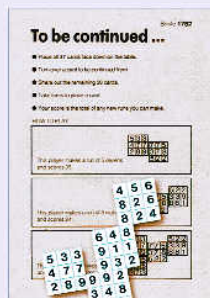
These three games provide fun and effective ways to reinforce multiplication facts up to  $10 \times 10$ . Good for collaborative learning. Pupils will want to come back to these again and again. Teachers' notes included.



Multiplication Jigsaw Puzzle



Triominos



To be continued ...

Suitable for N.C. Levels 2 to 5

Cost: £10.00 + £1.75 VAT

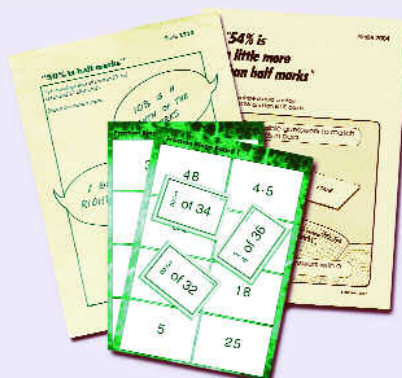
## Fractions galore

"50% is Half Marks", "54% is a Little More than Half Marks", Fraction Bingo.

Three practical activities involving fraction and percentage calculations and the equivalence between fractions, decimals and percentages. Teachers' notes and answers included.

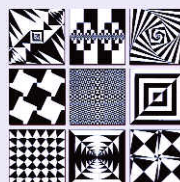
Suitable for N. C. Levels 5 to 6

Cost: £11.00 + £1.93 VAT



## Posthalf (Free with Fractions galore while stocks last)

A set of nine posters based on the SMILE program featured on the National Numeracy Strategy CD Rom. The posters (each 300mm x 300mm) provide a stimulating display for the classroom.



## Conversions

### Centigrade to Fahrenheit, Conversion Pack 1 and Conversion Pack 2

Three enriching activities designed for small group work, each packed full with challenging conversion problems. Conversions include both metric and imperial units. Teachers' notes and answers included.

Suitable for N.C. Levels 5 to 7

**Cost: £8.00 + £1.40 VAT**



## Towers

This motivating game for 2–4 teams, based upon Trivial Pursuit, is an excellent resource for groups of students to revise together.

There are 400 questions, arranged by Attainment Target and providing questions and answers at two levels of difficulty. Easy questions are aimed at Foundation students, harder questions at Intermediate/Higher. The questions on their own provide a source of mental mathematics questions.

Suitable for Key Stages 3 & 4

**Cost: £6.00 + £1.05 VAT**

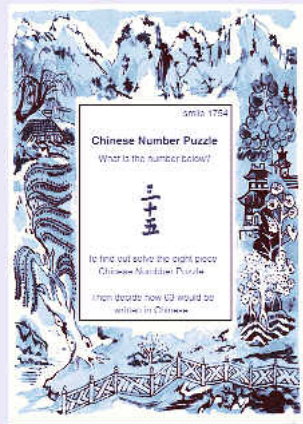


You will need: a **dice** and **cubes**

## Multicultural mathematical activities

**Bengali 19 Piece Puzzle, Chinese Number Puzzle, Talking poster, Which Script? poster and worksheet, Bengali Numbers, Hindi Additions, Panjabi Numbers and Urdu Multiples**

A wide range of stimulating materials which help to develop understanding of place value and properties of number within a multicultural context. The pack contains 2 box puzzles, 2 posters (A3 size), 1 worksheet original and 4 activity cards (5 copies of each). Teachers' notes and answers included.



Suitable for N.C. Levels 5 to 7  
Cost: £15.00 + £2.63 VAT



## Activities for maths clubs

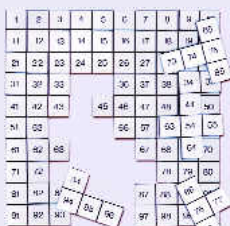
These packs contain a range of activities specially selected to inspire in pupils a confidence and enjoyment of mathematics. They will enhance any existing scheme of work and are perfect for use in maths clubs. The activities encourage a problem solving approach and foster collaborative learning. Each pack comes complete with accompanying notes and worksheets.

*"There is an extraordinary diversity of materials here covering every Attainment Target of the National Curriculum ... perhaps I can convey the quality of the materials from the fact that I wanted to try everything myself there and then ... Just remember to let the pupils use them as well." TES*

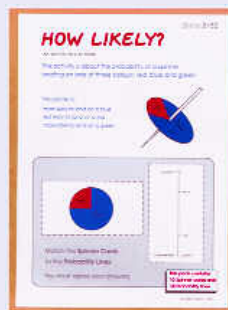
### Level 2–4 Contains 12 activities

Suitable for Key Stages 2 & 3

**Cost: £30.00 + £5.25 VAT**



19 piece jigsaw



How Likely

### Level 5–6 Contains 12 activities

Suitable for

Key Stages 2, 3 & 4

**Cost: £30.00 + £5.25 VAT**



World View



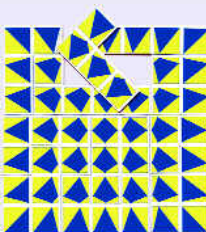
Algebra Game

### Level 7– Exceptional Performance

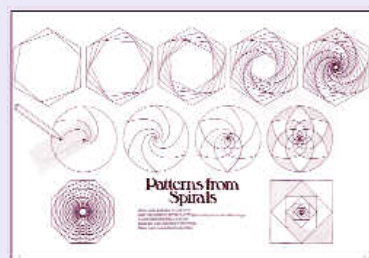
Contains 12 activities

Suitable for Key Stages 3 & 4

**Cost: £30.00 + £5.25 VAT**



Square Jigsaw



Equiangular Spirals

## Bridging Units from Smile Mathematics

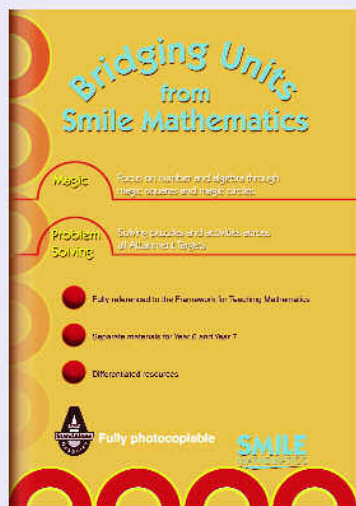
The two units, Magic and Problem Solving, facilitate learning through differentiated group activities and by stimulating whole class discussion. They are fully cross-referenced to the Framework for Teaching Mathematics.

Each lesson is accompanied by comprehensive teachers' notes including a detailed description within the three part structure of a 'typical' mathematics lesson, answers and key vocabulary. Ideal for professional development.

- Separate materials for Year 6 and Year 7
- Fully photocopiable

Suitable for Key Stages 2 & 3

Cost: £20.00



## Numeracy at Home Packs

**Numeracy at Home - Multiplication** has been a popular purchase by schools for use by parents or support teachers. Provides a variety of activities to encourage fluency with multiplication facts.

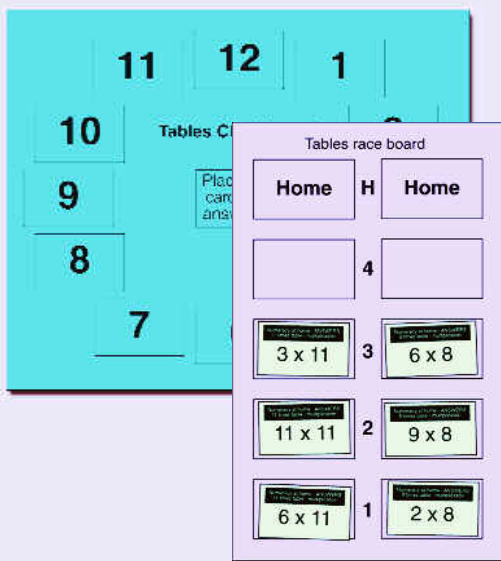
**Numeracy at Home - F D P** uses a similar format to encourage fluency with the use of fractions, decimals and percentages. Each pack contains:

- Booklet written for parents, which describes how to use the pack
- Eleven sets of multiplication cards
- One Games Board
- Recording Sheet for teachers and parents

Suitable for Key Stages 2 & 3

Multiplication

Cost: £30.00 + £5.25 VAT for a pack of 10



Fractions, Decimals & Percentages

Cost: £30.00 + £5.25 VAT for a pack of 10

## End of Level Reviews

These are widely acclaimed by schools as a perfect tool for reviewing students' progress. An invaluable aid to teachers when setting individual student targets. Questions of graded difficulty provide information on the depth of understanding.

Alternatively these books can be used to evaluate the effectiveness after a unit of work. An essential aid to informing teachers' termly planning of each topic.



Suitable for Key Stages 2, 3 & 4

**The End of Level Reviews are available by level in packs of five:**

Level 3 @£12.50 pck	Level 7 @£17.50 pck
Level 4 @£15.00 pck	Level 8 @£15.00 pck
Level 5 @£15.00 pck	Exceptional
Level 6 @£17.50 pck	Performance @£17.50 pck

## SMILE Materials

We are continuing to support SMILE schools who still use the card resources to run individualised learning schemes. For these schools, we hold a small quantity of stock of the Activity Lists, the Networks, the Test Books and Sheets, Test Answer Sheets and the Answer Books and Sheets. Please contact SMILE Mathematics for pricing and ordering information.

## INSET for Mathematics Teachers

SMILE Mathematics offers a wide range of in-service training for schools and LEAs. Please contact us if you are interested in any of the courses below or if you would like us to adapt a course to meet your own particular requirements (this may incur an additional preparation charge).

### Free INSET for Schools and LEAs

We provide free INSET, focused on SMILE resources, to schools and LEAs. This is subject to availability and a minimum attendance of 8 people. We charge only for travel/subsistence.

Seminars and workshops we currently offer include:

- Using SMILE resources to develop mathematical reasoning and problem solving.
- SMILE Whole Class Mathematics Projects: an interactive approach to whole class teaching.
- Using SMILE resources to explore handling data.
- MicroSMILE software and the interactive whiteboard.
- Improving primary/secondary transition with the SMILE Bridging Units.

### Other INSET for Schools and LEAs

We provide INSET to schools and LEAs on a consultancy basis.

Seminars and workshops we currently offer include:

- Enriching mathematics at Key Stages 3 and 4.
- Using spreadsheets in the mathematics classroom.
- Getting started with dynamic geometry software.
- Mathematics and citizenship: opportunities for classroom activities, handling data and ICT.
- Using Word or Excel to create interactive mathematical activities.

The fees for these courses are:

Half day course (up to 3.5 hours) - £250 (+ travel/subsistence)

Full day course (up to 6 hours) - £400 (+ travel/subsistence)

### Forum for Mathematics in Special Education

This group meets for three whole day sessions spread over the academic year. It provides an opportunity for teachers in pupil referral units, hospital schools, home tuition services, special schools, etc. to discuss developments in special and mainstream education. It often involves outside speakers and facilitators. The course is based at the Isaac Newton Centre in West London.

Cost: £30 for one day, £50 for all three days.

# MicroSMILE

## Order Form

# SMILE

MATHEMATICS

### Software Licences

All licences are based on the number of concurrent users.

Isaac Newton Centre  
108A Lancaster Road  
London W11 1QS


Tel: 020 7598 4841  
Fax: 020 7598 4838

### Licences

A single user licence may be installed on a single machine only; all other licences entitle the purchasing establishment to install the software on a network or standalone machines.

### Upgrading Software and Licences

- A software upgrade is an upgrade from an old version to a new version of the same software. Full pricing details are available on our website.
- A licence upgrade is an upgrade to a larger number of users. Upgrading from one type of licence to another is possible by quoting version and licence numbers, and paying the difference between the two licences. You can only upgrade a licence if you already hold a licence for the most recent version of the software.

MicroSMILE Software 	Licence			
	Single User	2 to 15 Users	16 to 50 Users	More than 50 Users
<b>Numeracy</b> v 1.00	£50.00	£100.00	£150.00	£200.00
<b>Ratio</b> v 1.02	£30.00	£60.00	£90.00	£120.00
<b>Enriching Number</b> v 1.0	£25.00	£50.00	£75.00	£100.00
<b>Properties of Number</b> v 3.0	£45.00	£90.00	£135.00	£180.00
<b>Sense of Number</b> v 1.0	£45.00	£90.00	£135.00	£180.00
<b>Probability</b> v 1.0	£35.00	£70.00	£105.00	£140.00
<b>Exploring Geometry</b> v 1.0	£40.00	£80.00	£120.00	£160.00
<b>Co-ordinates</b> v 3.0	£40.00	£80.00	£120.00	£160.00
<b>Symmetry &amp; Transformations</b> v 1.0	£50.00	£100.00	£150.00	£200.00
<b>Angle Estimation</b> v 1.00	£25.00	£50.00	£75.00	£100.00
<b>Movement</b> v 2.00	£40.00	£80.00	£120.00	£160.00
<b>Graphing</b> v 9.1.1a (Win 95/98 only)	£40.00	£80.00	£120.00	£160.00
<b>Mathematical Puzzles</b> v 3.0 (Available June 2004)	£50.00	£100.00	£150.00	£200.00
<b>Investigations</b> v 1.01	£30.00	£60.00	£90.00	£120.00

Discount

Orders of £900  
and over  
(excl. VAT) will  
receive a 5%  
discount.

### Software Support

Visit our website to access frequently asked questions. If you are still having problems, email the IT Learning Exchange at [technical.title@londonmet.ac.uk](mailto:technical.title@londonmet.ac.uk)

Title of Software	No. of Users	Price
Numeracy v 1.00		
Ratio v 1.02		
Enriching Number v 1.0		
Properties of Number v 3.00		
Sense of Number v 1.0		
Probability v 1.0		
Exploring Geometry v 1.0		
Co-ordinates v 3.0		
Symmetry & Transformations v 1.0		
Angle Estimation v 1.00		
Movement v 2.00		
Graphing v 9.1.1a (Win 95/98 only)		
Mathematical Puzzles v 3.0 (Available June 2004)		
Investigations v 1.01		
Total		

Individual school orders for software and printed resources placed at the same time will incur one postage charge of £5.00.

If total above is £900.00 or more subtract **5% Discount**

\* Overseas orders will be despatched at cost (airmail) plus a handling charge of £5.00.

\*Postage & packing at £2.50 per item up to a maximum of £5.00.

Sub Total

VAT @ 17.5%

Grand Total

## Purchaser Details–Please Print

Tick here if using eLearning credits. ☐

Title	First name	Surname
Establishment	LEA	
Department	Phase	
Address		
Town/City	Postcode	
Tel:	Fax:	Email:

Authorised
Date

I enclose a cheque made payable to RBKC SMILE	
Please invoice me for this order	

# Printed Resources Order Form



Isaac Newton Centre  
108A Lancaster Road  
London W11 1QS

**Tel:** 020 7598 4841  
**Fax:** 020 7598 4838

Number		Quantity	Price	Sub-total
S2364	Decimal Playing Cards		£4.11*	
S2096	Fraction Playing Cards		£4.11*	
S2404	Equivalence Playing Cards		£4.11*	
S2226	Number Playing Cards		£4.11*	
SRMS	Ratio Makes Sense		£15.00	
SFDP1	FDP Make Sense Vol.1		£15.00	
SFDP2	FDP Make Sense Vol.2		£15.00	
SMMS	Multiplication Makes Sense		£15.00	
SSMS	Spreadsheets Make Sense		£15.00	
S1783	Calculating		£3.50	
S1671	Multiplication Jigsaw		£4.70*	
S2303	Hundred Fit		£4.11*	
<b>Data Handling</b>				
SRD	Real Data		£58.75*	
1-874072-02-7	Discussing Data		£35.25*	
<b>Shape Space &amp; Measures</b>				
SMTT	Materials to teach time		£11.75*	
SG	Graphs		£11.75*	
<b>Thinking Skills</b>				
SRB	Reasoning		£25.00	
SPSA	Problem solving activities		£9.40*	
SPSP	Problem solving posters		£14.10*	
<b>Mental Maths</b>				
S2376	Maths in Your Head		£6.50	
S2324	Reckonings		£6.50	
S2112	Imaginings		£3.00	
<b>Whole Class Teaching</b>				
SWWCD	Wealth of Worksheets CD		£57.58*	
SWCMP	Whole Class Mathematics Projects		£25.00	
<b>Collaborative Learning</b>				
SMG	Multiplication games		£11.75*	
SFG	Fractions galore		£12.93*	
SC	Conversions		£9.40*	
S2292	Towers		£7.05*	
SMMA	Multicultural maths activities		£17.63*	

\*Price includes VAT

Sub-total 1

Maths Clubs		Quantity	Price	Sub-total
SSEP1	Activities for Maths Clubs level 2–4		£35.25*	
SSEP2	Activities for Maths Clubs level 5–6		£35.25*	
SSEP3	Activities for Maths Clubs level 7–EP		£35.25*	
Primary/Secondary Transition				
SBU	Bridging Units		£20.00	
SNHP	Numeracy@Home–Multiplication (Pk of 10)		£35.25*	
SNHP2	Numeracy@Home–FDP (Pk of 10)		£35.25*	
Assessment–End of Level Reviews				
2350	Level 3–Pack of five		£12.50	
2351	Level 4–Pack of five		£15.00	
2352	Level 5–Pack of five		£15.00	
2353	Level 6–Pack of five		£17.50	
2354	Level 7–Pack of five		£17.50	
2355	Level 8–Pack of five		£15.00	
2356	Exceptional performance–Pack of five		£17.50	

\*Price includes VAT

Sub-total 2

Sub-total 1

Postage & Packing  
£2.50 per item up to a maximum of £5.00

Total Amount  
Payable

Individual school orders for software and printed resources placed at the same time will incur one postage charge of £5.00.

\*  
Overseas orders will be despatched at cost (airmail) plus a handling charge of £5.00.

## Purchaser Details–Please Print

Tick here if using eLearning credits. ☐

Title	First name	Surname
Establishment	LEA	
Department	Phase	
Address		
Town/City	Postcode	
Tel:	Fax:	Email:

Authorised
Date

I enclose a cheque made payable to RBKC SMILE	<input type="checkbox"/>
Please invoice me for this order	<input type="checkbox"/>

# **SMILE Mathematics**

**[www.smilemathematics.co.uk](http://www.smilemathematics.co.uk)**

The SMILE Mathematics website includes:

- Full details of all our products and training provision.
- Online software ordering form.
- Trial versions of MicroSMILE software.
- Free support documents to help teachers organise teaching and learning with MicroSMILE software.
- Interactive activities live in your browser.
- Links to useful maths related sites.

**Tel.** 020 7598 4841  
**Fax.** 020 7598 4838  
**Email.** [info@smilemathematics.co.uk](mailto:info@smilemathematics.co.uk)  
**Web.** [www.smilemathematics.co.uk](http://www.smilemathematics.co.uk)

**SMILE**  
**MATHEMATICS**

Isaac Newton Centre  
108A Lancaster Road  
London W11 1QS