CONTENTS

roreword. I	s illituitiet acy a problettit	'
Part I Nu	meracy: the student and the tutor	
	An introduction to numeracy	4
1.2	The adult learner	6
1.3	The student who also has difficulty with literacy	7
1.4	A balanced programme of work	8
1.5	The diagnosis of students' abilities	10
1.6	The importance of recording progress	14
1.7	Resources for learning	15
Part II TI	ne nature and sequencing of number sub-skills	
	luction	17
Section 2.1	Numbers up to 10	
	.1 Understanding numbers and basic mental addition	18
	.2 Recognition of numbers	19
	.3 Number sequence	20
	.4 Addition of numbers below 10	20
Section 2.2	The importance of 10	
2.2	.1 Number bonds	22
2.2	.2 Numbers 10–19	22
2.2	.3 Concept of 20	23
2.2	.4 Addition up to 20	24
Section 2.3	The relationship between the four mathematical operations	
2.3	.1 Introducing subtraction	25
2.3	.2 Vertical subtraction	26
2.3	.3 Multiplication	27
2.3	.4 Vertical multiplication	30
2.3	5.5 Division	30
Section 2.4	Developing the four operations	
	.1 Numbers 20–29	31
2.4	.2 Addition, with carrying	32
2.4	.3 Simple subtraction of numbers less than 100	33
-	.4 Multiples of 10 up to 100	34
2.4	.5 Multiplication by 10	35

Section 2.5 Mo	re on multiplication and division	
2.5.1	Other multiplication tables	36
2.5.2	Multiplication with tens and ones	36
2.5.3	Multiplication with carrying	37
2.5.4	Division with remainders	37
	thods of subtraction	
	Subtraction using decomposition	39
2.6.2	Subtraction using equal addition	41
	re advanced processes: estimating, larger numbers and	
fractions		
2.7.1		42
2.7.2	The same of the same of the same same of the same of t	44
	Simple addition of fractions	45
2.7.4	Simple addition and subtraction of fractions and whole numbers	46
Section 2.8 Usi	ng numbers over 100 and introducing decimals	
	Addition, in hundreds	47
	Subtraction, in hundreds	47
	Multiplication, with answers in the hundreds	48
2.8.4	An introduction to decimals	48
Section 2.9 Dec	cimals and percentages	
2.9.1		49
	Addition and subtraction of decimal money	50
2.9.3	Percentages	51
2.9.4	Commonly used percentages	51
Section 2.10 M	ore advanced multiplication and division	
2.10.1	Long multiplication	52
2.10.2	Multiplication of decimals	53
2.10.3	Long division	53
	Long division of decimals	54
Section 2.11 G	raphs, areas and averages	
	Graphs	54
2.11.2	Areas	55
2.11.3	Averages	56

Part III Case studies

Introduct	Introduction .		
3.1 Cas	e study 1: Colin	63	
3.1.1	At work; time sheets	64	
3.1.2	At work: monitoring materials	65	
3.1.3		•	
	work for teaching purposes	66	
3.1.4	Travelling	67	
3.1.5	Going on holiday	69	
3.1.6	Money matters	71	
3.1.7		73	
3.2 Case study 2: Jean		77	
3.2.1	Shopping	78	
3.2.2	Other ways of purchasing	79	
3.2.3	Budgeting	80	
3.2.4	Decisions	81	
3.3 Case	3.3 Case study 3: George		
3.3.1	Social interests	85	
3.3.2	Sports	87	
3.3.3	Taking decisions	88	
Concluding ren	oncluding remarks		