Suggested Modules and Units for Each School Term in Key Stage 2

<1> *Exemplar of Modules and Units for Key Stage 2* --- *First Term of Primary 4*

Learning Dimension	Module		Unit		Syllabus Reference (Remarks and additional notes on teaching are listed in brackets)	Time Ratio
	No.	Organizing Focus	No.	Organizing Focus		
Number	N6	Nature of numbers	N6-1	H.C.F. and L.C.M. by listing	4.1 Multiples 4.2 Factors (presentation by 'Venn diagrams', i.e. diagrams in point 2, not included)	5 6
	N7	Operations of whole numbers	N7-2	Multiplication (with 2-digit multiplier) and division (with 2-digit divisor)	4.3 Multiplication 4.4 Division	8 12
			N7-6	Direct proportion by unitary method	4.5 Direct proportion	6
	N8	Operations of fractions, decimals and percentages	N8-1	Addition and subtraction of fractions with the same denominator	4.6 Fractions (the number of operations in each question should not exceed two, and the numbers involved should be as simple as possible)	18
			N8-4	Addition and subtraction of decimals	4.7 Decimals	10
Measures	M2	Further measurement	M2-1	Millilitre	4.8 Capacity	3
Shape & Space	S2	Further 2-D and 3-D shapes	S2-3	Properties of pyramids and prisms	4.9 Solids	8
Data Handling	D2	Statistical charts	D2-1	Pictograms of greater frequency counts	4.10 Pictograms	4

Remark 1: On teaching time allocation of mathematics lessons, it is assumed that the total number of class periods of mathematics in a school year is 160, and on average 80 periods in one school term, with ETV lessons included. The days not included in the allocation are those for school examinations at mid-term, end of term and end of school year, and for school activities such as games day, speech day and picnic day, etc.

Remark 2: Teachers should provide opportunities for pupils in learning through tasks or other activities, in order to strengthen their ability in solving practical or mathematical problems by integrative use of subject knowledge and procedures.

2 > *Exemplar of Modules and Units for Key Stage 2* --- *Second Term of Primary 4*

Learning Dimension	Module		Unit		Syllabus Reference (Remarks and additional notes on teaching are listed in brackets)	Time Ratio
	No.	Organizing Focus	No.	Organizing Focus		
Number	N7	Operations of whole numbers	N7-3	Mixed operations on four rules (including use of of brackets)	(Newly added topic; including sums and problems, the number of operations in each question should not exceed four, and the numbers involved should be as simple as possible) 4.11 Brackets (not including 'square brackets')	5
			N7-4	Multiplication (with 3-digit multiplier)	(Newly added topic)	3
			N7-5	Division (with 3-digit divisor)	4.12 Division	10
	N8	Operations of fractions, decimals and percentages	N8-2	Addition and subtraction of fractions with different denominators	4.13 Fractions (the number of operations in each question should not exceed two, and the numbers involved should be as simple as possible)	18
			N8-5	Multiplication and division of decimals	4.14 Decimals (the number of operations in each question should not exceed two)	13
			N8-6	Averages	4.15 Averages	4
Measures	M2	Further measurement	M2-3	Square centimetre, square metre, areas of squares and rectangles	4.19 Area	10
Algebra	A1	Algebra	A1-1	Algebraic symbols	4.16 Algebraic symbols (including only points 1 and 2a; 2b is shifted to Topic 5.5 of Primary 5 first term)	5
Shape & Space	S2	Further 2-D and 3-D shapes	S2-1	Properties of quadrilaterals	4.18 Quadrilaterals (including only points 1 to 4; presentation by 'Venn diagrams', i.e. diagrams in point 4, not included)	6
Data Handling	D2	Statistical charts	D2-2	Bar charts and compound bar charts	4.20 Compound bar charts	6

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Remark 2: Teachers should provide opportunities for pupils in learning through tasks or other activities, in order to strengthen their ability in solving practical or mathematical problems by integrative use of subject knowledge and procedures.

Remark 3 : The following changes are made to *the Syllabuses for Primary Schools: Mathematics, 1983* for the second term of Primary 4:

(a) The following is changed as enrichment topic (please see appendix G):
Topic 4.17 Changing units in metric system

(b) The following topic is deleted:
Topic 4.18 Quadrilaterals : [5]- (Method of making a quadrilateral rigid)

< 3 > *Exemplar of Modules and Units for Key Stage 2* --- *First Term of Primary 5*

Learning Dimension	Module		Unit		Syllabus Reference (Remarks and additional notes on teaching are listed in brackets)	Time Ratio
	No.	Organizing Focus	No.	Organizing Focus		
Number	N6	Nature of numbers	N6-4	Prime and composite numbers	5.2 Prime numbers and composite numbers	9
	N7	Operations of whole numbers	N7-1	Recognition of large numbers with rounding off and estimation	5.1 Large numbers	4
	N8	Operations of fractions, decimals and percentages	N8-3	Multiplication and division of fractions	5.3 Fractions (the number of operations in each question should not exceed two, and the numbers involved should be as simple as possible) 5.4 Distributive property of multiplication	23 5
Measures	M2	Further measurement	M2-4	Areas of parallelograms, triangles, trapeziums and polygons	5.7 Area	14
Algebra	A1	Algebra	A1-2	Concepts of simple equations	5.5 Simple equations (also including point 2b of Topic 4.16)	14
Shape & Space	S2	Further 2-D and 3-D shapes	S2-4	8 compass points	5.8 Directions	4
Data Handling	D2	Statistical charts	D2-3	Further techniques on bar charts	5.9 Graphs	7

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Remark 2: Teachers should provide opportunities for pupils in learning through tasks or other activities, in order to strengthen their ability in solving practical or mathematical problems by integrative use of subject knowledge and procedures.

Remark 3 : The following change is made to *the Syllabuses for Primary Schools: Mathematics, 1983* for the first term of Primary 5:

The following topic is deleted:
Topic 5.6 Time - (Changing units and simple four rules)

< 4 > *Exemplar of Modules and Units for Key Stage 2* --- *Second Term of Primary 5*

Learning Dimension	Module		Unit		Syllabus Reference (Remarks and additional notes on teaching are listed in brackets)	Time Ratio
	No.	Organizing Focus	No.	Organizing Focus		
Number	N6	Nature of numbers	N6-2	H.C.F. and L.C.M. by factorization	5.10 Factorization (numbers within 150)	11
	N7	Operations of whole numbers	N7-7	Inverse proportion by unitary method	5.11 Inverse proportion	7
	N8	Operations of fractions, decimals and percentages	N8-7	Further multiplication and division of decimals	5.12 Decimals	18
			N8-8	Percentages	5.14 Percentages ('simple problems' is shifted to Topic 6.5 of Primary 6 first term)	13
Measures	M2	Further measurement	M2-2	Cubic centimetre and cubic metre	5.17 Volume	10
Algebra	A1	Algebra	A1-3	Solving simple equations	5.13 Simple equations (not including the operation of like terms in algebra in point 1c; but including 'ask pupils to check the answers after solving an equation'; points 2 and 3 are shifted to Topic 6.4 of Primary 6 first term)	10
Shape & Space	S2	Further 2-D and 3-D shapes	S2-2	Circles	5.16 Circles	5
Data Handling	D2	Statistical charts	D2-4	Further techniques on straight line graphs	5.18 Straight line graphs	6

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Remark 2: Teachers should provide opportunities for pupils in learning through tasks or other activities, in order to strengthen their ability in solving practical or mathematical problems by integrative use of subject knowledge and procedures.

Remark 3 : The following change is made to *the Syllabuses for Primary Schools: Mathematics, 1983* for the second term of Primary 5:

The following is changed as enrichment topic for Primary 5 (please see appendix G):
Topic 6.12 Recurring decimals

< 5 > *Exemplar of Modules and Units for Key Stage 2* --- *First Term of Primary 6*

Learning Dimension	Module		Unit		Syllabus Reference (Remarks and additional notes on teaching are listed in brackets)	Time Ratio
	No.	Organizing Focus	No.	Organizing Focus		
Number	N6	Nature of numbers	N6-3	H.C.F. and L.C.M. by short division	6.3 Highest common factor and lowest common multiple (not including ' problem solving')	10
	N8	Operations of fractions, decimals and percentages	N8-9	Applications of percentages	6.5 Percentages ('simple interest' not included, but including 'simple problems' of Topic 5.14)	25
Measures	M2	Further measurement	M2-5	Circumferences of circles	6.7 Circumference (use $\pi = 3.14$ or $\frac{22}{7}$ in calculations)	10
			M2-8	Angle measures in degrees	6.6 Angles	9
Algebra	A1	Algebra	A1-4	Solving simple equations	6.4 Simple equations (including points 2 and 3 of Topic 5.13 and solving problems by equations involving fractions and decimals, but not including the operation of like terms in algebra)	20
Data Handling	D2	Statistical charts	D2-5	Pie charts	6.9 Pie charts (not including point 2)	6

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Remark 2: Teachers should provide opportunities for pupils in learning through tasks or other activities, in order to strengthen their ability in solving practical or mathematical problems by integrative use of subject knowledge and procedures.

Remark 3 : The following changes are made to *the Syllabuses for Primary Schools: Mathematics, 1983* for the first term of Primary 6:

The following topics are deleted:
(1) Topic 6.2 Divisibility
(2) Topic 6.9 Pie charts : [2]- (Making pie charts)

< 6 > *Exemplar of Modules and Units for Key Stage 2* --- *Second Term of Primary 6*

Learning Dimension	Module		Unit		Syllabus Reference (Remarks and additional notes on teaching are listed in brackets)	Time Ratio
	No.	Organizing Focus	No.	Organizing Focus		
Number	N6	Nature of numbers	N6-5	Squares and square roots	6.10 Squares and square roots (finding square roots from numbers within 200; not including 'finding square roots' by factorization and point 3)	9
			N6-6	Ancient numerals	6.1 Ancient numerals (the topic is shifted to Primary 6 second term)	6
			N6-7	Stories of calculating devices	6.15 Stories of calculating devices (points 2 and 3 are changed as enrichment topics)	8
Measures	M2	Further measurement	M2-6	The 24-hour clock	5.15 Time (the topic is shifted to Primary 6 second term)	5
			M2-7	Metre per second and kilometre per hour	6.13 Speed	10
			M2-9	Drawing plans	6.18 Simple surveying (including point 1 only)	6
Algebra	A1	Algebra	A1-5	Number patterns	6.11 Number patterns (including 'square numbers' but not including 'magic squares')	16
Shape & Space	S2	Further 2-D and 3-D shapes	S2-5	Bearings	6.18 Simple surveying (including only points 2 to 5)	10
Data Handling	D2	Statistical charts	D2-6	Appropriate use of graphical representation	6.19 Graphs (not including point 2)	10

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Remark 2: Teachers should provide opportunities for pupils in learning through tasks or other activities, in order to strengthen their ability in solving practical or mathematical problems by integrative use of subject knowledge and procedures.

Remark 3 : The following changes are made to *the Syllabuses for Primary Schools: Mathematics, 1983* for the second term of Primary 6:

(a) The following are changed as enrichment topics (please see appendix G):
- (1) Topic 6.8 Curve stitching
- (2) Topic 6.15 Stories of calculating devices : [2]- (Notation on the Chinese abacus)
  [3]- (Addition and subtraction on the Chinese abacus)
- (3) Topic 6.16 Symmetry
- (4) Topic 6.18 Simple surveying : [6]- (Horizontal and vertical)
  [7]- (Angle of elevation)

(b) The following topics are deleted:
- (1) Topic 6.10 Squares and square roots : [2]- (Finding square roots by factorization)
  [3]- (Plotting the graph of numbers against their squares)
- (2) Topic 6.14 Positive and negative numbers - (Introducing negative numbers)
- (3) Topic 6.17 Area of a circle
- (4) Topic 6.19 Simple curve graphs : [2]- (Drawing curve graphs)