

Scottish Heinemann Maths Matching Chart

Program	SHM Topic and Unit	Mathematics 5 – 14	Curriculum for Excellence Outcomes
Addition problems	SHM 2 Number 2 Addition to 20 (TF: 49 - 78)	AS/B <ul style="list-style-type: none"> Add and subtract mentally for numbers 0 to 20. 	<ul style="list-style-type: none"> I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed. MNU 103C
Division modeller	SHM 2 Number 7 Division (TF: 144 - 150)	MD/B <ul style="list-style-type: none"> Multiply and divide mentally by 2, 3, 4, 5, 10, within the confines of these tables. 	<ul style="list-style-type: none"> I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate. MNU 101A I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed. MNU 103C
	SHM 3 Number 5 Division (TF: 191 - 226)	MD/B <ul style="list-style-type: none"> Multiply and divide mentally by 2, 3, 4, 5, 10, within the confines of these tables. Multiply and divide with a calculator for 2 digit numbers multiplied by any digit. 	
Fractions of objects	SHM 2 Number 5 Fractions (TF: 122 - 128)	RTN/A <ul style="list-style-type: none"> Work with halves (practical applications only). RTN/B <ul style="list-style-type: none"> Work with quarters (practical applications only). 	<ul style="list-style-type: none"> Having explored fractions by taking part in practical activities, I can show my understanding of: <ul style="list-style-type: none"> - how a single item can be shared equally - the notation and vocabulary associated with fractions - where simple fractions lie on the number line. MNU 104H Through exploring how groups of items can be shared equally, I can find a fraction of an amount by applying my knowledge of division. MNU 105H Through taking part in practical activities including use of pictorial representations, I can demonstrate my understanding of simple fractions which are equivalent. MTH 106H
	SHM 3 Number 7 Fractions (TF: 233 - 240)	RTN/B <ul style="list-style-type: none"> Work with quarters (practical applications only). FPR/B <ul style="list-style-type: none"> Find halves and quarters of quantities involving 1 or 2 digit numbers, for example by sharing. 	
Number boards	SHM 2 Number 2 Addition to 20 (TF: 49 - 78)	AS/B <ul style="list-style-type: none"> Add and subtract mentally numbers 0 to 20. 	<ul style="list-style-type: none"> I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate. MNU 101A I have investigated how whole numbers are constructed, can understand the importance of zero within the system and use my knowledge to explain the link between a digit, its place and its value. MNU 102B

Program	SHM Topic and Unit	Mathematics 5 – 14	Curriculum for Excellence Outcomes
Number boards <i>cont.</i>	SHM 3 Number 3 Subtraction to 100 (TF: 117 - 160)	AS/B <ul style="list-style-type: none"> Add and subtract mentally for numbers 0 to 20; in some cases beyond 20. 	<ul style="list-style-type: none"> I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed. MNU 103C
	SHM 3 Measure 1 Measure – Length (TF: 241 - 250) SHM 3 Measure 2 Measure - Weight (TF: 251 - 256) SHM 3 Measure 3 Measure - Capacity (TF: 257 - 260)	ME/B <ul style="list-style-type: none"> Measure in easily handled standard units and fractions of them: length: $\frac{1}{2}$m, $\frac{1}{4}$m, cm. Use the abbreviations m, cm. Measure in easily handled standard units and fractions of them: weight: kg, $\frac{1}{2}$kg. 	<ul style="list-style-type: none"> I can estimate how long or heavy an object is, or what amount it holds, using everyday things as a guide, then measure or weigh it using appropriate instruments and units. MNU 112M I can use the common units of measure, convert between related units of the metric system and carry out calculations when solving problems. MNU 218M
	SHM 4 Measure 1 Measure - Weight (TF: 269 - 275) SHM 4 Measure 2 Measure - Length (TF: 276 - 283) SHM 4 Measure 3 Measure - Capacity (TF: 284 - 289)	ME/C <ul style="list-style-type: none"> Measure in standard units: weight: 1 kg = 1000g. Estimate length and height in easily handled standard units: m, $\frac{1}{2}$m, $\frac{1}{10}$m, cm. Measure in standard units: volume: $\frac{1}{2}$ litre, $\frac{1}{4}$ litre. ME/B <ul style="list-style-type: none"> Read scales on measuring devices to the nearest graduation, where each graduation is labelled. 	
Number grids	SHM 2 Number 1 Numbers to 100 (TF: 18 - 48)	RTN/B <ul style="list-style-type: none"> Work with whole numbers up to 100 (count, order, read/write). PS/B <ul style="list-style-type: none"> Work with patterns and sequences: even and odd numbers. Work with patterns and sequences: whole number sequences within 100. 	<ul style="list-style-type: none"> I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate. MNU 101A I have investigated how whole numbers are constructed, can understand the importance of zero within the system and use my knowledge to explain the link between a digit, its place and its value. MNU 102B I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed. MNU 103C

cont.

Program	SHM Topic and Unit	Mathematics 5 – 14	Curriculum for Excellence Outcomes
Number grids cont.	SHM 3 Number 2 Addition to 100 (TF: 75 - 108)	AS/B <ul style="list-style-type: none"> • Add and subtract mentally for numbers 0 to 20; in some cases beyond 20. • Add and subtract without a calculator for 2 digit numbers. • Add and subtract with a calculator for numbers to 2 digits added to 3 digits. 	<ul style="list-style-type: none"> • Through exploring number patterns, I can recognise and continue simple number sequences and can explain the rule I've applied. MTH 116P
	SHM 3 Number 4 Multiplication (TF: 161 - 190)	MD/B <ul style="list-style-type: none"> • Multiply and divide mentally by 2, 3, 4, 5, 10, within the confines of these tables. • Multiply and divide without a calculator for 2 digit numbers multiplied by 2, 3, 4, 5, 10. • Multiply and divide with a calculator for 2 digit numbers multiplied by any digit. 	
Number line	SHM 3 Number 1 Numbers to 1000 (TF: 31 - 74)	RTN/B <ul style="list-style-type: none"> • Work with whole numbers up to 100 and then up to 1000 (count, order, read/write). RN/B <ul style="list-style-type: none"> • Round 2-digit whole numbers to the nearest ten. 	<ul style="list-style-type: none"> • I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate. MNU 101A • I have investigated how whole numbers are constructed, can understand the importance of zero within the system and use my knowledge to explain the link between a digit, its place and its value. MNU 102B
Place value	SHM 3 Number 1 Numbers to 1000 (TF: 31 - 74)	RTN/B <ul style="list-style-type: none"> • Work with whole numbers up to 100 and then up to 1000 (count, order, read/write). RN/B <ul style="list-style-type: none"> • Round 2-digit whole numbers to the nearest ten. 	<ul style="list-style-type: none"> • I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate. MNU 101A • I have investigated how whole numbers are constructed, can understand the importance of zero within the system and use my knowledge to explain the link between a digit, its place and its value. MNU 102B
Scales	SHM 3 Measure 2 Measure - Weight (TF: 251 - 256)	ME/B <ul style="list-style-type: none"> • Measure in easily handled standard units and fractions of them: weight: kg, $\frac{1}{2}$kg. 	<ul style="list-style-type: none"> • I can estimate how long or heavy an object is, or what amount it holds, using everyday things as a guide, then measure or weigh it using appropriate instruments and units. MNU 112M

Program	SHM Topic and Unit	Mathematics 5 – 14	Curriculum for Excellence Outcomes
<i>Scales cont.</i>	SHM 4 Measure 1 Measure - Weight (TF: 269 - 275)	M/E/C • Measure in standard units: weight: 1 kg = 1000g.	<ul style="list-style-type: none"> I can use the common units of measure, convert between related units of the metric system and carry out calculations when solving problems. MNU 218M
Sequences	SHM 2 Number 1 Numbers to 100 (TF: 18 - 48)	RTN/B <ul style="list-style-type: none"> Work with whole numbers up to 100 (count, order, read/write). PS/B <ul style="list-style-type: none"> Work with patterns and sequences: even and odd numbers. Work with patterns and sequences: whole number sequences within 100. 	<ul style="list-style-type: none"> I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate. MNU 101A I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed. MNU 103C Through exploring number patterns, I can recognise and continue simple number sequences and can explain the rule I've applied. MTH 116P
	SHM 3 Number 2 Addition to 100 (TF: 75 - 108)	AS/B • Add and subtract mentally for numbers 0 to 20; in some cases beyond 20.	
Shape and number sorter	SHM 3 Information handling 2 Data Handling (TF: 319 - 340)	C/A <ul style="list-style-type: none"> Collect by obtaining information for a task from a picture. C/B <ul style="list-style-type: none"> Collect by conducting a class survey. D/B <ul style="list-style-type: none"> Display by using tables, charts or diagrams, such as mapping one to many. I/B <ul style="list-style-type: none"> Interpret from displays by asking specific questions including some about similarities and differences. 	<ul style="list-style-type: none"> I have explored a variety of ways in which data is presented and can ask and answer questions about the information it contains. MNU 124W I have used a range of ways to collect information and can sort it in a logical, organised and imaginative way using my own and others' criteria. MNU 125W Using technology and other methods, I can display data simply, clearly and accurately by creating tables, charts and diagrams, using simple labelling and scale. MTH 126X

cont.

Program	SHM Topic and Unit	Mathematics 5 – 14	Curriculum for Excellence Outcomes
<i>Shape and number sorter cont.</i>	<p>SHM 3 Shape 1 Shape - 3D Shape (TF: 281 - 290)</p> <p>SHM 3 Shape 2 Shape - 2D Shape (TF: 291 - 306)</p>	<p>RS/B</p> <ul style="list-style-type: none"> Collect, discuss, make and use 3D shapes: respond to written or oral descriptions which refer to features of shapes such as faces, edges, corners, sides, angles. Collect, discuss, make and use 3D shapes: identify and name triangular prism, square pyramid. <p>RS/B</p> <ul style="list-style-type: none"> Collect, discuss, make and use 2D shapes: respond to written or oral descriptions which refer to features of shapes such as corners, sides, angles. 	<ul style="list-style-type: none"> I have explored simple 3D objects and 2D shapes and can identify, name and describe their features using appropriate vocabulary. MTH 119S
Symmetry searcher	<p>SHM 3 Shape 3 Shape - 2D Shape (TF: 291 - 306)</p>	<p>S/B</p> <ul style="list-style-type: none"> Work with symmetry: recognise symmetrical shapes by folding or using a mirror. 	<ul style="list-style-type: none"> I have explored simple 3D objects and 2D shapes and can identify, name and describe their features using appropriate vocabulary. MTH 119S I can continue and devise more involved repeating patterns or designs, using a variety of media. MTH 115P I have explored symmetry in my own and the wider environment and can create and recognise symmetrical pictures, patterns and shapes. MTH 123V I can illustrate the lines of symmetry for a range of 2D shapes and apply my understanding to create and complete symmetrical pictures and patterns. MTH 231V
	<p>SHM 4 Shape 3 Shape - 2D Shape: symmetry (TF: 341 - 345)</p>	<p>S/C</p> <ul style="list-style-type: none"> Work with symmetry: find lines of symmetry of shapes drawn on squared grids. Work with symmetry: complete the missing half of a simple symmetrical shape or pattern on a squared grid. 	
Target totals	<p>SHM 3 Number 2 Addition to 100 (TF: 75 - 108)</p>	<p>AS/B</p> <ul style="list-style-type: none"> Add and subtract mentally for numbers 0 to 20, in some cases beyond 20. Add and subtract without a calculator for 2 digit numbers. Add and subtract with a calculator for numbers to 2 digits added to 3 digits. 	<ul style="list-style-type: none"> I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate. MNU 101A I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed. MNU 103C

Program	SHM Topic and Unit	Mathematics 5 – 14	Curriculum for Excellence Outcomes
Time	SHM 4 Time 2 Time: Minutes past/to the hour (TF: 304 - 315)	T/C <ul style="list-style-type: none"> Work with time: conventions for recording time. Work with time: work with hours, minutes. 	<ul style="list-style-type: none"> I can tell the time using 12 and 24 hour clocks, explain how it impacts on my daily routine and ensure that I am organised and ready for events throughout my day. MNU 109L
Virtual data	SHM 4 Information handling 1 Data Handling (TF: 355 - 374)	C/C <ul style="list-style-type: none"> Collect by obtaining information for a task from a variety of given sources. O/C <ul style="list-style-type: none"> Organise by using a tally sheet with grouped tallies. Organise by entering data in a table using row and column headings. I/C <ul style="list-style-type: none"> Interpret from displays and databases by identifying the most and least frequent items. 	<ul style="list-style-type: none"> I have explored a variety of ways in which data is presented and can ask and answer questions about the information it contains. MNU 124W I have used a range of ways to collect information and can sort it in a logical, organised and imaginative way using my own and others' criteria. MNU 125W Using technology and other methods, I can display data simply, clearly and accurately by creating tables, charts and diagrams, using simple labelling and scale. MTH 126X
Zoom number line	SHM 3 Number 1 Numbers to 1000 (TF: 31 - 74)	RTN/B <ul style="list-style-type: none"> Work with whole numbers up to 100 and then up to 1000 (count, order, read/write). RN/B <ul style="list-style-type: none"> Round 2-digit whole numbers to the nearest ten. 	<ul style="list-style-type: none"> I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate. MNU 101A I have investigated how whole numbers are constructed, can understand the importance of zero within the system and use my knowledge to explain the link between a digit, its place and its value. MNU 102B
	SHM 4 Number 1 Numbers to 10 000 (TF: 33 - 74)	RTN/B <ul style="list-style-type: none"> Work with whole numbers up to 10 000 (count, order, read/write). 	

TF = Teaching File