MATHEMATICS YEAR 6 YEARLY PLAN

| Week | Area | Topic | Learning Area | Learning Objectives | Learning Outcomes | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1$ | 1. Numbers | 1. Whole Numbers | 1. Numbers up to seven digits | 1. Develop number sense up to seven digits. | i. Name and write numbers up to seven digits. | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, flash cards, picture cards. <br> Curriculum Specifications Refer to page 1 <br> Thinking Skills <br> 1. Listing <br> 2. Visualizing |
| $2$ | 1. Numbers | 1. Whole Numbers | 1. Numbers up to seven digits | 1. Develop number sense up to seven digits. | ii. Determine the place value of the digits in any whole number up to seven digits. <br> iii. Express whole numbers in <br> a) decimals <br> b) fractions <br> of a million and vice versa | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, flash cards, picture cards. <br> Curriculum Specifications Refer to page $1 \& 2$ <br> Thinking Skills <br> 1. Comparing \& Contrasting <br> 2. Sequencing <br> 3. Listing <br> 4. Visualizing |
| 3 | 1. Numbers | 1. Whole Numbers | 1. Numbers up to seven digits | 1. Develop number sense up to seven digits. | iv. Compare number values up to seven digits. <br> v. Round off numbers to the nearest tens, hundreds, thousands, ten thousands, hundred thousands and millions. | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, flash cards, picture cards. |


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|  |  |  |  |  |  | Curriculum Specifications Refer to page 2 <br> Thinking Skills <br> 1. Translating <br> 2. Sequencing <br> 3. Analysing <br> 4. Elaborating |
| $4$ | 1. Numbers | 1. Whole Numbers | 2. Basic operations with numbers up to seven digits | 2. Add, subtract, multiply and divide numbers involving numbers up to seven digits. | i. Add any two to four numbers up to 9999999. <br> ii. Subtract <br> a) one number from a bigger number less than 10000000. <br> b) successively from a bigger number less than 10000000. | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, flash cards, picture cards, word cards. <br> Curriculum Specifications Refer to page 3 <br> Thinking Skills <br> 1. Comparing \& Contrasting <br> 2. Decision Making <br> 3. Problem Solving |
| $5$ | 1. Numbers | 1. Whole Numbers | 2. Basic operations with numbers up to seven digits | 2. Add, subtract, multiply and divide numbers involving numbers up to seven digits. | iii. Multiply up to six-digit numbers with <br> a) a one digit number, <br> b) a two-digit number, <br> c) 10,100 and 1000 <br> iv. Divide numbers of up to seven digits by <br> a) a one-digit number, <br> b) 10, 100 and 1000 , <br> c) two-digit number. | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, flash cards. <br> Curriculum Specifications Refer to page 4 <br> Thinking Skills <br> 1. Elaborating <br> 2. Drawing Conclusion <br> 3. Problem Solving |


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| $6$ | 1. Numbers | 1. Whole Numbers | 2. Basic operations with numbers up to seven digits | 2. Add, subtract, multiply and divide numbers involving numbers up to seven digits. | v. Solve <br> a) addition, <br> b) subtraction, <br> c) multiplication, <br> d) division problems involving numbers up to seven digits. | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, word cards. <br> Curriculum Specifications Refer to page 5 <br> Thinking Skills <br> 1. Elaborating <br> 2. Drawing Conclusion <br> 3. Problem Solving |
| $7$ | 1. Numbers | 1. Whole Numbers | 3. Mixed Operations With Numbers Up To Seven Digits | 3. Perform mixed operations with whole numbers. | i. Compute mixed operations problems involving addition and multiplication. <br> ii. Compute mixed operations problems involving subtraction and division. <br> iii. Compute mixed operations problems involving brackets. <br> iv. Solve problems involving mixed operations on numbers of up to seven digits. | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, word cards. <br> Curriculum Specifications Refer to page 6 <br> Thinking Skills <br> 1. Elaborating <br> 2. Decision Making <br> 3. Drawing Conclusion <br> 4. Problem Solving |
| 8 | 1. Numbers | 2. Fractions | 1. Addition Of Fractions | 1. Add three mixed numbers with denominators of up to 10 | i. Add three mixed numbers with the same denominator of up to 10 . <br> ii. Add three mixed numbers with different denominator of up to 10 . <br> iii. Solve problems involving | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, word cards, Cuisenaire rods <br> Curriculum Specifications Refer to page 7 |


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|  |  |  |  |  | addition of mixed numbers. | Thinking Skills <br> 1. Elaborating <br> 2. Drawing Conclusion <br> 3. Problem Solving |
| $9$ | 1. Numbers | 2. Fractions | 2. Subtraction Of Fractions | 2. Subtract mixed numbers with denominators of up to 10 . | i. Subtract involving three mixed numbers with the same denominator of up to 10. <br> ii. Subtract involving three mixed numbers with different denominator of up to 10 . <br> iii. Solve problems involving subtraction of mixed numbers. | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, word cards, Cuisenaire rods <br> Curriculum Specifications <br> Refer to page 8 <br> Thinking Skills <br> 1. Elaborating <br> 2. Drawing Conclusion <br> 3. Problem Solving |
| $10$ | 1. Numbers | 2. Fractions | 3. Multiplication of Fractions | 3. Multiply any mixed numbers with a whole numbers up to 1000 . <br> 4 Divide fractions with a whole number and a fraction. | i. Multiply mixed numbers with a whole number. <br> ii. Divide fractions with a) a whole number b) a fraction | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, word cards, Cuisenaire rods <br> Curriculum Specifications Refer to page $9 \& 10$ <br> Thinking Skills <br> 1. Elaborating <br> 2. Drawing Conclusion <br> 3. Problem Solving |
| 11 | 1. Numbers | 2. Fractions | 3. Multiplication of Fractions | 4 Divide fractions with a whole number and a fraction. | iii. Divide mixed numbers with <br> a) a whole number <br> b) a fraction | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, word cards, Cuisenaire rods |


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|  |  |  |  |  |  | Curriculum Specifications Refer to page 10 <br> Thinking Skills <br> 1. Elaborating <br> 2. Drawing Conclusion <br> 3. Problem Solving |
| $12$ | 1. Numbers | 3. Decimals | 1. Mixed Operations With Decimals | 1. Perform mixed operations of addition and subtraction of decimals of up to 3 decimal places. | i. Add and subtract three to four decimal numbers of up to 3 decimal places, involving <br> a) decimal numbers only <br> b) whole numbers and decimal numbers. | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, word cards, Cuisenaire rods <br> Curriculum Specifications Refer to page 11 <br> Thinking Skills <br> 1. Elaborating <br> 2. Decision Making <br> 3. Drawing Conclusion |
| $13$ | 1. Numbers | 4. Percentage | 1. Relationship Between Percentage, Fraction And Decimal | 1. Relate fractions and decimals to percentage. | i. Convert mixed numbers to percentage. <br> ii. Convert decimal numbers of value more than 1 to percentage. | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, word cards, 100 square paper, Cuisenaire rods <br> Curriculum Specifications Refer to page 12 <br> Thinking Skills <br> 1. Elaborating <br> 2. Drawing Conclusion <br> 3. Visualising <br> 4. Problem Solving |


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| $14$ | 1. Numbers | 4. Percentage | 1. Relationship Between Percentage, Fraction And Decimal | 1. Relate fractions and decimals to percentage. | iii. Find the value for a given percentage of a quantity. <br> iv. Solve problems in real context involving relationships between percentage, fractions and decimals. | KITS <br> Specific courseware, powerpoint presentation, place value frame, number cards, word cards, 100 square paper, Cuisenaire rods <br> Curriculum Specifications <br> Refer to page 13 <br> Thinking Skills <br> 1. Elaborating <br> 2. Drawing Conclusion <br> 3. Visualising <br> 4. Problem Solving |
| $15$ | 1. Numbers | 5. Money | 1. Money to RM10 Million | 1. Use and apply number sense in real context involving money. | i. Perform mixed operations with money up to a value of RM10 million. <br> ii. Solve problems in real context involving computation of money. | KITS <br> Specific courseware, powerpoint presentation, simulation notes and coins, cut out notes and coins, flash cards <br> Curriculum Specifications <br> Refer to page 14 <br> Thinking Skills <br> 1. Comparing \& Contrasting <br> 2. Elaborating <br> 3. Drawing Conclusion <br> 4. Problem Solving |
| $16$ | 2. Measures | 6. Time | 1. Duration | 1. Use and apply knowledge of time to find the duration. | i. Calculate the duration of an event in between <br> a) months <br> b) years <br> c) dates | KITS <br> Analogue clock face, calendars, flash cards, number cards, word cards, phrase cards, sentence cards <br> Curriculum Specifications <br> Refer to page 15 |


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|  |  |  |  |  |  | Thinking Skills <br> 1. Planning <br> 2. Elaborating <br> 3. Listing |
| $17$ | 2. Measures | 6. Time | 1. Duration | 1. Use and apply knowledge of time to find the duration. | ii. Compute time period from situations expressed in fractions of duration. <br> iii. Solve problems in real context involving computation of time duration. | KITS <br> Analogue clock face, calendars, flash cards, number cards, word cards, phrase cards, sentence cards <br> Curriculum Specifications Refer to page 15 \& 16 <br> Thinking Skills <br> 1. Planning <br> 2. Elaborating <br> 3. Decision Making <br> 4. Problem Solving |
| $18$ | 2. Measures | 7. Length | 1. Computation Of Length | 1. Use and apply fractional computation to problems involving length. | i. Compute length from a situation expressed in fraction. <br> iii. Solve problems in real context involving computation of length. | KITS <br> Specific courseware, powerpoint presentation, measuring tapes, rulers, objects of different length such as pencils, rope, ribbons place value frame, word cards, sentence cards <br> Curriculum Specifications Refer to page 17 <br> Thinking Skills <br> 1. Comparing \& Contrasting <br> 2. Sequencing <br> 3. Decision Making <br> 4. Problem Solving <br> 5. Relaying Information |


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| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $19$ | 2. Measures | 8. Mass | 1. Computation Of Mass | 1. Use and apply fractional computation to problems involving mass. | i. Compute mass from a situation expressed in fraction. <br> ii. Solve problems in real context involving computation of mass. | KITS <br> Specific courseware, powerpoint presentation, weighing scales, flash cards, number cards, word cards, phrase cards, sentence cards, <br> Curriculum Specifications <br> Refer to page 18 <br> Thinking Skills <br> 1. Comparing \& Contrasting <br> 2. Sequencing <br> 3. Decision Making <br> 4. Problem Solving <br> 5. Relaying Information |
| $20$ | 2. Measures | 9. Volume of Liquid | 1. Computation Of Volume Of Liquid | 1. Use and apply fractional computation to problems involving volume of liquid. | i. Compute volume of liquid from a situation expressed in fraction. <br> ii. Solve problems in real context involving computation of volume of liquid. | KITS <br> Specific courseware, powerpoint presentation, measuring cylinders, variety of containers such as bottles, jugs, cans, cups, word cards, sentence cards <br> Curriculum Specifications <br> Refer to page 19 <br> Thinking Skills <br> 1. Comparing \& Contrasting <br> 2. Sequencing <br> 3. Listing <br> 4. Problem Solving <br> 5. Relaying Information |


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| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $21$ | 3. Shape and Space | 10. Shape and Space | 1. Two-Dimensional Shapes | 1. Find the perimeter and area of composite twodimensional shapes. | i. Find the perimeter of a two-dimensional composite shape of two or more quadrilaterals and triangles. | KITS <br> Specific courseware, powerpoint presentation, cut out cards of various polygons, pictures cards, word cards, sentence cards <br> Curriculum Specifications <br> Refer to page 20 <br> Thinking Skills <br> 1. Comparing \& Contrasting <br> 2. Elaborating <br> 3. Planning |
| $22$ | 3. Shape and Space | 10. Shape and Space | 1. Two-Dimensional Shapes | 1. Find the perimeter and area of composite twodimensional shapes. | ii. Find the area of a twodimensional composite shape of two or more quadrilaterals and triangles. <br> iii. Solve problems in real contexts involving calculation of perimeter and area of twodimensional shapes. | KITS <br> Specific courseware, powerpoint presentation, cut out cards of various polygons, pictures cards, word cards, sentence cards <br> Curriculum Specifications <br> Refer to page 21 <br> Thinking Skills <br> 1. Comparing \& Contrasting <br> 2. Elaborating <br> 3. Problem Solving |
| $23$ | 3. Shape and Space | 10. Shape and Space | 1. ThreeDimensional Shapes | 1. Find the surface area and volume of composite three-dimensional shapes. | i. Find the surface area of a three-dimensional composite shape of two or more cubes and cuboids. | KITS <br> Specific courseware, powerpoint presentation, cut out cards of various polygons, pictures cards, word cards, sentence cards |


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|  |  |  |  |  |  | Curriculum Specifications <br> Refer to page 22 <br> Thinking Skills <br> 1. Comparing \& Contrasting <br> 2. Elaborating <br> 3. Planning |
| $24$ | 3. Shape and Space | 10. Shape and Space | 1. ThreeDimensional Shapes | 1. Find the surface area and volume of composite three-dimensional shapes. | ii. Find volume of a threedimensional composite shape of two or more cubes and cuboids. <br> iii. Solve problems in real contexts involving calculation of surface area and volume of threedimensional shapes. | KITS <br> Specific courseware, powerpoint presentation, cut out cards of various polygons, pictures cards, word cards, sentence cards <br> Curriculum Specifications Refer to page 22 \& 23 <br> Thinking Skills <br> 1. Comparing \& Contrasting <br> 2. Elaborating <br> 3. Problem Solving |
| $25$ | 4. Statistics | 11. Data Handling | 1. Average | 1. Understand and compute average. | i. Calculate the average of up to five numbers. <br> ii. Solve problems in real contexts involving average. | KITS <br> Specific courseware, powerpoint presentation, newspaper cutting, pictures cards, calendars, cards with tables, word cards, sentence cards <br> Curriculum Specifications Refer to pages 24 \& 25 <br> Thinking Skills <br> 1. Comparing \& Contrasting <br> 2. Elaborating <br> 3. Problem Solving |


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| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $26$ | 4. Statistics | 11. Data Handling | 1. Organising and Interpreting Data | 1. Organise and interpret data from tables and charts. | i. Construct a pie chart from a given set of data. <br> ii. Determine the frequency, mode, range, mean, maximum and minimum value from a pie chart. | KITS <br> Specific courseware, powerpoint presentation, newspaper cutting, pictures cards, calendars, cards with tables, word cards, sentence cards <br> Curriculum Specifications Refer to pages 26 \& 27 <br> Thinking Skills <br> 1. Comparing \& Contrasting <br> 2. Elaborating <br> 3. Interpreting Information <br> 4. Planning |

