**BGCFL**

#### MATHS DEPARTMENT



# YEAR 7

**SCHEME OF WORK**

**This scheme of work is to be used as a guide only. Sometimes due to unforeseen circumstances the class may be a week behind or sometimes may even a week ahead of schedule. The topics will still be covered in the same order.**

Term 1 Year 7

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| **Number** | Learning Objectives. | Resources. |
| Week 1 | Stage 1: Read and write, add and take away numbers up to 10. | Play money. Number lines.Dice.Cubes.Counters.Textbooks.Worksheets.Follow me cards.Test sheets.ICT: My Maths, Twinkl and many more resources. |
| Stage 2: Order numbers up to 100. Write numbers in words and vice versa. Understand place value for HTU. |
| Stage 3: Understand place value up to 1000. |
| Stage 2/3: Know addition and subtraction facts up to 20. |
| Week 2 | Stage 3: Solve problems involving money. Know that add is opposite to take away. (Change) |
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| Stage 5: Introduce decimals using money. |
| Week 3 | Stage 3: Add and subtract 2 digit numbers mentally and on paper. |
| Stage 3: Add and subtract 3 digit numbers on paper.  |
| Week 4 | Stage 4: Know 2,3,4,5 and 10 times tables. |
| Stage 6: Solve times and divide problems including remainders. |
| Week 5 | Stage 4: Introduce times tables up to 10 x 10. |
| Stage 4: Multiply 2 digit numbers by single digit numbers. |
| Week 6 | Consolidation and end of term test. |
| Advice: Less able pupils may not complete all sections. They can concentrate on understanding number and simple addition and subtraction. Most able pupils can progress further by solving problems involving 4 or more digits.Many activities can be taught as starters or games at the end of each lesson. |

 Term 2 Year 7

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| **Measures** | Learning Objectives. | Resources. |
| Week 1 | Stage 1: Order events. | Clocks. Number lines.Rulers.Metre rules.Trundle wheels.Weighing scales.Measuring jugs.Maps.Textbooks.Worksheets.Test sheets.ICT: My Maths, Twinkl and many more resources. |
| Stage 2: Use measures of time. |
| Stage 2: Work out elapsed time. |
| Week 2 | Stage 1: Begin to measure length. |
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| Stage 4: Use metric units to measure length. |
| Stage 4: Use correct instruments and units to read measurements of length. |
| Week 3 | Stage 2: Begin to measure mass. |
| Stage 4: Use metric units to measure mass.  |
| Stage 4: Use correct instruments and units to read measurements of mass. |
| Week 4 | Stage 3: Begin to measure capacity. |
| Stage 4: Use metric units to measure capacity. |
| Stage 4: Use correct instruments and units to read measurements of capacity. |
| Week 5 | Stage 4: Estimate everyday measurements, including length, mass and capacity. |
| Week 6 | Consolidation and end of term test. |
| Advice: Less able pupils may not complete all sections. They can concentrate on being able to tell the time and measuring. Most able pupils can progress further by solving problems timetables etc and estimating and measuring more difficult objects.Many activities can be taught as starters or games at the end of each lesson. Previous topics such as number bonds and times tables can also be revisited and reinforced in starter or plenary activities. |

Term 3 Year 7

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| **Data Handling** | Learning Objectives. | Resources. |
| Week 1 | Stage 1: Read information in tables and lists. | Probability lines.Dice.Cubes.Playing cards.Textbooks.Worksheets.Test sheets.ICT: My Maths, Twinkl and many more resources. |
| Stage 2: Draw bar charts. |
| Stage 3: Interpret bar charts. |
| Week 2 | Stage 2: Draw pictograms. |
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| Stage 3: Interpret pictograms. |
| Stage 3: Collect data and record it in a frequency table/tally chart. |
| Week 3 | Stage 4: Group data in groups |
| Stage 4: Sort analyse and present data.  |
| Week 4 | Stage 3: Understand and use the probability scale using words such as impossible, likely etc. |
| Stage 3: Understand and use the probability scale from 0 to 1. |
|  | Stage 3: Place events such as the probability of throwing a 6 on a die on the probability scale. |
| Week 5 | Stage 5: Find and interpret probabilities from an experiment using all the skills learnt so far this term. |
| Week 6 | Consolidation and end of term test. |
| Advice: Less able pupils may not complete all sections. They can concentrate on drawing and interpreting simple bar charts and pictograms. They can collect and analyse simple data such as favourite colours etc. Most able pupils can progress further by working independently to collect and analyse more difficult data such as heights of other pupils. Previous topics such as number bonds and times tables can also be revisited and reinforced in starter or plenary activities. |

 Term 4 Year 7

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| **Shape** | Learning Objectives. | Resources. |
| Week 1 | Stage 1: Describe things about shapes such as straight lines, curved lines etc. | Sets of plastic shapes.Lesson templates.Textbooks.Worksheets.Follow me cards.Flip charts.Mirrors.Pairs of compasses.Angle measures.ICT: My Maths, Twinkl and many more resources. |
| Stage 1: Know maths names for simple shapes: Circle, triangle, square, rectangle, pentagon, heptagon and octagon. |
| Week 2 | Stage 2: Be able to recognise numbers of sides and corners of shapes. |
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| Stage 2: Group shapes in many ways.  |
| Week 3 | Stage 1: Recognise reflective symmetry. |
| Stage 2: Reflect simple shapes in a mirror line.  |
| Week 4 | Stage 1: Know angles measure turn. |
| Stage 2: Draw and recognise acute, obtuse, reflex and right angels. |
| Stage 3: Measure and draw angles to the nearest degree. |
| Week 5 | Stage 4: Know the angle sum on a straight line and find missing angles from this fact. |
|  | Stage 4: Know the angle sum in a triangle and find missing angles based on this fact. |
| Week 6 | Consolidation and end of term test. |
| Advice: Less able pupils may not complete all sections. They can concentrate on understanding basic shapes and angles. Angle / triangle sum questions can be fully differentiated so that less able pupils can consolidate number bonds using sums involving tens and more able can be given any missing angles..Many activities can be taught as starters or games at the end of each lesson. Previous topics such as number bonds and times tables can also be revisited and reinforced in starter or plenary activities. |

Term 5

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| **Number and algebra.** | Learning Objectives. | Resources. |
| Week 1 | Stage 2: Recognise simple number patterns including odd and even etc. | Lesson templates.Cubes.Counters.100 square paper.Flip charts.Fraction discs.Play pizza.Follow me cards.Worksheets.Test sheets.ICT: My Maths, Twinkl and many more resources. |
| Stage 2: Describe number patterns and number pattern rules. |
| Stage 2: Find the next 2 numbers in a sequence. |
| Week 2 | Stage 1: Recognise simple fractions. |
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| Stage 2: Use simple fractions. |
| Stage 2: Recognise equivalent fractions. |
| Week 3 | Stage 4: Understand that percentage means out of 100. |
| Stage 4: Represent percentages on 100 square paper. |
| Stage 5: Recognise simple percentage and fraction equivalents. Half, quarter etc. |
| Week 4 | Stage 1: Use positive co-ordinates. |
| Stage 2: Use co-ordinates in all 4 quadrants. |
| Week 5 | Up to Stage 5: Revisit all number work to include addition, subtraction, multiplication and division. |
| Week 6 | Consolidation and end of term test. |
| Advice: Less able pupils may not complete all sections. They can concentrate on understanding simple fractions.Most able pupils can progress further by solving problems involving more difficult fraction or percentages.Many activities can be taught as starters or games at the end of each lesson. Previous topics such as number bonds and times tables can also be revisited and reinforced in starter or plenary activities. |

Term 6

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| **Shape and Measure** | Learning Objectives. | Resources. |
| Week 1 | Stage 2: Find perimeters of simple shapes. | Sets of plastic shapes.Lesson templates.Textbooks.Worksheets.Follow me cards.Flip charts.Worksheets.Test sheets.ICT: My Maths, Twinkl and many more resources. |
| Stage 5: Find perimeters of other shapes. |
| Stage 5: Find the perimeter of compound shape. |
| Week 2 | Stage 3: Find area by counting squares. |
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| Stage 3: Know the formula for the area of a rectangle. |
| Week 3 | Stage 5: Find the areas of shapes made by rectangles. |
| Stage 5: Find the areas of compound shapes.  |
| Weeks 4,5and 6 | Consolidation and end of year test.End of year activities. |
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| Advice: Less able pupils may not complete all sections. They can concentrate on understanding number and simple addition and subtraction. Most able pupils can progress further by solving problems involving 4 or more digits.Many activities can be taught as starters or games at the end of each lesson. Previous topics such as number bonds and times tables can also be revisired and reinforced in starter or plenary activities. |