**Algebra**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Topics** | **Clip Number** | **R** | **A** | **G** |
| Algebraic expressions | 151, 152, 153 |  |  |  |
| Collecting like terms | 156, 157 |  |  |  |
| Multiplying and dividing algebra | 158, 159 |  |  |  |
| Substitution | 155, 780, 781 |  |  |  |
| Algebra terminology | 154 |  |  |  |
| Expanding brackets | 160, 161 |  |  |  |
| Factorising expressions | 167, 168, 169, 170, 171 |  |  |  |
| Index laws | 173, 174 |  |  |  |
| Changing the subject | 280, 281, 282, 283, 284 |  |  |  |
| Coordinates | 199 |  |  |  |
| Midpoints | 200 |  |  |  |
| Plotting straight line graphs | 205, 206, 207 |  |  |  |
| Gradient | 201, 202 |  |  |  |
| Distance-time graphs | 874, 875 |  |  |  |
| Sketch quadratic graphs | 251, 257 |  |  |  |
| Linear equations | 176, 177, 178, 179, 180, 181, 182, 183, 188, 189 |  |  |  |
| Linear equations on graphs | 217 |  |  |  |
| Quadratic expressions | 222 |  |  |  |
| Linear sequences | 196, 197, 198 |  |  |  |
| Other sequences | 261 |  |  |  |

**Ratio and proportion**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Topics** | **Clip Number** | **R** | **A** | **G** |
| Scale diagrams | 864, 865, 866, 867, 868, 869 |  |  |  |
| Simplifying ratios | 328, 329, 331 |  |  |  |
| Dividing in a ratio | 332, 333, 334 |  |  |  |
| Fractions and ratio | 330 |  |  |  |
| Direct proportion | 339, 340, 341, 343 |  |  |  |
| Inverse proportion | 342, 346 |  |  |  |
| Proportion graphs | 348 |  |  |  |
| Recipes | 739, 740, 741, 742 |  |  |  |
| Direct proportion | 344, 345 |  |  |  |
| Inverse proportion | 347 |  |  |  |

**Number**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Topics** | **Clip Number** | **R** | **A** | **G** |
| Ordering positive integers | 13, 14 |  |  |  |
| Ordering negative integers | 37 |  |  |  |
| Ordering decimals | 45, 46 |  |  |  |
| Ordering fractions | 60 |  |  |  |
| Addition and subtraction of positive integers | 18, 19, 20 |  |  |  |
| Multiplication and division of positive integers | 21, 22, 23, 144, 145 |  |  |  |
| Addition and subtraction of negative integers | 38, 39, 40, 41 |  |  |  |
| Multiplication and division of negative numbers | 42, 43 |  |  |  |
| Addition and subtraction of decimals | 47 |  |  |  |
| Multiplication and division of decimals | 48, 49, 50, 51, 135, 136 |  |  |  |
| Addition and subtraction of fractions | 65, 66 |  |  |  |
| Multiplication and division of fractions | 67, 68, 69, 70, 71, 72 |  |  |  |
| Place value: multiplying and dividing by 10 | 15, 16 |  |  |  |
| Order of operations | 24, 44, 120, 150 |  |  |  |
| Prime numbers, prime factorisation | 28, 29, 30 |  |  |  |
| Factors, multiples, HCF and LCM | 27, 31, 32, 33, 34, 35, 36 |  |  |  |
| Powers and roots | 99, 100, 101 |  |  |  |
| Using standard form | 121, 122, 123, 124 |  |  |  |
| Calculating with standard form | 125, 126, 127, 128 |  |  |  |
| Converting decimals to/from fractions | 52, 73, 74, 149 |  |  |  |
| Converting percentages to/from fractions | 75, 76, 82, 149 |  |  |  |
| Converting percentages to/from decimals | 55, 83 |  |  |  |
| Simplifying fractions | 59, 61 |  |  |  |
| Mixed numbers and improper fractions | 63, 64 |  |  |  |
| Fractions of amounts | 62, 77 |  |  |  |
| Increasing/decreasing by fractions | 78, 79 |  |  |  |
| Fraction problems | 80 |  |  |  |
| Percentages of amounts | 84, 85, 86, 87 |  |  |  |
| Percentage increase/decrease | 88, 89, 90 |  |  |  |
| Percentage change | 97 |  |  |  |
| Reverse percentages | 96 |  |  |  |
| Simple interest | 93 |  |  |  |
| Percentage problems | 98 |  |  |  |
| Rounding | 17, 56, 134 |  |  |  |
| Rounding to significant figures | 130 |  |  |  |
| Estimating answers | 129, 131, 132, 133 |  |  |  |
| Working with money | 747, 748, 749, 750, 751 |  |  |  |
| Money problems | 752, 753, 754 |  |  |  |
| Financial statements | 757 |  |  |  |
| Income and rates of pay | 755, 756 |  |  |  |
| Profit and loss | 759, 760, 761, 762 |  |  |  |
| Best buys | 763, 764, 765, 766, 767 |  |  |  |

**Geometry and measures**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Topics** | **Clip Number** | **R** | **A** | **G** |
| Geometric notation | 456 |  |  |  |
| Points and lines | 821 |  |  |  |
| Properties of 2D shapes | 822, 823, 824, 825, 826, 827, 828 |  |  |  |
| Angle on a line | 477, 478 |  |  |  |
| Complementary angles | 815 |  |  |  |
| Angles around a point | 812, 813, 814, 479, 480 |  |  |  |
| Angles on parallel lines | 481, 482, 483 |  |  |  |
| Angles in a triangle | 484, 485, 486, 487 |  |  |  |
| Angles in polygons | 560, 561, 562, 563, 564 |  |  |  |
| Translations | 637, 638 |  |  |  |
| Reflections | 639, 640, 641 |  |  |  |
| Enlargements | 642, 643 |  |  |  |
| Rotations | 648, 649 |  |  |  |
| Describing transformations | 650, 651, 652, 653, 654 |  |  |  |
| Congruence | 680, 681 |  |  |  |
| Properties of 3D shapes | 829, 830, 831, 832 |  |  |  |
| Nets of 3D shapes | 833, 834, 835, 836 |  |  |  |
| Metric units | 691 |  |  |  |
| Units of measure: Length | 692, 693, 694 |  |  |  |
| Units of measure: Mass | 695, 696, 697 |  |  |  |
| Units of measure: Volume/capacity | 698, 699, 702, 703, 704 |  |  |  |
| Units of measure: Time | 709, 710, 711 |  |  |  |
| Units of measure: Area | 700, 701 |  |  |  |
| Imperial units | 705, 706 |  |  |  |
| Currency conversion | 707, 708 |  |  |  |
| Conversion graphs | 712, 713 |  |  |  |
| Compound units: Speed | 716, 717, 718, 719, 720, 724 |  |  |  |
| Angles: Recognising and Estimating | 455, 457 |  |  |  |
| Angles: Measuring and Drawing | 458, 459, 460, 461 |  |  |  |
| Bearings | 492, 493, 494, 495 |  |  |  |
| Calculating perimeter | 549, 550, 551, 552 |  |  |  |
| Calculating area | 554, 555, 556, 557, 558, 559 |  |  |  |
| Circles | 592 |  |  |  |
| Circumference | 534, 535, 536 |  |  |  |
| Circle area | 539, 540, 541 |  |  |  |
| Surface area | 584, 585, 586 |  |  |  |
| Volume of cuboids | 568, 569 |  |  |  |
| Volume of prisms and cylinders | 570, 571, 572, 573, 574, 575 |  |  |  |
| Similar shapes | 608, 609, 610, 611 |  |  |  |

**Probability**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Topics** | **Clip Number** | **R** | **A** | **G** |
| Probability scale | 349, 350 |  |  |  |
| Probability of single events | 351, 352, 353, 354 |  |  |  |
| Experimental probability | 355, 356 |  |  |  |
| Multiple event probability | 358, 359, 360 |  |  |  |
| Listing elements in a set | 370, 371 |  |  |  |
| Venn diagrams | 372, 373, 374, 375, 376, 377, 378, 379, 380 |  |  |  |
| Probability from Venn diagrams | 383, 384 |  |  |  |
| Frequency trees | 368, 369 |  |  |  |
| Listing systematically | 670 |  |  |  |
| Independent events and probability trees | 361, 362, 363 |  |  |  |

**Statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Topics** | **Clip Number** | **R** | **A** | **G** |
| Collecting data, frequency tables | 401, 402, 403 |  |  |  |
| Two-way tables | 422, 423, 424 |  |  |  |
| Bar charts | 425 |  |  |  |
| Pictograms | 426 |  |  |  |
| Pie charts | 427, 428, 429 |  |  |  |
| Mode | 404, 415 |  |  |  |
| Mean | 405, 406, 407, 408, 417 |  |  |  |
| Median | 409, 416 |  |  |  |
| Range | 410, 414 |  |  |  |
| Choosing averages | 413 |  |  |  |
| Averages problems | 419, 420 |  |  |  |
| Scatter graphs | 453, 454 |  |  |  |