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| **Topics Studied in Year 6 Websites** :<https://www.bbc.com/education/subjects/z826n39>  <https://www.khanacademy.org/math/cc-sixth-grade-math/modal/e/understand-equivalent-ratios> | |
| **Number - number and place value**   * read, write, order and compare numbers & use place value * round to a required degree of accuracy use negative numbers in context, and calculate intervals across 0 | <http://www.cimt.org.uk/projects/mepres/book7/bk7i2/bk7_2i1.htm>  <http://www.cimt.org.uk/projects/mepres/book7/bk7i2/bk7_2i2.htm> |
| **Number - addition, subtraction, multiplication and division**   * Multiply numbers upto 4 digits * divide numbers up to 4 digits by a two-digit number * perform mental calculations * identify common factors, common multiples and prime numbers * use BIDMAS to carry out calculations involving the 4 operations * solve problems involving add, subtract, multiply and divide * use estimation to check answers to calculations | <http://www.cimt.org.uk/projects/mepres/book7/bk7i6/bk7_6i1.htm>  <http://www.cimt.org.uk/projects/mepres/book7/bk7i6/bk7_6i2.htm>  <http://www.cimt.org.uk/projects/mepres/book7/bk7i8/bk7_8i1.htm> |
| **Number - Fractions (including decimals and percentages)**   * use common factors to simplify fractions * compare and order fractions, including fractions >1 * add/subtract fractions, using the concept of equivalent fractions * multiply simple pairs of proper fractions * divide fractions by whole numbers * calculate decimal fraction equivalents [for example, 0.375 = 3/8] * multiply and divide numbers by 10, 100 and 1,000 * multiply decimals by whole numbers * divide in cases where the answer has up to 2 decimal places * round to specified degrees of accuracy * use equivalences between simple fractions, decimals and % | <http://www.cimt.org.uk/projects/mepres/book7/bk7i10/bk7_10i2.htm>  <http://www.cimt.org.uk/projects/mepres/book7/bk7i17/bk7_17i4.htm>  <http://www.cimt.org.uk/projects/mepres/book7/bk7i6/bk7_6i3.htm>  <http://www.cimt.org.uk/projects/mepres/book7/bk7i8/bk7_8i2.htm>  <http://www.cimt.org.uk/projects/mepres/book7/bk7i20/bk7_20i2.htm> |
| **Ratio and proportion**   * solve problems using integer multiplication and division facts * calculate percentages [eg. 15% of 360] * solve problems involving similar shapes using scale factor * solve problems using knowledge of fractions and multiples | <http://www.cimt.org.uk/projects/mepres/book7/bk7i17/bk7_17i3.htm> |
| **Algebra**   * use simple formulae * generate and describe linear number sequences * express missing number problems algebraically * find pairs of numbers that satisfy an equation with 2 unknowns * enumerate possibilities of combinations of 2 variables | <http://www.cimt.org.uk/projects/mepres/book7/bk7i16/bk7_16i1.htm> |
| **Measurement**   * use, read, write and convert between standard units, converting measurements of length, mass, volume and time, up to 3 decimal places * recognise that shapes with the same areas can have different perimeters * recognise to use formulae for area and volume of shapes * calculate the area of parallelograms and triangles * calculate, estimate and compare volume of cubes and cuboids | <http://www.cimt.org.uk/projects/mepres/book7/bk7i9/bk7_9i1.htm>  <http://www.cimt.org.uk/projects/mepres/book7/bk7i9/bk7_9i2.htm> |
| **Geometry - properties of shapes**   * draw 2-D shapes using given dimensions and angles * recognise, describe and build simple 3-D shapes, including making nets * find unknown angles in triangles, quadrilaterals, and regular polygons * illustrate and name parts of circles: radius, diameter and circumference * recognise angles: at a point, on a straight line, vertically opposite | <http://www.cimt.org.uk/projects/mepres/book7/bk7i5/bk7_5i4.htm>  <http://www.cimt.org.uk/projects/mepres/book7/bk7i5/bk7_5i6.htm> |
| **Geometry - position and direction**   * describe positions on the full coordinate grid (all 4 quadrants) * draw and translate/reflect simple shapes on the coordinate plane | <http://www.cimt.org.uk/projects/mepres/book8/bk8i14/bk8_14i1.htm> |
| **Statistics**   * interpret/construct pie charts & line graphs, use to solve problems * calculate and interpret the mean as an average | <http://www.cimt.org.uk/projects/mepres/book7/bk7i11/bk7_11i2.htm> |