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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> |