The BeDifferent Federation

Success and Challenge Card

BAND 5 Mathematics

Name:

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Class:

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1.I am able to use the commutative, associative and distributive 'rules' when solving calculations in the four operations
2.I am able to recognise, describe using correct vocabulary, and use number patterns and relationships to establish *e.g.* ***multiples, all factor pairs for a given number and common factors for two numbers, prime factors and composite (non-prime) numbers to 100 (recall primes to 19) square and cube numbers (and uses notation and recall all square numbers to 144)***
3. I am able justify solutions and determine in the context of the problem levels of accuracy using estimation, rounding and use of inverse operation
4. I am able to use a range of mental methods of addition and subtraction within the fluency focus *e**.g. decimal complements to 1***
5. I am able to multiply and divide numbers mentally using known facts and uses derived facts ***e.g. 2.3 x 4 = 9.2***
6. I am able to multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
7. I am able to use formal written column methods of addition and subtraction and reasons why they are appropriate
8. I am able to multiply numbers with up to four digits by a one or two digit number using a formal written method
9. I am able to divide numbers with up to four digits by a one digit number using the formal written method of short division and interprets remainders appropriately

31.I am able to distinguish between regular and irregular polygons based on reasoning about equal sides and angles
32. I am able to identify 3D shapes including cubes and other cuboids, from 2D Representations
33. I know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
34. I am able to identify: angles at a point and one whole turn (total 360°) angles at a point on a straight line and ½ a turn (total 180°)other multiples of 90°
35. I am able to draws given angles and measure them in degrees(°)
36. I am able to use the term diagonal and makes conjectures about the angles formed between sides, and between diagonals and parallel sides and other properties of quadrilaterals
37. I am able to identifies, describes and represents the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed
38. I am able to complete, read and interpret information in tables, including timetables
39. I am able to solve comparison, sum and difference problems using information presented in a line graph, collect, represent and interpret continuous data, decide upon an appropriate scale for a graph, e.g. labelled divisions representing 2, 5, 10, and read between the labelled divisions, e.g. reads 17 on a scale labelled in fives

21. I am able to convert between different units of metric units of measure for length, capacity and mass, ***e.g. 1.2 kg = 1200 g***
22. I am able to understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
23. I am able to measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres– **including *missing measure questions can be expressed algebraically e.g. 4 + 2b = 20 for a rectangle of sides 2 cm and b cm and perimeter of 20 cm***
24. I am able to calculate and compare the area of rectangles and use standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes
25. I am able to estimate volume, ***e.g.: using 1cm³ blocks to build cuboids (including cubes) and capacity (e.g. using water)***
26. I am able to calculate the duration of an event using appropriate units of time, ***e.g. 'a film starts at 6:45pm and finishes at 8:05pm. How long did it last?***
27. I am able to read and interpret timetables
28. I am able to solve problems involving converting between units of time
29. I am able to use all four operations to solve problems involving measure (**a: money; b: length; c: mass / weight; d: capacity / volume) using decimal notation, including scaling**
30. I am able to use the properties of rectangles to deduce related facts and find missing lengths and angles

10. I am able to add and subtract fractions whose denominators are multiples of the same number
11. I am able to multiply proper fractions and mixed numbers by whole numbers supported by materials and diagrams
12. I am able to solve numerical problems through a range of contexts ***addition and subtraction multi-step problems in contexts deciding which operation to use and why/ using knowledge of factors, multiples, squares and cubes/ scaling by simple fractions and problems involving simple rates***
13. I am able begin to write equations to express situations
14. I am able to locate points and solve problems in the first quadrant
15. I am able to understand and apply the knowledge of place value *e.g. **reads, writes, orders, compares, estimates, multiplies and divides numbers by 10,100 and 1000*** **up to 1 000 000 and to 3 decimal places and as fractions**
16. I am able to round decimals with two decimal places to the nearest whole number and to one decimal place (5F7) and any whole number up to 1,000,000
17. I am able to read Roman numerals to 1000 (M) and recognise years written in Roman numerals
18. I am able to recognise and converts mixed numbers, improper fractions and recognise and uses thousandths and relate to tenths, hundredths and decimal equivalents
19. I am able to compare and order fractions whose denominators are all multiples of the same number
20. I am able to identify equivalent fractions of a given fraction represented visually