The BeDifferent Federation

Morris Primary School

Success and Challenge Card

BAND 6 Mathematics

Name:

.....

Class:

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1. I am able to use my knowledge of the order of operations to carry out calculations involving the four operations ***e.g.2 + 1 x 3 = 5 and (2 + 1) x 3 = 9***			
2. I am able to use estimation to check answers to calculations and determine in the context of a problem, an appropriate degree of accuracy			
3. I am able to identify common factors, common multiples and prime numbers			
4. I am able to perform mental calculations, including with mixed operations and large numbers			
5. I am able to solve addition and subtraction problems and gives reason why operations and methods are appropriate			
6. I am able to multiply multi-digit numbers up to four digits by a two digit number using the formal written method of long multiplication and divides numbers up to four digits by a two digit number using the formal written methods of long and short division and use remainders			
7. I am able to use common factors to simplify fractions			
8. I am able to add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions			
9. I am able to multiply simple pairs of proper fractions, writing the answer in its simplest form **[e.g. ¼ x ½ = 1/8]**			
10. I am able to divide proper fractions by whole numbers *e.g. 1/3 ÷2=1/6*			
11. I am able to associate a fraction with division and calculates decimal fraction equivalents for a simple fraction ***e.g.3 ÷ 5 = 0.6 = 3/5***			

44. I am able to illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius			
45. I am able to draw and translate simple shapes on the coordinate plane, and reflect them in the axis/ *predicts missing coordinates using the properties of shapes. These might be/ expressed algebraically for example, translating vertex (a, b) to (a-2, b+3); (a, b) and (a+d, b+d) being opposite vertices of a square of side d*			
46. I am able to describe positions on the full coordinate grid (all four quadrants)			
47. I am able to interpret and construct pie charts and line graphs and uses these to solve problems: *connect work on angles, fractions and percentages to the interpretation of pie charts*			
48. I am able to recognise the difference between discrete and continuous data			
49. I am able to recognise when information is presented in a misleading way, e.g. compares two pie charts where the sample sizes are different			
50. I am able to when drawing conclusions, identify further questions to ask- *begin to decide which representation of data is most appropriate and why*			
51. I am able to calculate and interpret the mean as an average —*know when it is appropriate to find the mean* median and mode *of a data set*			

12. I am able to continue to use all known facts to calculate mathematical statements with increasing complexity			
13. I am able to multiply one-digit numbers with up to two decimal places by whole numbers			
14. I am able to use written division methods in cases where the answer has two decimal places			
15. I am able to solve problems involving: quantities where missing values can be found by using integer multiplication and division/ calculation of percentages and the use of percentages for comparison/ similar shapes where the scale factor is known or can be found/ unequal quantities (e.g. for every egg you need three spoonful of flour)			
16. I am able to use simple formulae to generate, express and describe: linear number sequences/ mathematical formula/ missing number, lengths, coordinates and angles problem/ equivalent expressions (a + b = b + a)			
17. I am able to find pairs of numbers that satisfy an equation with two unknowns			
18. I am able to find all possibilities of combinations of two variables			
19. I am able to solve increasingly complex numerical problems (including multistep) within the fluency focus and through a range of contexts using estimation to check answers and an appropriate degree of			
20. I am to solve problems which require answers to be rounded to specified degrees of accuracy			

21. I am able to identify the value of each digit in numbers to 10 000 000 and numbers with up to 3 decimal places and multiplies and divides by 10, 100 and 1000			
22. I am able to compare and order fractions, including fractions >1			
23. I am able to recognise, describe and use number patterns and relationships to make generalisations about sequences within the whole number system			
24. I am able to use negative numbers in context, and calculate intervals across zero			
25. I am able to use common multiples to express fractions in the same denomination			
26. I am able to recall and use equivalences between simple fractions, decimals and percentages			
27. I am able to solve number problems and practical problems within context			
28. I am able to use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit			
29. I am able to convert between miles and km*: connects conversion from km to miles in measurement to its graphical representation*			
30. I am able to recognise that shapes with the same areas can have different perimeters			
31. I am able to calculate the area of parallelograms and triangles			
32. I am able to recognise when it is possible to use the formulae for the area of shapes			

33. I am able to calculate, estimate and compare volume of cubes and cuboids using standard units, including centimeter cubed (cm^3) and cubic metres (m^3)			
34. I am able to recognise when it is possible to use the formulae for the volume of shapes			
35. I am able to solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places			
36. I am able to compare and classify geometric shapes based on their properties and sizes			
37. I am able to describe simple 3D shapes			
38. I am able to draw 2D shapes using given dimensions and angles			
39. I am able to recognise and build simple 3D shapes including making nets/ visualise a 3D shape from its net and matches vertices that will be joined/ visualise where patterns drawn on a 3D shape will occur on its net			
40. I am able to find unknown angles in any triangles, quadrilaterals and regular polygons			
41. I am able to recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and finds missing angles			
42. I am able to illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius			
43. I am able to draw and translates simple shapes on the coordinate plane, and reflects them in the axis/ *predicts missing coordinates using the properties of shapes.*			