26. I am able to convert between hours and minutes; minutes to seconds; years to months and weeks to days- *calculates time durations that pass through the hour* 

27. I am able to compare and classify geometric shapes based on their properties and sizes *e.g. quadrilaterals and triangles extending to parallelogram, rhombus and trapezium; isosceles and scalene* 

28. I am able to identify acute and obtuse angles; *compares and orders angles up to two right angles (180°) by size* 

29. I am able to decide if a polygon is regular or irregular

30. I am able to identify lines of symmetry in 2-D shapes presented in different orientations

31. I am able to recognise lines symmetry in a variety of diagrams including where the line of symmetry does not dissect the original shape

32. I am able to complete a simple symmetric figure with respect to a specific line of symmetry

33. I am becoming familiar with different orientations of lines of symmetry **e.g. vertical, horizontal and diagonal axes** 

34. I am able to describe positions on a 2-D grid as co-ordinates in the first quadrant. *draws and describes a pair of axes in one quadrant, with equal scales and integer labels, reads, writes and uses pairs of co-ordinates e.g.(2,5)* 

35. I am able to describe movements between positions as translations of a given unit to the left/right and up/down

36. I am able to plot specified points and draws sides to complete a given polygon

37. I am able to complete, read and interpretsinformation presented in bar charts (*e.g.: finds the difference between two bars showing temperatures, where one is 20°C and the other is 13°C, on a scale labelled in multiples of five*)

38. I am able interpret and present discrete and continuous data using bar charts, and time graphs using a greater range of scales



# The BeDifferent Federation

## **Success and Challenge Card**

## **BAND 4 Mathematics**

#### Name:

#### 

**Class:** 



1. I am able to understand and apply the commutative, associative and distributive 'rules' when solving calculations e.g.
- that $7 \times 8 = (5 \times 8) + (2 \times 8)$ (distributive) = $7 \times 2 \times 4$ (associative)
2. I am able to understand the relationship between non-unit fractions and multiplication and division, to include equivalence and fractions as operators
3. I am able to use a range of mental strategies for all four operations appropriate to context
4. I am able to use mental recall of multiplication facts including all tables up to 12 x 12 and quickly use corresponding division facts, <i>e.g.</i> uses their knowledge of tables and place value in calculations with multiples of 100, such as $600 \div 3 = 200$ can be derived from $2 \times 3 = 6$
5. I am able to use place value, known and derived facts to multiply and divide, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
6. I am able to recognise and uses factor pairs and commutativity in mental calculations
7. I am able to combines knowledge of number facts and rules to solve written calculations
8. I am able to add and subtracts numbers with up to 4 digits using the formal written
9. I am able to use methods of column addition and subtraction where appropriate
10. I am able to estimate and use inverse operations to check answers to a calculation
11. I am able to multiply two-digit and three-digit numbers by a one-digit number using formal written layout
12. I am able to add and subtract fractions with the same denominator
13. I am able to recognise and write decimal equivalents to $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ and of any number of tenths or hundredths

14. I am able to calculate fractions of quantities, including non-unit fractions where the answer is a whole number e.g. find $\frac{34}{4}$ of 20 litres
15. I am able to find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
16. I am able to solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why
17. I am able to solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects
18. I am able to solve problems involving increasingly harder fractions to
divide quantities, including non-unit fractions where the answer is a whole number and measure and money problems involving fractions and decimals to two decimal places
19. I am able to use and interpret coordinates in the first quadrant
20.I am able to convert different units of measure e.g. km to m-
builds on their understanding of place value and decimal notation to record metric measures accurately, including money, use multiplication to convert from larger to smaller units, use division to convert from smaller to larger units
21. I am able measures and calculates the perimeter of a rectilinear
figure including squares in centimetres and metres
22. I am able to find the area of rectilinear shapes using counting squares- understand area as a measure of surface/ relate area to arrays and multiplication
23. I am able to read, write and convert between analogue including clock faces using Roman Numerals and digital 12 and 24 hour clocks using am and pm
24. I am able to convert between different units of measure e.g. hours to minutes
25. I am able to estimate, compare and calculate different measures, including money in pounds and pence