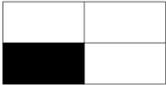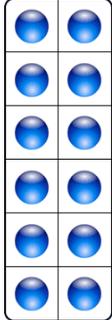# PROGRESSION IN THE TEACHING OF FRACTIONS, DECIMALS AND PERCENTAGES

Year 2 Objectives
• Recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity.
• Write simple fractions, e.g. ½ of 6 = 3 and recognise the equivalence of 2/4 and ½.

Part of a whole (item or quantity or set of items)	Result of division (including when the numerator is smaller than the denominator	Fraction of a number	Ratio (one object as a fraction of another)
Find 1/3, ¼, 2/4, ¾ of shapes, groups of items and continuous quantities, e.g. lengths, sand and water. • Complete the shading on this diagram so that one half is shaded: Solve problems such as finding ½ of numbers as groups of items, first practically, then recorded as number sentences. Show that 2/4 = ½ and 3/3 = 1 whole practically, to understand a whole group/item split into fractions. On a clock face, show ¼ to/past the hour. How far round the clock face is ¾ of the hour? • Use time and a clock face to support understanding of ½ and ¼ by solving problems	Say half of every whole number up to 20. • What fraction of the dots has a ring around them? Share 1, 2, 3 or 4 things such as pizzas, and chocolate bars between 3 and then 4 people to solve problems. • Use equal grouping and sharing to find unit fractions. • Plan a picnic and explore dividing different sorts of food and drinks between people using equal sharing and grouping. • Test statements to confirm whether they are always, sometimes, never true: *"There are 4 numbers less than 10 that divide exactly in half to give a whole number."* • Word problems: *"Think of a number and then halve it. The answer is 9. What could*	Count in halves up to 10, showing this on a number line and visually, e.g. as halves of a rectangular model. • Count in quarters up to 10 showing this on a number line and visually. (Use fact that 2/4 = ½ when counting in quarters.) • Fold card / string / ribbon into thirds or quarters. Use / create a fraction wall with halves, thirds and quarters. Link to the number line. ¼ ¼ ¼ ¼ 1/3 1/3 1/3 ½ ½ 1	Make a tower 1/3 or 3/4 of the size of this one. o Make the tower ½ as tall. o Make the tower twice / half as wide. • Make and talk about patterns for example with beads or multilink such as: o Using 20 cubes, make a shape that is ½ red and ¼ blue. What fraction is left? o In an array for 12, ½ of the cubes are blue, ¼ are red and the rest are green. How many are there of each colour? If

such as: *"Mary went into a shop at 10:30 and came out at 10:45. What fraction of the hour was she in the shop?"* • PE lesson: turn ½, ¼, ¾ turns clockwise and anti-clockwise. Understand a right angle as a quarter-turn. • Use two geo-strips to make and draw half and quarter turns from the same starting point. • Describe what is happening in repeating patterns:	*the number be?"*		there were 10 identical arrays, how many cubes of each colour would there be?