

<b>Multiplicative reasoning 2.13</b>		Length of unit: <b>3 weeks</b>	Week beg:	Year: 2	Teacher:
<b>Success criteria</b> Pupils can represent and explain how to find halves, thirds and quarters in the context of both discrete objects and continuous measures. They can show and tell the time on an analogue clock, including quarter past and quarter to the hour.	<b>Prior Learning:</b> Check that children can already <ul style="list-style-type: none"> <li>• count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens</li> <li>• solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher</li> <li>• recognise and know the value of different denominations of coins and notes</li> <li>• recognise, find and name a half as one of two equal parts of an object, shape or quantity</li> <li>• recognise, find and name a quarter as one of four equal parts of an object, shape or quantity</li> <li>• tell the time to the hour and half past the hour and draw the hands on a clock face to show these times</li> </ul>			<b>Resources</b> Maths vocabulary book Using and Applying in every maths lesson Assessment through guided maths Think Maths! Pitch and Expectations Y2 Models and Images Overcoming Barriers to learning Level 1 to 2/Level 2 to 3 Securing Level 1/Level 2/Level 3	
<b>Guidance</b> Pupils use fractions as 'fractions of' discrete and continuous quantities by solving problems using shapes, objects and quantities. They connect unit fractions to equal sharing and grouping, to numbers when they can be calculated, and to measures, finding fractions of lengths, quantities, a set of objects or shapes. They meet $\frac{3}{4}$ as the first example of a non-unit fraction. Pupils should count in fractions up to 10, starting from any number and using the $\frac{1}{2}$ and $\frac{2}{4}$ equivalence on the number line (for example, $1\frac{1}{4}$ , $1\frac{2}{4}$ [or $1\frac{1}{2}$ ], $1\frac{3}{4}$ , 2). This reinforces the concept of fractions as numbers and that they can add up to more than one. They become fluent in telling the time on analogue clocks and recording it.					

## Learning objectives

Pupils should be taught to:

Number and place value

- count in steps of 2, 3 and 5 from 0 and in tens from any number, forward and backward

Multiplication and division

- recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division ( $\div$ ) and equals (=) signs
- show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

Fractions

- recognise, find, name and write fractions  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{2}{4}$  and  $\frac{3}{4}$  of a length, shape, set of objects or quantity
- write simple fractions for example  $\frac{1}{2}$  of 6 = 3 and recognise the equivalence of  $\frac{2}{4}$  and  $\frac{1}{2}$ .

Measurement

- tell and write the time to five minutes, including quarter past / to the hour and draw the hands on a clock face to show these times
- know the number of minutes in an hour and the number of hours in a day.

## Pupil outcomes:

I can compare two pieces of ribbon and explain how I know that one piece is a third of the other.

I can show and explain how to share a cake between four people, how to share a packet of biscuits between four people and set the clock for quarter past four when they have a snack.