Number sense 4.10	Length of unit: **2 weeks**	Week beg:	Year:4	Teacher:

Success criteria

Pupils can make appropriate decisions about when to use their understanding of counting (including counting below zero), place value and rounding for solving problems including adding and subtracting. They can explain how to tell the time in both 12 and 24 hour clocks and can solve problems using their understanding of how to convert between different units of time.

Prior Learning:

Check that children can already

- count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
- recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- compare and order numbers up to 1000
- identify, represent and estimate numbers using different representations
- read and write numbers up to 1000 in numerals and in words
- solve number problems and practical problems involving these ideas
- count up and down in tenths, recognising that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10
- recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
- recognise and show, using diagrams, equivalent fractions with small denominators
- add and subtract fractions with the same denominator within one whole [for example, $^{5}/_{7} + {}^{1}/_{2} = {}^{6}/_{7}$]
- compare and order unit fractions and fractions with the same denominator
- solve problems that involve all of the above (fractions)
- tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
- estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m. / p.m., morning, afternoon, noon and midnight
- know the number of seconds in a minute and the number of days in each month, year and leap year
- compare durations of events, [for example, to calculate the time taken by particular events or tasks]

Resources

Maths vocabulary book

Using and Applying in every maths lesson

Assessment through guided maths

Think Maths!

Pitch and Expectations Y4 and Y5

Mind the Gap (L3 to L4)

Overcoming Barriers to Learning – L3 to 4 and L4 to 5 (available online)

Securing Level 3 and Securing Level 4 documents

Guidance

Using a variety of representations, including measures, pupils become fluent in the order and place value of numbers beyond 1000, including counting in tens and hundreds, and maintaining fluency in other multiples through varied and frequent practice.

Pupils use multiplication to convert from larger to smaller units.

Learning objectives	Pupil outcomes:
Pupils should be taught to: Number and place value ● count in multiples of 1000 ● find 1000 more or less than a given number ● count backwards through zero to include negative numbers ● recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) ● order and compare numbers beyond 1000 ● identify, represent and estimate numbers using different representations ● round any number to the nearest 10, 100 or 1000 ● solve number and practical problems that involve all of the above and with increasingly large positive numbers Measurement ● convert between different units of measure [for example, hour to minute] ● read, write and convert time between analogue and digital 12- and 24-hour clocks ● solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days Statistics ● solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	I can explain and show how I know what time I would need to arrive at St. Pancras train station in order to catch the train to Paris if I have to check in 30 minutes before the train leaves, for a range of departure times in a table. I can say what the time will be in an hour and a quarter, 120 seconds and 90 minutes in both 12- and 24-hour clocks.