Subject	Year	Month
Mathematics	7	March



Topic:

UNITS OF LENGTH, MASS, VOLUME, TIME AND MONEY

5 LESSONS

Content (Intent)

Prior Learning

KEY STAGE 2:

- Know that there are 10mm in 1 cm; 100cm in 1m etc.
- Know that there are 60 seconds in a minute, 60 minutes in an hour, 24 hours in a day
- Use 12- and 24-hour clocks, both analogue and digital
- Know the various denominations of money and 100p=£1

Future Learning

Year 8— Plans, Scales, Enlargements and Bearings Year 9— Direct and Inverse Proportion

Objectives

- Convert fluently between metric units of length
- Convert fluently between metric units of mass
- Convert fluently between metric units of volume / capacity
- Convert fluently between units of time
- Convert fluently between units of money

For teaching purposes

Possible Questions:

- Show me another way of describing 2.5km. And another.
- Show me another way of describing 3.4 litres. And another.
- Show me another way of describing 3.7kg. And another.
- Kenny thinks that 14:30 is the same time as 2.30 p.m. Do you agree?
- What's the same, what's different: 2 hours 30 minutes, 2.5 hours,
 2½hours and 2 hours 20 minutes?

Possible Misconceptions:

- may write £3.5 instead of £3.50,
- may apply column addition and subtraction when calculating with time.
 (incorrect understanding that there are 100 minutes in a hour)

How will understanding be assessed & recorded

• may thinking that 15:00 is 5 o' clock (e.g)

Pedagogical notes (implementation)

Weight is the force due to gravity, and is calculated as **mass** multiplied by the acceleration due to gravity. Therefore **weight** varies due to location while **mass** is a constant measurement.

Prefix with Latin origin

'centi-' = one hundredth 'milli-' = one thousandth.

Prefix with Greek origin

'kilo-' = one thousand.

Notation

Abbreviations of metric units: m, cm, mm, kg, g, l, ml Abbreviations of imperial units: lb, oz Miles should be written in full. (Impact)

BAM task 10 - Units

End of Year Assessment in June/July

How can parents help at home?

MathsWatch clips (Qualifications KS3)

N7a, N7b, N7c

Further reading/discussion

Reading / Enrichment	Literacy	Numeracy Links	Careers Links
KM: Sorting units	Length, distance		Carpenter
KM: Another length	Metre, centimetre, millimetre Mass, weight		Banker
KM: Measuring space	Tonne, kilogram, gram, milligram		Basic numeracy
KM: Another capacity	Volume, Capacity Litre, millilitre		requirement for all careers
KM: Stick on the Maths: Units	Hour, minute, second		
NRICH: <u>Temperature</u>	Imperial units : Inch, foot, yard, Pound, ounce, Pint, gallon		