1 A man visits the USA and buys a gift costing $27.99

£5 is approximately $8

What is the approximate cost of the gift in pounds?

    A £8.50   **C** £17.50

    B £13.60   **D** £44.80

2 A plumber is planning central heating for a building. The existing boiler has a heat output of 150 000 BTUs (British Thermal Units) per hour. The plumber converts this to kilowatt-hours to see if the boiler is big enough.

1 000 BTUs per hour is approximately equal to 0.3 kilowatt-hours

A heat output of 150 000 BTUs per hour is approximately the same as

    A 45 kilowatt-hours   **C** 450 kilowatt-hours

    B 50 kilowatt-hours   **D** 500 kilowatt-hours

3 A man weighs himself after a training session. The scale shows 12 stone 3 pounds.

**1 stone = 14 pounds
1 kilogram is approx 2.2 pounds**

Which calculation gives his approximate weight in kilograms?

    A (12 x 14 + 3) ÷ 2.2   **C** (12 x 14) + (3 ÷ 2.2)
    B (12 x 14 + 3) x 2.2   **D** (12 x 14) + (3 x 2.2)

4. A family changes £560 into euros.

**£1 = 1.4 euros
No commission charged**

How many Euros do they receive, to the nearest ten euros?

    A 80   **C** 780

    B 400   **D** 224

Answer sheet and teachers' notes
OHT: Level 2 converting measures sample exam questions.

1	–	**C** £17.50	(from Feb 05 exam)
2	–	**A** 45 kilowatt-hours	(from Feb 05 exam)
3	–	**A** (12 x 14 + 3) ÷ 2.2	(from Jan 05 exam)
4	–	**C** 780 euros	(from Jan 05 exam)

Exam tips:
● Would you expect more or less units after the conversion? This will tell you whether you need to multiply or divide. E.g. Q3 – divide by 2.2 because you would expect the answer to be a smaller number of kilograms than pounds. Q4 – multiply (also see below).
● Eliminate answers that are not sensible. E.g. Q4 – if you exchange pounds for euros you are going to end up with more euros than pounds so the only sensible answer is C.
● If you see the word 'approximate', round the numbers you are working with. E.g. Q1 – round the $27.99 to $28.
● If asked to give a rounded answer – eliminate any answers that are not rounded correctly. E.g. Q4 – answer cannot be D (€224) because you are asked to give an answer to the *nearest 10* euros.
● Don't be put off by lots of zeros. E.g. Q2 – work with 150 (not 150 000).
● Cross out irrelevant information. E.g. 'No commission charged' in Q4, all the extra information about the plumber and the boiler in Q3.

Main Curriculum Links
MSS1/L2.1 calculate with sums of money and convert between currencies
(a) understand that exchange rates of currencies are not fixed, but vary on a daily basis
(b) understand buying rate and selling rate
MSS1/L2.6 Calculate with units of measure between systems, using conversion tables and scales, and approximate conversion factors
(a) know rough equivalencies between common metric and imperial measures, e.g. 1lb is about 450 grams, a litre is a bit less than 2 pints, a gallon is about 4.5 litres, a kilogram is a bit more than 2lb, a metre is a bit more than a yard, an inch is about 2.5 cm, a foot is about 30 cm.
(b) know how to read conversion scales and tables
(c) know how to use approximate conversion factors, e.g. 1 inch = 2.54

● A set of nine enlarged Level 2 negative number practice questions, suitable for printing as OHTs, on our site at:
http://www.skillsworkshop.org/l2num/oht1neg.pdf

● A set of 14 Level 2 practise measure questions, in smaller print – suitable for homework or revision, available on our site at:
http://www.skillsworkshop.org/mss/l2mss1-practice.pdf