

# Working with Decimals

## Contributor's notes

These resources were designed for a dyslexic Level 1 learner (with an interest in cars and a visual learning style) but can be used with any Entry 3-Level 2 learners including those studying NVQ1 and 2 Motor Vehicles.

## Multiplying Decimals

- You will need 2 pages of white card and 1 each of 2 other colours.
- Print pages 1 and 4 on white card.
- Print pages 2 and 3 on coloured card.
- Cut out the cards.
- Ask the learners to pick a white card and a coloured card, and work out the cost of the petrol, rounding to the nearest whole number of pence and then converting to pounds and pence.
- Use the cards from page 2 for Level 1 learners (multiplying decimals by a whole number).
- Use the cards from page 3 as an extension for Level 2 learners (multiplying decimals by decimals).
- Optional money resources on page 4 of next resource (below)

## Adding and subtracting decimals

- Hand out page 1 and give students a set time to search for car accessories (and prices) on the internet.
- Alternatively, use pages 2-3 if students do not have internet access or find internet searching difficult due to spelling, etc.

### Main curriculum elements covered

#### **N2 (Fractions, decimals and percentages)**

N2/L1.5 Add, subtract, multiply and divide decimals up to two places.

N2/L1.7 Approximate decimals by rounding to a whole number or two decimal places

N2/L2.6 Add, subtract, multiply and divide decimals up to three places.

#### **MSS1 (Common measures)**

MSS1/E3.1 Add and subtract sums of money using decimal notation.

MSS1/L1.1 Add, subtract, multiply and divide sums of money and record

MSS1/L2.1 calculate with sums of money and convert between currencies



- Pick a **price** card and an **amount of petrol** card.
- Work out the cost of the petrol in pence, and in pounds and pence.
- Which notes will you need to pay for it?
- How much change will you get?

<b>14 litres</b>	<b>15 litres</b>
<b>16 litres</b>	<b>17 litres</b>
<b>18 litres</b>	<b>19 litres</b>
<b>20 litres</b>	<b>22 litres</b>
<b>25 litres</b>	<b>27 litres</b>
<b>29 litres</b>	<b>30 litres</b>

<b>10.5 litres</b>	<b>14.8 litres</b>
<b>16.3 litres</b>	<b>17.9 litres</b>
<b>18.2 litres</b>	<b>19.7 litres</b>
<b>20.25 litres</b>	<b>22.75 litres</b>
<b>25.55 litres</b>	<b>27.5 litres</b>
<b>29.25 litres</b>	<b>30.75 litres</b>

97.9p	95.3p
98.6p	102.4p
96.1p	99.5p



- Choose 3 things you would like to buy for your car.
- Work out the total cost.
- Which notes will you need to pay for it?
- How much change will you get?

<p>Foot pump £4.87</p>	
<p>Car mats £14.99</p>	
<p>Steering lock £26.49</p>	
<p>Wheel cover £8.25</p>	

<p>Car polish £9.99</p>	
<p>Gear knob £23.75</p>	
<p>Petrol can £4.49</p>	
<p>Wheel trim set £24.79</p>	



