# Reasoning and Problem Solving Kilograms and Kilometres

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## **Developing**

1a. 3,000g, 1,000g

2a. Various possible answers, for example:

60kg > 7,000g, 7,000g > 2,000g,

2,000g < 60kg

3a. Beth is correct. 2 packs of strawberries weigh 1,000g. 1,000g is equivalent to 1kg.

1kg of strawberries cost £4.00.

#### **Expected**

4a. First row: 1.6km Second row: 4.3km Third row: 0.2km

5a. Various possible answers, for example:

3,300m > 2,800m, 2,800m > 2.5km

2.5km < 3,300m

6a. Nadia is correct. 1,500g is equivalent

to 1.5kg. 1 kg costs £2.60 so 0.5kg would

cost £1.30. £2.60 + £1.30 = £3.90.

## <u>Greater Depth</u>

7a. First row: 3.09km Second row: 4.85km Third row: 1.15km

8a. Various possible answers, for example:

4,500g > 4.05kg, 4,500g > 4,320g,

4,320g > 4.05kg

9a. Ruby is not correct.

20 apples would weigh 20 x 105g =

2,100g, which is equivalent to 2.1kg. 2kg of apples would cost  $2 \times £1.60 = £3.20$  so

2.1kg would cost more than £3.20.

#### **Developing**

1b. 40,000m, 10,000m

2b. 2kg = 2,000g, 5,000g > 2kg,

5,000g > 2,000g

3b. Jack is not correct.  $4 \times 500g = 2,000g$ .

2,000g is equivalent to  $2kg. 2 \times £3 = £6$  so

4 bunches of bananas would cost £6.00

# **Expected**

4b. First row: 0.5kg Second row: 2.5kg Third row: 2.3kg

5b. Various possible answers, for example:

3.9 kg > 3.3 kg, 3.3 kg < 3,500 g,

3,500 < 3.9kg.

6b. Ewan is not correct.

 $3 \times 500g = 1,500g$ , which is equivalent to

1.5kg.  $1.5 \times £2.80 = £4.20$ .

#### Gr<u>eater Depth</u>

7b. First row: 4.74kg

Second row: 2.31kg

Third row: 6.15kg

8b. Various possible answers, for example:

3.7kg > 3.07kg, 3.7kg > 3,007g, 3.07kg >

3,007g

9b. Harrison is not correct.

10 pears would weigh 10 x 252g = 2,520g, which is equivalent to 2.52kg. 2.5kg would cost  $2.5 \times £1.90 = £4.75$  so 2.52kg would

cost more than £4.75.

