Functional Skills: decimals (L2)

Name _____ Date _____

Questions 1 to 3 are about motor cars.

1 The government puts cars into groups, A, B, C or D, according to their carbon dioxide (CO_2) emissions.

The table below shows the numbers of new cars people bought in 2001 in these groups.

New cars in 2001

Group	Number of cars (millions)
A	0.59
B	0.58
C	0.50
D	0.79

What is the difference between the number of cars in group D and the number of cars in group A?

A	2 000
B	20 000
C	200 000
D	2 000 000

2 A man wants a new car. He looks for a **low** carbon dioxide (CO_2) emissions and a **high** miles per gallon (mpg) figure.

He lists the information for different models.

Model	CO_2 (grams per kilometre)	mpg
Citroen Saxo 1.1	145	46.3
Daewoo Matiz	161	44.1
Fiat Punto 1.2	136	49.6
Ford Ka 1.3	154	42.2
Ford Focus 1.4	158	44.1
Peugeot 206 1.1	154	45.6
Renault Clio 1.2	139	49.9
Rover 25 1.1	160	42.2
Vauxhall Corsa 1.2	151	44.8
VW Polo 1.2	142	47.9

How many cars in his list have CO_2 emissions **less than** 155 grams per kilometre **and** also do more than 44 miles per gallon?

A	6
B	7
C	8
D	9

3   The man looks up prices of imported cars on the internet.

£1 = 1.4 euros

How much is 10 000 euros in pounds, to the nearest 10 pounds?

A   £7 140
B   £9 860
C   £10 140
D   £14 000

4   Some friends go for a walk.
They walk 12 kilometres.

1 mile = 1.6 kilometres

How many miles do they walk?

A   1.92 miles
B   7.5 miles
C   10.4 miles
D   19.2 miles

5   A shop assistant takes 3 hours to fill 50 display stands around the store.
His rate of pay is £4.50 per hour.

What is his average payment per stand?

A   3p
B   9p
C   27p
D   150p

6   A woman drives a van at an average speed of 60 kilometres per hour.
8 kilometres is approximately equal to 5 miles.

What is her average speed in miles per hour (mph)?

A   7.5mph
B   12mph
C   37.5mph
D   96mph

7 A nurse weighs a baby at birth and again one month later.

The readings are 3.7 kg and 5.2 kg.

What was the increase in the baby's weight during the month?

A 1.25kg
B 1.4kg
C 1.5kg
D 1.55kg

8 An older baby weights 11 kilograms.

A parent converts this weight to pounds.

> **1 kilogram = 2.2 pounds**

What is her weight in pounds?

A 5.0 pounds
B 13.2 pounds
C 22.0 pounds
D 24.2 pounds

9 A company delivers laundry to the leisure centre.
The distance by road is 17 miles from the laundry.

> 1 kilometre = (approximately) 0.6 mile

What is 17 miles in kilometres, to the nearest kilometre?

A 10km
B 11km
C 28km
D 29km

10 A shop assistant loads bales of peat onto a pallet.
Each pallet is 1 metre long and 1 metre wide.
Bales can be stacked 1 metre high.

The bales of peat measure 0.5m x 0.33m x 0.33m.
What is the maximum number of bales he can load on each pallet?

A 6
B 8
C 9
D 18

11   A company is offering rides in a balloon.
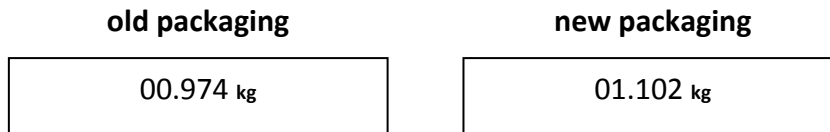The pilot needs to know the total weight of passengers in the balloon.

One passenger states that her weight is 114 pounds.

1 kilogram = 2.2 pounds

What is 114 pounds in kilograms, to the nearest 5 kilograms?

A   50kg
B   60kg
C   230kg
D   250kg

12   The worker in the dispatch section of a games company compares the weights of the game in two types of packaging.

The diagram shows the display of the scales.

old packaging   **new packaging**

00.974 kg

01.102 kg

The worker rounds each weight to the nearest 10 grams.
What is the difference in the weights to the nearest 10 grams?

A   100g
B   120g
C   128g
D   130g