AQA

Functional Skills Certificate
FUNCTIONAL MATHEMATICS
Level 1
Data Book (Examination)

Insert

Instructions
- This copy of the Data Book is for use in the examination. It should not be given to students in advance.

Advice
- This book will not be collected in for marking. Ensure that all working that you wish to have marked is written in the space provided in the question/answer book.

Data Sheet for Cars

New cars have **official** values for

the number of miles the car travels per gallon of fuel (mpg)
and
the number of grams of CO_2 the car produces per kilometre (g/km).

Here are the official values for two cars.

	Miles per gallon (mpg)	CO$_2$ produced (g/km)
Ford Focus Estate	67	110
Renault Clio	83	90

Actual mpg

The **actual** mpg depends on how, when and where the car is driven.
It is usually lower than the official value.

Spending on fuel

Use these steps to work out the amount you spend on fuel.

Step 1   Work out   the number of miles you drive ÷ your **actual** mpg

Step 2   Work out   the answer to **Step 1** × the cost per gallon of fuel

The answer to **Step 2** is the amount you spend on fuel.

Vehicle tax

You must pay vehicle tax on your car.
The cost depends on the official value for the amount of CO_2 the car produces.

Here are some of the yearly costs of vehicle tax for new cars bought after 1 April 2017

CO_2 produced (g/km)	Yearly cost	
	In year 1	After year 1
1 – 50	£10	£140
51 – 75	£25	£140
76 – 90	£100	£140
91 – 100	£120	£140
101 – 110	£140	£140

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Data Sheet for Transporting hamsters

Two popular breeds of hamster are Syrian hamsters and Dwarf hamsters.
They are transported in cuboid boxes.

Minimum height of a box

Syrian hamsters   15.2 cm
Dwarf hamsters   12.7 cm

Minimum floor area of a box, per hamster

Age of hamster	Syrian hamsters	Dwarf hamsters
From birth to 5 weeks	45 cm^2	32 cm^2
From 5 weeks to 8 weeks	71 cm^2	48 cm^2

Windows

At least two sides of a box must have windows.

Temperature

Use these steps to convert degrees Celsius (°C) to degrees Fahrenheit (°F)

Step 1   Work out   temperature in Celsius (°C) $\times$ 9
Step 2   Work out   answer to **Step 1** $\div$ 5
Step 3   Work out   answer to **Step 2** + 32

END OF DATA