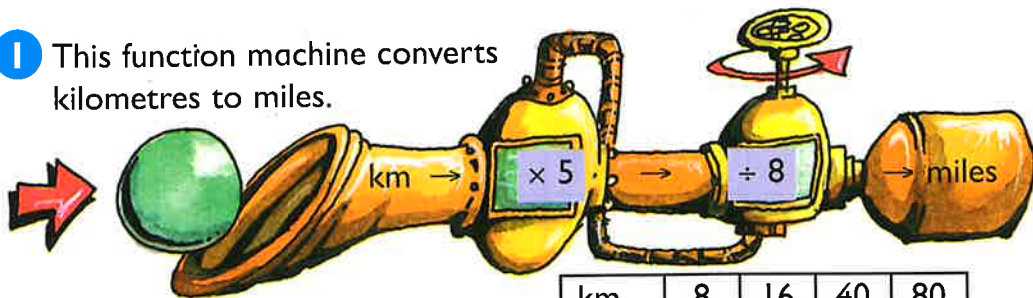


Using conversion graphs

Begin to plot and interpret the graphs of simple linear functions arising from real-life situations



1 This function machine converts kilometres to miles.



You need:

- a copy of RCM 20
- a ruler

a Use the function machine to construct a table of values.

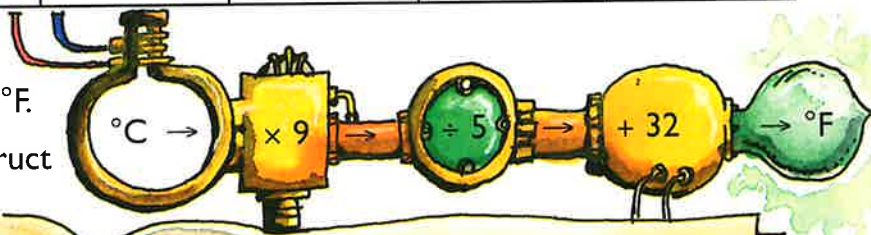
km	8	16	40	80
miles				

b Use your table to plot points on the squared grid on RCM 20: Squared grid and graph paper. Draw a conversion graph. Give your graph a title.

c Use your graph to convert these distances. Copy and complete the table.

From Glasgow	To Dundee	To Edinburgh	To Gourock	To Largs	To Oban	To Perth
miles	80	45		30	90	55
km			40			

2 This function machine converts °C to °F.



a Use the function machine to construct a table of values. Round up to the nearest whole degree.

°C	0	5	16	28	35
°F					

b Plot the points on the graph paper. Draw a conversion graph. Give your graph a title.

c Use your graph to convert these temperatures from °C to °F.

Boston	25°C	Dubai	39°C
Canberra	11°C	Luxor	41°C
Madrid	27°C	Paris	19°C
Tokyo	22°C	Bangkok	33°C

3 4.5 litres ≈ 8 pints

a Decide how many points you need to plot to draw an accurate graph to convert up to 50 litres to pints.

b Choose suitable scales for the axes.

c Draw the graph on graph paper.

d Label the axes and give the graph a title.

HINT

You may need to construct a table of values.