

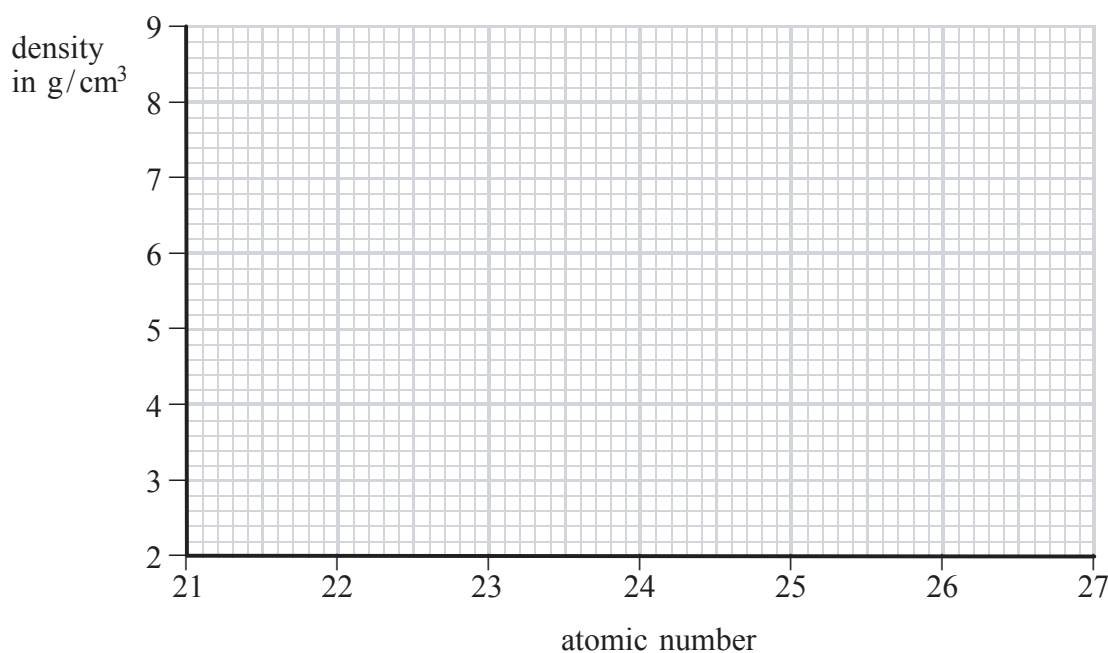
4. (a) The table shows information about some metallic elements.

element	atomic number	density (g/cm ³)
scandium	21	3.0
titanium	22	4.5
vanadium	23	6.0
chromium	24	7.2
cobalt	27	8.9

(i) Find the position of these metals in the periodic table.
What name is given to these metals?

..... (1)

(ii) On the grid draw a graph of density against atomic number for these metals.



(3)

(iii) Use the periodic table to find the atomic number of manganese and iron.
Then use your graph to estimate a value for their density.
Write your answers in the table below.

element	atomic number	density (g/cm ³)
manganese		
iron		

(2)

(b) In the table below put a tick against those metals that usually form coloured compounds.

metal	forms coloured compounds (✓)
calcium	
chromium	
cobalt	
copper	
potassium	

(1)

Q4

(Total 7 marks)