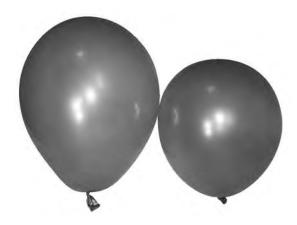
7 A student blows up two balloons to the same size.

She puts one balloon into a freezer.

After a while, the student compares the two balloons.

The balloon that has been cooled is smaller.



(a) Use ideas about particles to explain why the cooled balloon is smaller.	(4)



(b) The student decides to investigate the link between temperature and the size of the balloon.

She writes a plan.



I will change the temperature of the balloon by putting it into a freezer.

To get a range of different temperatures I will put the balloon into the freezer for different times.

I will measure the temperature of the balloon using a thermometer.

To measure the size of the balloon I will take it out of the freezer and line it up next to a ruler.

To make sure it is a fair test I will repeat the experiment three times.

I will plot a graph of size against temperature.

There are several faults in the student's plan.

Identify **three** of these faults and suggest an improvement to correct each one.

1	
n	
2	
3	
	(Total for Question 7 = 10 marks)



TOTAL FOR PAPER = 60 MARKS

(6)