

Fizzy drinks go flat

When you take the top off a can of a fizzy drink and leave it, it goes 'flat' because the gas comes out of the water. In this experiment, you will be investigating what happens to the mass of the drink when the drink goes flat.

Apparatus

- Can of fizzy drink (coke)
- Balance
- Stop clock

Prediction

Read the three predictions below. Do you agree with one of them? Which one? Perhaps you've got another theory of your own?

1. Explain which prediction and explanation you think is correct.

2. Explain your prediction by drawing particle diagrams if you can.



3. Planning

Read the following method for your investigation. You will need to record the results for about 5 minutes.

1 - Weigh your coke can (can closed) and write down the weight.

_____ g (grams).

2 - Open your can off the balance immediately, and put again on balance starting the stop clock.

3 - Record results for each minute during 5 minutes in the table below.

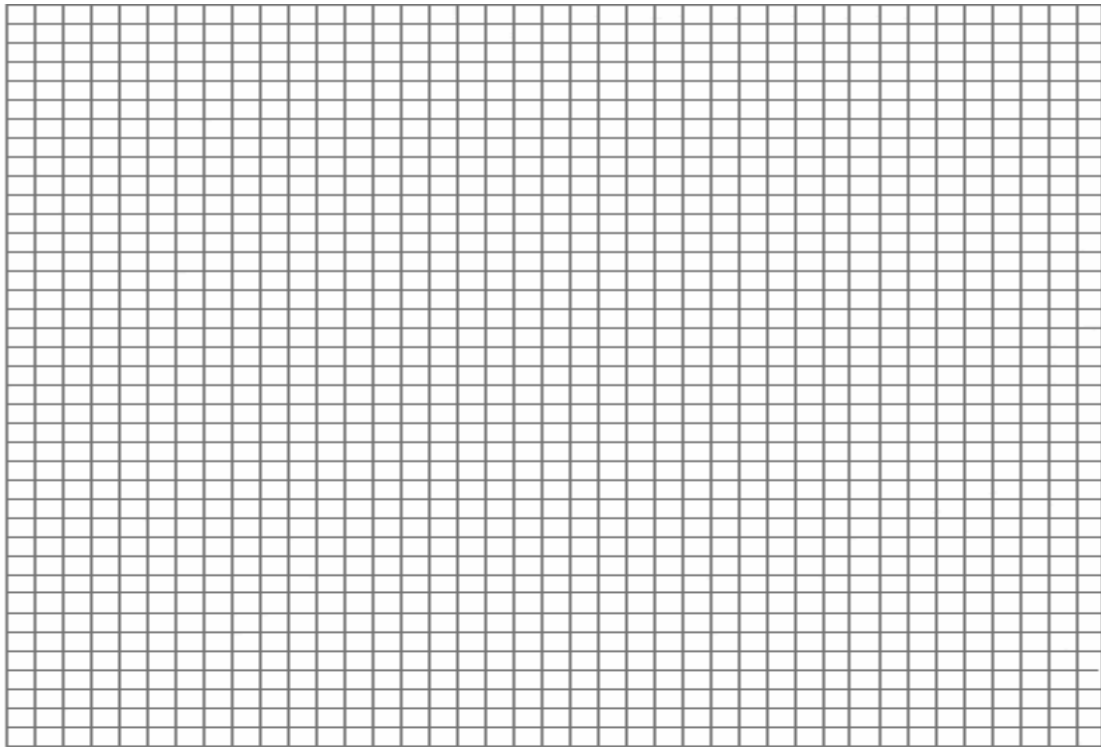
4. Recording your results

Time (minutes)	Weight (grams)
0	
1	
2	
3	
4	
5	

5. Considering your results

Draw a graph to show how the mass varies with time. Join up the points with a line of best fit.

(Is this a straight line or a curve?)



6. Conclusion

Was your prediction correct? If not, which theory do you now think is correct?

7. Use the graph to estimate the mass of the can of drink once it has gone completely flat.
