

Organic or conventional farming – what’s the difference?

Data sheet A4 – Sheep farm data

These data come from a real scientific investigation comparing sheep production on conventional and organic farms. The study collected data from four flocks.

Your task is to analyse the data from all the data sheets, and make recommendations to help the farmers increase their yields of lamb and wool.

Lamb performance

	Year	Lower Twiddle Farm	Higher Twiddle Farm	Cairn Farm	Burnside Farm
Type of farm		conventional	organic	organic	organic
Birth mass (kg)	1998	4.1	4.1	4.1	4.3
	1999	3.8	3.9	4.2	4.0
	2000	4.0	4.4	4.4	4.2
Daily liveweight gain, DLWG (g)	1998	202	183	207	213
	1999	202	188	210	188
	2000	214	204	215	212

Questions

- 1
 - a) What was the range of mass of the lambs born at the start of the study?
 - b) Describe how the mass of the lambs born in the four flocks changed over the three years of the study.
 - c) Which type of farming produced heavier lambs in 2000?
- 2
 - a) Describe how the daily gain in liveweight (mass) of the lambs born in the four flocks changed over the three years of the study.
 - b) Do the results provide evidence that one type of farming produces a bigger daily gain in liveweight (mass) of lambs?