Crowded-ness



The four maps of imaginary towns above are all drawn to the same scale (about 5km wide) and have about the same population.

Each dot on the map shows where one person or family lives.

In reality, there would be a *lot* more dots for a typical town – and we would be using a computer to calculate the measure – but we have to design our measure first!

1. Look at the maps and put them in order of how “crowded” you think they look.
2. Now design a method for calculating a measure of “crowded-ness”
3. Compare your measure with other students’ work. Which do you think is the better measure and, most important, explain why.
4. Try to devise a better measure.
5. Extended task - find the population of some real medium-size towns and cities. How many people might one of the dots on the map above *really* represent? Look at satellite photos online and try to guess where most people live – could you estimate a value for your crowded-ness measure?