

1A Populations & Samples

Population

Census

Sample

Sampling Frame

	Advantages	Disadvantages
Census	→ Completely accurate result	→ Time consuming → Cannot be used if the sampling process would render the items unusable → Processing a lot of data takes a long time
Sample	→ Less time-consuming → Fewer responses needed → Less data to process	→ Data might not be accurate → Sample might not be properly representative of the population

1. A supermarket wants to test a delivery of avocados for ripeness by cutting them in half.
 - a) Suggest a reason why the supermarket should choose a sample rather than a census

The supermarket tests a sample of 5 avocados and find that 4 of them are ripe. They estimate that 80% of the total are ripe.

- b) Suggest a way this estimate could be improved