Data collection

Mia is investigating the variation in daily total rainfall for Camborne in 2015.
She used the large data set to select a sample from all 184 days.

    a   Describe how Mia could take a stratified sample of size 30 from the large data set for Camborne in 2015.

    b   Give an advantage of using a stratified sample.

Silver

Toby is investigating the variation in daily total sunshine for Heathrow in May, June and July 1987.
He used the large data set to select a sample of size 30 from the May, June and July data for 1987.
Toby selected the first value using a random number from 1 to 4 and then selected every third value after that.

    a   State the sampling technique Toby used.

    b   From your knowledge of the large data set, explain why this process will not generate a sample of size 30.

Bronze

Emily is investigating the variation in daily mean windspeed for Leeming in 1987.
She used the large data set to select a sample from all 184 days.

    a   Describe how Emily could take a random sample of 20 days from the large data set for Leeming in 1987.

    b   Give a disadvantage of using a random sample.

    c   Suggest a more suitable sampling method.