We will gather data from the class on the question of how old Nelson Mandela, the first president of South Africa following apartheid, was at his death.

(a) Identify the observational units and variables.

(b) Was this an observational study or a randomized experiment?

(c) Did this study make use of random sampling, random assignment, both, or neither? Also explain the purpose of any randomness that was used.

(d) Examine graphical displays of the data. Comment on what they reveal.

(e) Conduct a two-sample *t*-test of whether the class data provide strong evidence in support of the cognitive bias known as anchoring. Include all aspects of a hypothesis test (hypotheses, check of conditions/assumptions, test statistic, p-value, conclusion).

(f) Follow up with a 99% confidence interval to estimate the magnitude of the anchoring effect in this context. Interpret the interval, and also indicate whether it is consistent with the result of the hypothesis test.