A valid conclusion is one that is supported by unbiased data that has been interpreted properly.

Statistical Bias can occur in the collecting of the data and/or in the analyzing and reporting of the data.

Biases in Collecting Data

Statistical bias occurs when a systemic error contributes to the statistics of a sample being different from those of the population being sampled.

- **Sampling Bias**
  - _____
  - _____
  - Example – a pollster in a mall randomly selected people to interview as they walked by.

See Ex. 1 Pg. 237

- **Non-Response Bias**
  - _____

    _____
  - Example – a mail-in survey was sent to randomly selected households to ask them their opinions about a new playground in the neighbourhood.

See Ex. 2 Pg. 237

- **Measurement Bias**
  - _____

    _____
  - Example – when measuring the height of students in our class some students mistakenly measured in inches instead of in cm.

See Ex. 3 Pg. 238

- **Response Bias**
  - _____

    _____
  - A "leading" survey question can also result in response bias.
  - Example – a class of grade 9 students was asked by their gym teacher to put up their hands if they have had a date with a girl.

See Ex. 4 Pg. 238

Read Page 239 "Key Concepts" and Answer "Discuss the Concepts"

Practice: Pgs. 239-243 # 1-6, 9, 12, 13 Answers on pg. 550 ***QUIZ NEXT CLASS***