STAT 110
Chapter 8 Definitions

measure – assign a number to represent a property of a person or thing

instrument – device used to make a measurement

units – used to record the measurements (feet, pounds, inches, gallons, etc.)

variable – the result of a measurement that takes different values for people or things that differ in whatever we're measuring

valid – a variable is a valid measure of a property if it is relevant or appropriate as a representation of that property

bias – systematic deviation from the true value of the property

random error – repeated measurements on the same individual give different results

reliable – when random error is small

measured value = true value + bias + random error