

## Section 1.2: Variables and Data

Monday, January 8, 2018 9:05 AM

definitions:

variable  $\equiv$  a characteristic that either

- ① changes over time
- ② changes for different individuals or objects under consideration

examples of ①: tree height, diameter over a period of 10 years

②: at a particular time, heights of all trees in a certain area

experimental unit - individual or object on which a variable is measured

univariate data - result of a single variable measured on a single experimental unit

bivariate data - two variables

multivariate data - more than two

---

qualitative variable - measure is a quality or characteristic

→ does not result in a numerical value  
(resulting measurement is called categorical data)

examples: political party  
hair colour  
model of car

quantitative variables: measure is a numerical quantity

examples: height  
number of students in a class