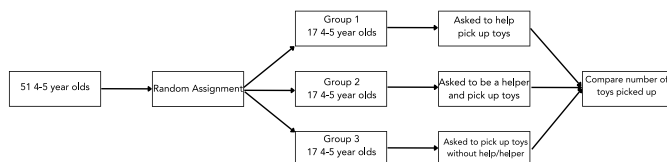


1.
 - a. The scenario is an observational study because treatments were not imposed on the pregnant women. The researchers asked the women about their chocolate consumption and did not assign them to either eat chocolate or not eat chocolate.
 - b. The explanatory variable is the amount of chocolate consumed during pregnancy and is quantitative.
 - c. The response variable is whether or not the women developed preeclampsia before giving birth and is categorical.
 - d. No, because it is not possible to determine causal relationships between variables using data collected from an observational study. It is possible that extraneous variables are causing the decreased risk of preeclampsia.

2.
 - a. Prospective study because researchers followed the individuals into the future by completing a follow-up analysis of mortality twelve years after the initial survey.
 - b. Explanatory – reading books or not reading books; Response – mortality (whether or not the participants died during the 12 years after the initial survey)
 - c. Education level
 - d. People with higher education levels are more likely to read books.
 - e. People with higher education levels may make certain decisions, health and otherwise, that lead to longer lifespans.

3.
 - a. The study is an experiment because the women were randomly assigned into one of three treatment groups: Mediterranean diet, stress reduction, or nothing.
 - b. Yes, because this is an experiment with random assignment of pregnant women to different diets.
 - c. The mothers who chose to bring their child in for a follow-up analysis may differ from the mothers who chose not to bring their child in for a follow-up. It is impossible to know if the assessment scores from the other 600 children would have changed the results of the study.

4. a.



- b. 51 four- and five-year old children
- c. Verb condition (help), noun condition (helper), baseline condition (neither)
- d. The number of toys children helped pick up

5. D

6. A