Question 1: Chapter 10 Question 15: For her Statistics class experiment, researcher K. Morrison decided to study how usage of social media affected Grade 12 students' performance in school. She proposed to collect information from a random sample of Grade 12 students and examine the relationship between the average amount of time spent on social media each day and the average graduating grade.

- (a) Is this an experiment? If not, what is it?
- (b) If there is a relationship between the average amount of time spent on social media each day and the average graduating grade, why can't we conclude that the differences in average graduating grades are caused by differences in average amount of time spent on social media each day?

Question 2: Design an experiment to see whether the amount of sleep and exercise you get affects your grades.