

Exercise 2. Due Monday, August 31st

Complete the following exercise, using a word processor. Grading will be based on the effort placed into answering the questions completely. Poorly written or weak answers will result in a lower grade.

1. Dr. Fearn hired you to complete demographic and social research on the students majoring in a discipline within the Department of Earth Sciences. The primary reason for this project is there appears to be an inequality in the distribution of males to females among Geography majors. For her, the end result is that she wants to know how to recruit more female students as Geography majors. Therefore, you are to find out why we have the current students as majors. You will need to look at all the students in the department because the Geology and Meteorology disciplines do not appear to have such an inequality among the students. Before you begin, you must decide what information YOU need to acquire to complete the research project.
 - a. Write a series (at least 3) of research questions you will need to answer for this project.
2. For months, you have been investigating potential graduate schools for you to attend following graduation from South Alabama. After narrowing it down to 10 schools, you need to focus on 4 that you are most interested in attending so that you can apply to those schools. You have identified one school out of the 10, which you are interested in attending, but need 3 other schools. Therefore, you want to find 3 schools that are similar in their appeal as your number one pick.
 - a. Write an objective (be specific) that illustrates your approach to picking the other 3 schools.
 - b. Write a research question or questions (be specific) that illustrate your approach to picking the other 3 schools.
3. As the newest field technician at the USGS, you have been assigned to identify and map all of the vegetation in a 5-acre plot of land slated to be disturbed by a mining company. The USGS needs an accurate count of each species and the location.
 - a. Write a series of problem statements (minimum of 5) that are progressively more specific in researching the issue mentioned above.
4. As an employee of the Mobile Visitor's and Convention Bureau, you have closely monitored the development of the football program at the University of South Alabama. Bringing college football to the Mobile area has the potential to increase the number of visitors to the region on game day. You believe one influence on this potential is the number of Alabamians who align themselves with the University of Alabama, Auburn University, or some other school.
 - a. Develop three different hypotheses, one of which is a "cause and effect" hypothesis. For each hypothesis, identify the variables.
5. You are a student interested in the amount of runoff that can be produced by a parking lot. You hear that a new parking lot will be built in conjunction with a new science building on campus. You do not know much about the topic, including whether it is good or bad to increase the runoff into a watershed, or how runoff from a parking lot can be mitigated.
 - a. Write a problem statement on this topic.
 - b. Write a research objective on this topic. Research objectives are typically several sentences long.
 - c. Write a research question(s) on this topic.
 - d. Write a hypothesis on this topic.