



**Problem 1 – Gathering the Data**

Listen carefully to the game rules provided by your teacher. You will play the game described.

1. Discuss the game with your partner. Write a short explanation of what you think the outcome will be. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

2. Play the game 20 times and keep a record of each outcome from your experiment. Also enter each result, as it occurs, in L1. Press 3 and move to L1. If there is data in the list move to the top of the list and press : β. Press β after each number you input.

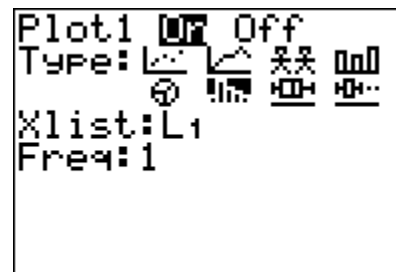
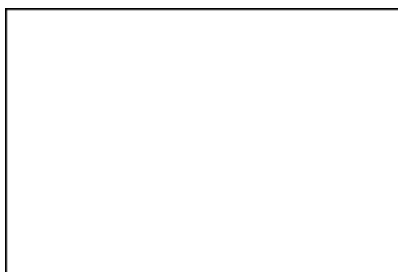
Switched and Won (1)	Switched and Lost (2)	Stuck and Won (3)	Stuck and Lost (4)

3. Do you think your results will be similar to other students in the class? Explain.  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Problem 2 – Graph the Data**

Set up a Stat Plot to display your data from Question 2. Press – & and set your Plot as indicated below.

4. Draw your Plot.





5. What conclusion can you draw from the display of data?

---

---

---

6. Which strategy, if any, for playing the game has the best chance of winning? How did you decide which strategy is best?

---

---

7. Play the game 30 more times, adding to your original data, and draw your final graph. How do the results of 50 games compare to the results after 20 games (Question 4)?

---

---

---



### Problem 3 – Compare to Another Group

Work with another group to answer the following questions.

8. How does your data compare to the other groups' data? Are the outcomes similar? Explain.

---

---

---

9. Were you surprised by the outcome? Why or why not?

---

---

10. How do the outcomes compare to your prediction in Question 1? \_\_\_\_\_

---

---