

Bio 111 Pre-Lab for Lab #09: Name _____

Aipotou II TA & Sect. _____

Consider each of the following hypotheses about the relationship between protein structure and protein color in Aipotou and answer the following questions for each. **Do not state whether or not the hypothesis is correct; you do not need to download Aipotou to answer these questions.**

- a) Is the hypothesis *scientifically reasonable*? Does it fit with what you already know about proteins and basic scientific logic?
 - If yes, go on to question (b).
 - If no, go on to the next hypothesis.

- b) Is the hypothesis *testable*? Can it be tested using the Aipotou simulation?
 - If yes, give an experiment in Aipotou to test it.
 - If no, explain why not.

1) A protein containing a round hydrophobic “blob” of 7 amino acids will be red.

2) A protein containing arginine will be blue.

3) A protein containing a round hydrophilic “blob” of 7 amino acids will be red.

4) The color depends on the shape.

