Pre-Activity Worksheet: Evolutionary Factors

**General Description**
In the activity you will do this week during your learning/discussion group, you will be examining ways that allele and genotype frequencies change in populations. In order to be prepared for this activity, complete this worksheet.

**Reading**
Browse the “Genes Within Populations” chapter in your text (Ch. 21). Pay particular attention to figure 21.4 and 21.6. Carefully read sections 21.1 and 21.2 on pages 434-441.

**Definitions**
Write a definition of the following words. Use your text, textbook glossary, and your previous knowledge to create the best definition possible. Remember to connect your definitions to population genetics and violations of hardy-Weinberg equilibrium.

1) genetic drift
2) migration
3) mutation
4) dominance

**Questions**
Answer the following questions. You will explore your answers to these questions in-depth during learning/discussion group.
1) Why is Hardy-Weinberg equilibrium the starting point for understanding evolutionary change?
2) Which evolutionary factors introduce more genetic variation to populations?
3) Describe why assortative mating does not alter allele frequencies.