**Chromosome Mapping** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ # \_\_\_\_\_

Introduction- Mag Bio

Chromosome Map Practice Problem

In pea plants, flower color and pollen shape are located on the same chromosome.  A plant with purple flowers and long pollen (AaBb) is crossed with one that is recessive for both traits (aabb).

The F1 results are as follows:



1. Does this follow Mendel’s 1:1:1:1 phenotypic ratio results obtained with crossing pea plants?
2. What does this imply? (Explain your answer)
3. Are the majority of the offspring like the parents, or are they recombinant?
4. What % of the time did they cross over?
5. How far apart are the genes?
6. Draw a chromosome and map the genes (scale the distance appropriately)