

AP Biology 029 – Mendelian Genetics

Video Review Sheet

www.bozemanscience.com/029-mendelian-genetics

A. Introduction

1. What did Mendel work with?
2. What is the P Cross?
3. What is the F1 cross?
4. Describe the incorrect idea of “Blending”?
5. The F1 was a “hybrid” – what does that mean?

B. Diagram the first Punnett square that he created below and explain how white flower could come from two purple flowers:

C. Mendel's Laws:

a. Law of Segregation: like a _____ flip. It is a _____ of those two alleles. Random _____

b. Independent Assortment: Traits on different chromosomes don't _____ each other. Sometimes things do travel together, but that is because those two genes are found on the same:

D. Pause the video at the Sample Problems and try and work them out.

1. Coin flip:
2. Heterozygous means:

Homozygous means:
3. What is an organism's genotype? What is an organism's phenotype?
4. What is the probability of homozygous recessive (rr)?
5. Why is there a greater chance of green seeds in problem 5 than wrinkled seeds (rr) in problem 4 above?
6. Two Punnett squares because you need to multiply the _____ together.

E. Disease: Would you want to know?