

AP Biology 034 – Mechanisms that Increase Genetic Variation Video Review Sheet

www.bozemanscience.com/034-mechanisms-that-increase-genetic-variation

A. Introduction:

1. Charles the II of Spain: what happened in his pedigree (to cause his physical problems etc)?
2. Variation is:
3. Two main ways (each then containing three ways) to maintain genetic variation:
 - a. Prokaryotes:
 - b. Eukaryotes:

B. Maintaining Variation in Prokaryotes:

1. Transformation:
 - a. Experiment by
 - b. Other bacteria can _____ the DNA from another bacterium to pass traits
2. Transduction: using a vector as in a: _____ to carry DNA from one bacterium to another.
3. Conjugation: Transferring a ring of auxiliary DNA, a fertility _____ from one bacterium to another

C. Maintaining Variation in Eukaryotes:

1. Crossing-over: during _____, swapping genes which gives us _____
2. Random _____: determines what happens to the
3. Random _____