

AP Biology 008 – Reproductive Isolation and Speciation Video Review Sheet

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1. Describe the simple experiment to show speciation after just 8 generations:

2. To start the process of speciation, first there has to be some sort of:
 - a. Name the three options:
3. Eventually this creates reproduction isolation, where you eliminate
4. Geographic Isolation: isolation due to where you
 - a. Allopatric: two groups that live in
 - b. Sympatric: live in the same
 - c. Describe the example of Allopatric Speciation: Meadowlarks

 - d. Describe the example of Sympatric Speciation: plants have mistakes in

 - e. Pre-zygotic Isolation:
 - i. Temporal – Why don't the toads normally breed together even though they could make fertile offspring?

 - ii. Mechanical – Why don't the snails interbreed?

 - iii. Behavioral – Why don't the Meadowlarks interbreed?

 - f. Post-zygotic Isolation:
 - i. Zygote Mortality Example:

 - ii. Hybrid Sterility Example:
5. Briefly describe the Reproductive Isolation Example with plants on either side of the Great Wall of China –

6. Speciation Rate:
 - a. Polyploidy – very _____ speciation due to a mistake in

 - b. Phyletic Gradualism – the belief that speciation occurs

 - c. Punctuated Equilibrium – belief that speciation occurs quickly due to