

# AP Biology 008 – Reproductive Isolation and Speciation Video Review Sheet

[www.bozemanscience.com/speciation](http://www.bozemanscience.com/speciation)

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