Internet Assignment 11: Beadle & Tatum Experiment

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

<http://jackbagwell.com/Micro/SWFs/13_3_1a.html>

1. One of the most important things genes do is to store information for the creation of \_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What organism did Beadle & Tatum study?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What is a minimal medium?
4. How did Beadle & Tatum induce mutations?
5. What is the main difference between the wild type organism used by Beadle & Tatum and the mutant strain?
6. Which amino acid had to be added to most media for mutants to grow?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Draw the metabolic pathway used for arginine synthesis in wild types
8. Beadle & Tatum argued that a mutant had been mutated so that a gene was altered in such a way by the X-rays that it could no longer do what?
9. How were the conclusion of these experiment summarized?
10. What is a better way to summarize these conclusions based on modern knowledge?
11. If the mutant can grow with the addition of ornithine, what do you know?

Click through this one

<http://www.dnalc.org/view/16360-Animation-16-One-gene-makes-one-protein-.html>