



<http://www.life.umd.edu/grad/mlfsc/>

Crossing Over

by

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Crossing Over

- 1) The importance and significance of this topic is presented in the PowerPoint presentation.
- 2) The assessment consists of the following activities.

Objective:

Students will demonstrate an understanding of crossing over and its implications for heredity by successfully predicting the effects of crossing over on *Drosophila* progeny.

Activities:

- 1) Students should view the PowerPoint presentation on crossing over.
- 2) Students should go to <http://www.dnafb.org/dnafb/11/concept/index.html> for additional information about crossing over. Students should complete the problem portion of this website.
- 4) Students should obtain the assessment worksheet and complete it as directed.

Assessment Scoring Rubric

- 4 Student makes no errors on Problems 3 and 4 of the assessment.
- 3 Student makes 1 error on either Problem 3 or 4 of the assessment but provides adequate explanation of the reason for the error.
- 2 Student makes 1 error on either Problem 3 or 4 of the assessment but provides a less than complete explanation for the error.
- 1 Student makes 1 error on either Problem 3 or 4 of the assessment but provides no explanation for the error.
- 0 Student makes errors on both Problem 3 and Problem 4.

Crossing Over Assessment

Complete this assessment only after viewing the Crossing Over PowerPoint presentation and using the website as directed in your class work.

http://www.biology.arizona.edu/mendelian_genetics/problem_sets/sex_linked_inheritance_2/01Q.html

- 1) Go to the web address listed above.
- 2) Complete Problem 1 as directed.
- 3) Record your response here _____ .
- 4) Were you correct? _____
- 5) If so, move on to Problem 2. If not, use the tutorial, then explain why you think you made an error.
- 6) Complete Problem 2 as directed.
- 7) Record your response here _____ .
- 8) Were you correct? _____

9) If so, move on to Problem 3. If not, use the tutorial, then explain why you think you made an error.

10) Complete Problem 3 as directed.

11) Record your response here _____ .

12) Were you correct? _____

13) If so, move on to Problem 4. If not, use the tutorial, then explain why you think you made an error.

14) Complete Problem 4 as directed.

15) Record your response here _____ .

16) Were you correct? _____

17) If so, turn in this paper to your teacher. If not, use the tutorial, then explain why you think you made an error. Turn in this paper to your teacher when completed.