

## MCB422 Cricket\_7: Deletion mapping

While not part of the actual path to the letter counting, deletion mapping was a Big Idea in laying the foundation that came before Crick et al. Among other things, mapping a mutation to a REGION can be done by asking “what deletion(s) cover the region of a given mutation” (you can think of a deletion as being a larger case of “are these two mutations the same” except that a DELETION is ‘the same’ as all the individual point mutations in the region deleted). Consider it somewhat different phenotypically; if the a full sequence is found, it will be like rIIb+; if sequences are missing, rIIb-

Requirement	Description	Expectation	Loss of points if
Task <b>10 points total</b>	A brief statement of the task	2-3 sentences.	Imprecise, unclear, wordy
Strategy/plan of attack <b>25 points</b> (10 = getting ‘permission to proceed’. <u>excessive</u> attempts or guidance => points lost here)	In the process of solving this problem, you will develop several ‘principles of mapping’. Include: deletion size, endpoint spacing, and overlap. Describe and illustrate with visual examples	Clean, spare <i>visual</i> presentation of cases such as ‘deletions overlapping’ or ‘deletion endpoints distant from each other’ accompanied by tell-tale (hypothetical) DATA	Messy, incoherent, poorly thought out, lacking refinement, could be enhanced by second draft
Graphic of your map <b>40 points</b>	The ‘modeling’ page of the Cricket App allows you to ‘draw’ and save your map. It is this representation that will be graded.	Saved map that corresponds to actual deletions of scenario page. Relative sizes and distances should be reasonably correct	Not saved, not correct
Explain one <b>15 points</b>	Choose one deletion, that overlaps at least one other and does NOT overlap at least one other; explain each of those two findings briefly, efficiently, clearly	Wrong, wandering, unnecessary words, details, information	Incorrect assignments of values, misinterpretation of result
Required statement <b>15 points</b>	“I did not use internet resources other than those assigned, nor did I consult folks who have taken the course before, tutors, or other inappropriate resources”	Both names should appear after this statement if it is a joint submission.	Absent

**10 points:** Spelling, grammar, overall organizational clarity. 10% of grade!!

**5 bonus points available:** Insightfulness, sparseness & clarity of graphical presentation; novelty of approach *if superior to norm*

**Loss of points** if both last names not in filename of submitted file, or not .pdf format