Plant Hormone Report (65 pts)   **Group:** _____

		Poor				Excellent	**Section Scores**
Section Points		0	1	2	3	4	

1   **Title**   0.00
  1   Describes content concisely, adequately, appropriately   0.00

1   **Abstract**   0.00
  1   Summarizes paper concisely, adequately, appropriately   0.00

12   **Introduction**   0.00
  6   Successfully establishes context of the study with brief, relevant   0.00
      background information
          e.g., plant hormones and functioning
  2   Effectively incorporates relevant studies into introduction   0.00
  2   Effectively presents objectives and purpose of study   0.00
  2   Introduction well written in coherent, concise style   0.00

6   **Methods**   0.00
  4   Enough relevant info to allow for replication of procedures   0.00
          > Successfully explains how experiment was set up -- plants used, serial dilutions; petri plates;
          controls
          > Successfully explains how hypocotyl length was measured
          > Statement of what statistical analyses were used (two-sample t-tests) for which comparisons
  1   Methods written in correct, consistent tense.   0.00
  1   Methods written in coherent, concise style.   0.00

14   **Results**   0.00
  6   Visually presents results clearly and accurately in figures or table   0.00
      > Fig. 1: Effect of various hormone X concentrations on lettuce hypocotyl growth in both dark and light
      > Fig 2: Effect of hormone X and inc. hormone Y conc. on lettuce hypocotyl growth in both dark and light
      > Table 1: interactive responses of two hormones
      --Axes correct and labeled; key or labels for groups; good figure captions; table captions and headers
  5   Text clearly states findings; points out important statistical   0.00
      relationships and trends;
      > Effect of light vs. dark on hypocotyl growth
      > Effect of hormone X concentrations on hypocotyl growth in dark
      > Effect of hormone X concentrations on hypocotyl growth in light
      > Effect of 1 concentration hormone X with various concentrations hormone Y on growth in dark
      > Effect of 1 concentration hormone X with various concentrations hormone Y on growth in dark
      -- Describes significant differences in mean measurements between treatments
  2   Properly interprets and writes about statistical analyses   0.00
  1   Successfully integrates textual and visual representations;   0.00
        results are presented concisely, neatly & clearly

19   **Discussion**   0.00
  12 Provides sufficient and logical explanation for results, showing   0.00
      understanding of the biology involved
          > Explain/discuss how hypocotyl growth was affected by light/dark treatment. (Talk about the
          advantage of hypocotyl growing quickly while underground, and advantage of slower growth when
          aboveground.)
          > Explain/discuss how hormone treatment affected response to light treatment; i.e., did hormone
          overcome light inhibition? Did it increase dark stimulation? Why?
          > State conclusions about whether the interactive effects of the 2 hormones were synergistic,
          additive, or inhibitive
          > Explanation/discussion of the interactive effects, in light of what they know about the functioning of
          the hormones
          > Discussion is explanation of results; not just restatement of results
  3   Effectively incorporates relevant studies (and those of other   0.00
      groups) into discussion of results.
  1   Discusses problems, solutions, new hypotheses, and how these   0.00
      hypotheses might be tested
  1   Provides clear conclusion about hypotheses   0.00
  2   Discussion is coherent and flows well   0.00

12   **Presentation/Overall**   0.00
  3   Citations of references adhere to proper format   0.00
  3   All sources in the report (at least 3) are correctly listed in   0.00
      Literature Cited section
  2   Grammar and spelling are correct   0.00
  2   Writing is neat, coherent, and flows well   0.00
  2   Demonstrates clear and thoughtful scientific inquiry,   0.00
      and knowledge of the biology involved

65   **Points Earned:**   **0.00**