Review of Science Standards Final Draft by Victor Bloomfield

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I reviewed the final draft of the science standards in the pdf version. My overall reaction is that these are good, demanding standards: a student who successfully goes through this educational program will know a lot (facts are important in science); will have had experience in asking scientific questions, collecting and interpreting data; and will have an appreciation of the roles that science, engineering, and technology play in our modern world.

There are two points that I think need improvement:

- 1. Nowhere is the term "protein" mentioned. It is just as important to know that proteins are the products of genes that carry out the work of the cell as enzymes, as ion channels, as molecular motors, as structural elements as it is to know that DNA is the genetic material.
- 2. The concepts of evolution are appropriately presented, but the word "evolution" itself should be used earlier. notably in Grade 5 IV. Life Sciences E. "Biological populations change over time." Perhaps it would suffice to restate the standard as "The student will know that biological populations evolve over time."

Sincerely, Victor Bloomfield