**Praxis**

*“Students who engage in active, hands-no learning activities and respond to higher-order thinking questions outperform their peers by more than (...) 40% in science” (Vacca, Vacca, & Mraz, 2014, p. 5)*

Welcome and thank you for visiting our page!  This ‘Genetics Jeopardy Game’ is an entertaining and authentic pre-assessment tool, created for the dual purpose of yielding insight into students’ levels of understanding while also preparing them for the final Grade 11 Biology - Genetics unit. The questions touch on the major concepts of the Genetics Unit and were designed based on the first four stages of Bloom’s Taxonomy (Crowe, Dirks, & Wenderoth, 2008).  Similar to the real Jeopardy game show, the game has two main parts.  The first set of questions involves simpler lower-order type questions focusing primarily on knowledge, comprehension and application of genetic concepts (Crowe et al., 2008).  The second set of questions involves some lower-order questions but gradually progress to higher-order questions, prompting students to critically think about concepts learned while applying problem-solving skills developed over the course of the unit.

As differentiated practice is an important and useful strategy to use to maximize student engagement and interest (Vacca et al., 2014), different learning styles have been carefully integrated to meet the learning needs of all students.  Firstly, the game gives students choices on how to demonstrate their learning by allowing them to choose which questions they want to answer.  The questions were also designed to suit visual, auditory, reading and kinesthetic learners giving students an equal opportunity to demonstrate their learning outcomes.  Secondly, this tool gives students an opportunity for self-assessment, assisting them in being aware of their content area weaknesses for the purpose of determining which content requires further study.  Lastly, the game allows students to work in collaboration, giving them the opportunity to not only learn from each other but also be accountable for their own preparation.  In turn, this allows students to strategically increase their content literacy, knowledge and skill (Vacca et al., 2014) while boosting student participation and effort.

In order to maximize the effectiveness of this ‘Genetics Jeopardy’ game, it is highly recommended that educators use it in conjunction with the cheat sheet group activity.  The use of a cheat sheet not only engages and motivates students to work collaboratively using print literacy, but also involves the careful review of the content. This enables student to strategically choose what concepts or ideas are believed to be significant.  This hidden purpose leads to student empowerment because it engages them in the learning process while refining their thinking and analytical skills.

**References**

Crowe, A., Dirks, C., Wenderoth, M.P. (2008). Biology in Bloom: Implementing Bloom’s

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Vacca, R.T., Vacca, J.L., Mraz, M. (2014). *Content Area Reading: Literacy and Learning Across*

*the Curriculum (11th Ed.).*  Upper Saddle River, NJ: Pearson Education Inc.