

SBI 3UI Culminating Activity

The Purpose of this activity is to express your knowledge of the course content learned this semester.

For this project you will be creating a SBI 3U for dummies book that encompasses the overall expectations for each of the 5 main topics we learned this semester. You should use your notes, text book, and old tests to establish the appropriate content.

- The sections should cover all of the aspects learned in this course and any additional information that you deem relevant.
- You should add any pictures and diagrams that will aid in the explanations of the topics.
- The overall goal of this book will be so that anyone could pick it up and learn what was taught in this course.

OR

Do you like watching game shows like Jeopardy, Deal or No Deal, or Are You Smarter than A 5th Grader? Have you always wanted to be a contestant on a game show? If this describes you, then this task was written for you!

For this culminating project, you have the opportunity to create your own game show quiz and even be a contestant for your classmate's game shows.

Your game must meet the following criteria:

- It must contain a minimum of 12 key questions from each unit (Genetics, Evolution, Diversity of Living Things, Anatomy, and Plants)
- Must contain; three vocabulary; three understanding/knowledge; three application; three lab or inquiry based).
- There must be an answer key attached/accessible.
- It must be interactive.
- It must use proper scientific terminology.
- It must use only course content.
- It can include the labelling of pictures or diagrams.

There are various game show templates available on the Internet for you to use as a guide. Take a few minutes to do a search for them, choose a format and template that you like, and have fun creating a review exercise both you and your classmates can use!

Power point game templates/ideas

<https://www.thebalance.com/free-powerpoint-games-for-teachers-1358169>

Board game templates/ideas

http://www.biologyjunction.com/biology_games.htm

All projects need to be emailed at roehrigscience@gmail.com or submitted in class no later than 3:10 on Thursday January 25, 2017.

Attached is a rubric from which you will be graded, please remember that this assignment is worth 10% of your final mark.

Below is a list of overall expectation taken from the Ontario Science Curriculum document, the whole document can be found by going to the following web address. (*note: use 2008 document*)
<http://www.edu.gov.on.ca/eng/curriculum/secondary/science.html>

Diversity of Living Things

- All living things can be classified according to their anatomical and physiological characteristics.
- Human activities affect the diversity of living things in ecosystems.

Genetic Processes

- Evaluate the importance of some recent contributions to our knowledge of genetic processes, and analyse social and ethical implications of genetic and genomic research.
- Investigate genetic processes, including those that occur during meiosis, and analyse data to solve basic genetics problems involving monohybrid and dihybrid crosses.
- Demonstrate an understanding of concepts, processes, and technologies related to the transmission of hereditary characteristics.

Evolution

- Analyse the economic and environmental advantages and disadvantages of an artificial selection technology, and evaluate the impact of environmental changes on natural selection and endangered species.
- Investigate evolutionary processes, and analyse scientific evidence that supports the theory of evolution.
- Demonstrate an understanding of the theory of evolution, the evidence that supports it, and some of the mechanisms by which it occurs.

Animals: Structure and Function

- Analyse the relationships between changing societal needs, technological advances, and our understanding of internal systems of humans.
- Investigate, through laboratory inquiry or computer simulation, the functional responses of the respiratory and circulatory systems of animals, and the relationships between their respiratory, circulatory, and digestive systems.
- Demonstrate an understanding of animal anatomy and physiology, and describe disorders of the respiratory, circulatory, and digestive systems.

Plants: Structure and Function

- Evaluate the importance of sustainable use of plants to Canadian society and other cultures.
- Investigate the structures and functions of plant tissues, and factors affecting plant growth.
- Demonstrate an understanding of the diversity of vascular plants, including their structures, internal transport systems, and their role in maintaining biodiversity.