

## Grade 10 Bellringer Topics - 2018

### **Biology**

- Microscope - identify the parts and their functions
- stages of mitosis as seen in the microviewer slides/textbook
- parts of plant and animal cells - organelle names and functions
- frog dissection - structures of internal and external anatomy and their functions
- plants - structures and functions
- transpiration/movement of water and minerals roots → stem → leaves → outside
- leaf anatomy - identify structures and their functions
- types of tissues for plants and animals - names and examples of each tissue
- root systems - types and purpose

### **Chemistry**

- types of indicators, how they are used, colour changes associated with the different indicators if placed in acid or base
- types of compounds - ionic, molecular
- be able to count atoms in a model to determine the number of atoms in each compound given a colour legend and be able to determine if this model represents a balanced equation
- the law that is related to balancing a chemical equation
- WHMIS symbols and their meanings
- laboratory equipment - names and uses
- determine independent and dependent variables in an experiment
- difference between a chemical and physical change, signs of a chemical
- types of reactions

### **Physics**

- properties of light
- light sources (be specific)
- reflection
- describe image characteristics using LOST
- characteristics of images always formed by a plane mirrors
- types of mirrors
- determine how light travels through different substances given the refractive index
- types of lenses - concave, convex
- difference between virtual and real image
- list image characteristics from a ray a diagram
- fibre optics - how it works