

HIGH SCHOOL BIOLOGY  
INVESTIGATION 3  
WHAT IS RADON?

- CCS 5.6** (Chemistry) All students will gain an understanding of the structure and behavior of matter.
- B.1 Grade 8 Show how substances can chemically react with each other to form new substances having properties different from those of the original substances.
  - A.2 Grade 12 Know that the number of protons in the nucleus defines the element.
  - A.3 Grade 12 Know that an atom's electron arrangement, particularly the outermost electrons, determines how the atom can interact with other atoms.
  - A.5 Grade 12 Explain how the Periodic Table of Elements reflects the relationship between the properties of elements and their atomic structure.
  - A.6 Grade 12 Know that many biological, chemical and physical phenomena can be explained by changes in the arrangement and motion of atoms and molecules.
- CCS 5.7** (Physics) All students will gain an understanding of natural laws as they apply to motion, forces, and energy transformations.
- A.5 Grade 12 Know that there are strong forces that hold the nucleus of an atom together and that significant amounts of energy can be released in nuclear reactions (fission, fusion, and nuclear decay) when these binding forces are disrupted.
  - B.3 Grade 12 Recognize that whenever mechanical energy is transformed, some heat is dissipated and is therefore unavailable for use.
  - B.4 Grade 12 Explain the nature of electromagnetic radiation and compare the components of the electromagnetic spectrum from radio waves to gamma rays.
- CCS 5.10** (Environmental studies) All students will develop an understanding of the environment as a system of interdependent components affected by human activity and natural phenomena.
- B.2 Grade 12 Use scientific, economic, and other data to assess environmental risks and benefits associated with societal activity.