HIGH SCHOOL CHEMISTRY/PHYSICS
INVESTIGATION 8
IS THERE RADON IN NEW JERSEY?

**CCS 2.2** (Life skills) All students will achieve optimal wellness by learning and applying health-enhancing personal, interpersonal, and life skills.

A.2 Grade 8 Analyze health ideas, opinions, and issues from a variety of valid and reliable health sources.

**CCS 3.3** (Speaking) All students will speak in clear, concise, organized language that varies in content and form for different audiences and purposes.

D.4 Grade 8 Give oral presentations to different audiences for various purposes, sharing appropriate changes in delivery (e.g., gestures, vocabulary, pace, visuals), and using language for dramatic effect.

B.1 Grade 12 Ask prepared and follow-up questions in interviews and other discussions.

**CCS 3.4** (Listening) All students will listen actively to information from a variety of sources in a variety of situations.

A.3 Grade 12 Demonstrate appropriate listener response to ideas in a persuasive speech, oral interpretation of a literary selection, or scientific or educational presentation.

**CCS 4.1** (Number and numerical operations) All students will develop number sense and will perform standard numerical operations and estimations on all types of numbers in a variety of ways.

C.1 Grade 12 Recognize the limitations of estimation, assess the amount of error resulting from estimation, and determine whether the error is within acceptable tolerance limits.

**CCS 4.5** (Mathematical processes) All students will use mathematical processes of problem solving, communication, connections, reasoning, representations, and technology to solve problems and communicate mathematical ideas.

A.1 Grade All Learn mathematics through problem solving, inquiry, and discovery.

A.3 Grade All Select and apply a variety of appropriate problem-solving strategies (e.g., "try a simpler problem" or "make a diagram") to solve problems.

B.1 Grade All Use communication to organize and clarify their mathematical thinking.

· Reading and writing
· Discussion, listening, and questioning

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| B.2 Grade All | Communicate their mathematical thinking coherently and clearly to peers, teachers, and others, both orally and in writing. |
| C.5 Grade All | Trace the development of mathematical concepts over time and across cultures (cf. world languages and social studies standards). |

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| **CCS 5.1** | (Scientific Processes) All students will develop problem-solving, decision-making and inquiry skills, reflected by formulating usable questions and hypotheses, planning experiments, conducting systematic observations, interpreting and analyzing data, drawing conclusions, and communicating results. |
| A.1 Grade 12 | When making decisions, evaluate conclusions, weigh evidence, and recognize that arguments may not have equal merit. |
| B.1 Grade 12 | Select and use appropriate instrumentation to design and conduct investigations. |
| B.2 Grade 12 | Show that experimental results can lead to new questions and further investigations. |

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| **CCS 5.8** | (Earth Science) All students will gain an understanding of the structure, dynamics, and geophysical systems of the earth. |
| D.1 Grade 8 | Utilize data gathered from emerging technologies (i.e. geographic information systems (GIS) and global positioning systems (GPS)) to create representations and describe processes of change on the Earth's surface. |

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| **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. |

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| **CCS 6.7** | (Geography) All students will acquire and apply geographical understanding through the study of spatial relationships among places, people and the environment. |
| A.3 Grade 12 | Use and interpret maps and supporting technologies and other graphical representations to analyze, explain, and solve geographical problems. |