

JUNIOR HIGH GENERAL ACADEMIC
INVESTIGATION 5
WHERE IS RADON FOUND IN NEW JERSEY?

- CCS 3.2** (Writing) All students will write in clear, concise, organized language that varies in content and form for different audiences and purposes.
- B.2 Grade 6 Write a range of grade-appropriate essays across curricula (e.g., persuasive, personal, descriptive, or issue-based).
- CCS 4.2** (Geometry and measurement) All students will develop spatial sense and the ability to use geometric properties, relationships, and measurement to model, describe and analyze phenomena.
- D.1 Grade 4 Understand that everyday objects have a variety of attributes, each of which can be measured in many ways.
- E.5 Grade 6 Develop informal ways of approximating the measures of familiar objects (e.g., use a grid to approximate the area of the bottom of one's foot).
- 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.2 Grade All Solve problems that arise in mathematics and in other contexts (cf. workplace readiness standard 8.3).
- Open-ended problems
 - Non-routine problems
 - Problems with multiple solutions
 - Problems that can be solved in several ways
- 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.
- C.3 Grade All Recognize that mathematics is used in a variety of contexts outside of mathematics.
- D.5 Grade All Make and investigate mathematical conjectures.
- Counter examples as a means of disproving conjectures
 - Verifying conjectures using informal reasoning or proofs
- 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.
- B.3 Grade 8 Collect, organize, and interpret the data that result from experiments.

- CCS 5.8** (Earth Science) All students will gain an understanding of the structure, dynamics, and geophysical systems of the earth.
- C.1 Grade 4 Recognize that some changes of the Earth's surface are due to slow processes such as erosion and weathering, and some changes are due to rapid changes such as landslides, volcanic eruptions, and earthquakes.
- D.1 Grade 6 Utilize various tools such as map projections and topographical maps to interpret features of Earth's surface.
- C.1 Grade 8 Explain how Earth's landforms and materials are created through constructive and destructive processes.
- C.2 Grade 8 Show how successive layers of sedimentary rock and the fossils contained in them can be used to confirm the age, history, changing life forms, and geology of Earth.