ELEMENTARY
INVESTIGATION 7
HOW DOES RADON GET IN?

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 4 Create narrative pieces, such as memoir or personal narrative that contain description and relate ideas, observations, or recollections of an event or experience.

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.

A.1 Grade 4 Use real-life experiences, physical materials, and technology to construct meanings for numbers (**unless otherwise noted, all indicators for grade 4 pertain to these sets of numbers as well**).
· Whole numbers through millions
· Commonly used fractions (denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 16) as part of a whole, as a subset of a set, and as a location on a number line
· Decimals through hundredths

A.4 Grade 4 Understand the various uses of numbers.
· Counting, measuring, labeling (e.g., numbers on baseball uniforms), locating (e.g., Room 235 is on the second floor)

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.

A.1 Grade 4 Identify and describe spatial relationships of two or more objects in space.
· Direction, orientation, and perspectives (e.g., which object is on your left when you are standing here?)
· Relative shapes and sizes
· Shadows (projections) of everyday objects

B.3 Grade 4 Investigate the occurrence of geometry in nature and art.

D.1 Grade 4 Understand that everyday objects have a variety of attributes, each of which can be measured in many ways.

CCS 4.4   (Data analysis, probability, and discrete mathematics) All students will develop an understanding of the concepts and techniques of data analysis, probability, and discrete mathematics, and will use them to model situations, solve problems, and analyze and draw appropriate inferences from data

A.1 Grade 4   Collect, generate, organize, and display data in response to questions, claims, or curiosity.
- Data collected from the school environment

A.2 Grade 4   Read, interpret, construct, analyze, generate questions about, and draw inferences from displays of data.

CCS 4.5

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

C.3 Grade All   Recognize that mathematics is used in a variety of contexts outside of mathematics.

C.4 Grade All   Apply mathematics in practical situations and in other disciplines.

E.1 Grade All   Create and use representations to organize, record, and communicate mathematical ideas.
- Concrete representations (e.g., base-ten blocks or algebra tiles)
- Pictorial representations (e.g., diagrams, charts, or tables)
- Symbolic representations (e.g., a formula)
- Graphical representations (e.g., a line graph)