

ELEMENTARY
INVESTIGATION 8
WHERE IN THE USA IS RADON?

- 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 4.3** (Patterns and algebra) All students will represent and analyze relationships among variable quantities and solve problems involving patterns, functions, and algebraic concepts and processes.
- B.1 Grade 4 Use concrete and pictorial models to explore the basic concept of a function.
- Input/output tables, T-charts
 - Combining two function machines
 - Reversing a function machine
- 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.2 Grade 4 Read, interpret, construct, analyze, generate questions about, and draw inferences from displays of data.
- B.3 Grade 4 Predict probabilities in a variety of situations (e.g., given the number of items of each color in a bag, what is the probability that an item picked will have a particular color).
- What students think will happen (intuitive)
 - Collect data and use that data to predict the probability (experimental)
 - Analyze all possible outcomes to find the probability (theoretical)
- CCS 5.6** (Chemistry) All students will gain an understanding of the structure and behavior of matter.
- A.3 Grade 4 Recognize that water, as an example of matter, can exist as a solid, liquid or gas and can be transformed from one state to another by heating or cooling.

- CCS 5.8** (Earth Science) All students will gain an understanding of the structure, dynamics, and geophysical systems of the earth.
- A.1 Grade 4 Observe that most rocks and soils are made of several substances or minerals.
- D.1 Grade 4 Use maps to locate and identify physical features on the Earth.

- 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.1 Grade 4 Demonstrate understanding of the spatial concepts of location, distance, scale, legends, symbols, direction and place to describe the spatial organization of places.
- A.2 Grade 4 Use maps to identify locations of places within their local community and in nearby communities to indicate spatial relationships of places.
- B.2 Grade 4 Identify and compare the characteristics used to define a region (e.g., mountains, lakes and wetlands).