Radon Vocabulary Activities

The concepts surrounding radiation can be complex. By conducting a vocabulary activity before beginning an activity or series of activities, students will have a shared base knowledge.

Materials and Resources
- *Vocabulary Materials* document.
- Materials noted in activity suggestions.

Common Core State Standards (CCSS)
The concepts in this activity align with the following CCSS English Language Arts Standards for Literacy in History/Social Studies, Science, & Technical Subjects:
- Key Ideas and Details: CCSS.ELA-LITERACY.RST.6-12.2
- Craft and Structure: CCSS.ELA-LITERACY.RST.6-12.4
- Vocabulary Acquisition and Use: CCSS.ELA-LITERACY.L.6-12.6

Vocabulary by Activity

Activity		
Activity 1: Ground Up	• Ionizing radiation • Radiation • Radioactive atom	• Radioactive decay • Radon • Uranium
Activity 2: Radon Vacuum	• Ionizing radiation • Radiation	• Radon • Uranium
Activity 3: Indoor Radon Levels	• Ionizing radiation • Radiation	• Radon • Uranium
Activity 4: The Half-Life of Radon	• Alpha particles • Half-life • Ingestion • Inhalation • Ionizing radiation	• Radiation • Radioactive atom • Radioactive decay • Radon • Uranium

Activity Suggestions

- **Identifying images.**
  - Print the applicable images from the *Vocabulary Materials* document.
  - Display the images around the room or spread them out in an open area on the floor.
  - Pronounce the vocabulary words one at a time. NOTE: You can provide the definition of the given word at this time or after students have identified the words.
  - Have students take turns identifying the words in an active manner. Suggestions include having students move to and identify the correct image, use a flashlight to point to the correct image (review safety rule: never shine the light in another person's eyes), drive a remote control car to the correct image, or throw a bean bag to land on the correct image.
- **Matching words and images.**
  - Print the applicable words and images from the *Vocabulary Materials* document.
  - Give each student a vocabulary word or image. Options: Fold or ball up the copies and let each student select one. Have students trade their copy with another student once or twice. NOTE: You may need to participate to have an even number of participants.
  - Direct students to find the person with the matching word or image.
  - Review the matches to confirm they are correct.
  - Pronounce each word and provide a definition.
- **Spelling the words.**
  - Print the applicable words and images from the *Vocabulary Materials* document.
  - Display the words and images.
  - Pronounce each word and provide a definition.
  - Conduct a spelling activity:
    - Have students create a word scramble or word find activity, trade papers and complete the activity.
    - Play spelling basketball. Divide the class into two teams. Pronounce a vocabulary word. Have a student (alternating between teams) spell or write the word on the board. Students that spell the word correctly are given an opportunity to shoot a basket (use a trash can) with a ball of paper (ball) from a designated distance (or varying distances for a different number of points). The team that scores the most points wins. You can have students provide a definition for extra points.
- **Creating definitions.**
  - Print the applicable words and images from the *Vocabulary Materials* document.
  - Display the vocabulary words and images.
  - Pronounce the vocabulary words.
  - Have students work in pairs or small groups to hypothesize and create a definition for each vocabulary word.
  - Options: Direct one student from each pair/group to rotate and join another pair/group or have two pairs/groups join together. Direct the newly formed groups to compare their definitions and modify them if desired.
  - Review each pair/group's definitions, have students discuss what they agree/disagree with and share the accurate definition.