

**TEACHER'S NOTES 8**


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**WHAT ARE THE RISKS FROM RADON?**


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**BACKGROUND**

People are often indifferent to the radon issue and exhibit a tendency to ignore or deny health risks. Some people are negative about radon testing, perhaps because of concerns that property values might be affected or because associated health risks are far off in time. There is also evidence suggesting that people are more apt to accept that other people's risk may be real, rather than their own. This may be from a need or desire to feel that one's home is "safe."

How do you, as a teacher, communicate risk to your students? There is no easy answer to this question. It is important for you to realize, however, that you must walk a fine line between inciting panic in some students versus combating indifference in others. This is a difficult task, and one that requires a great deal of sensitivity on your part. It is a task that calls for open discussions about risks and perceptions of risk with, and among, your students. Good luck!

**WARM-UP**

Prior to distributing *What Are the Risks from Radon?* have students assign some probability or "odds" for different events from their own experiences. Some of these events might include getting 100% on a math test, winning the lottery, or getting a free ticket to a concert or sporting event. Discuss with the students how they arrived at their probability estimates for each event.

**TEACHING TIPS**

It is recommended that you first review with students the terminology associated with probability (e.g., ratio, sample, outcomes) prior to beginning this activity. It is also recommended that you review with students the unit of measurement (picocuries per liter) used for indoor radon.

**GROUPING**

Pairing students in groups of 2 is suggested to complete the probability activity and subsequent analysis.

**MINIMUM RECOMMENDED TIME PERIOD**

One class period.

**LEARNING PROCESS SKILLS**

Science

Math

Social Studies

Social or Group

Communicating  
Inferring  
Applying

Investigating  
Analyzing

Judging informa-  
tion related to  
a problem

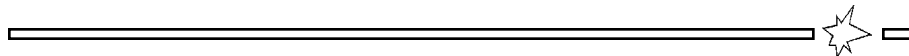
Collaborating  
with others

**STUDENT RESPONSES**

Student responses will vary according to the student’s background with probability.

**EXTENDED ACTIVITIES**

1. Have students research and develop a mathematical model that could explain the risks associated with radon gas.
2. Have students research and describe how the New Jersey state lottery computes the probability of winning.





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**Radon Alert**  
**Lesson Plan Evaluation Sheet**  
**and FREE POSTER AND STORYBOOK offer**

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The New Jersey Department of Environmental Protection is happy to provide these lesson plans for use by teachers. In order to evaluate the use of the lesson plans, we would greatly appreciate your response to the following questions. All teachers who return these forms will receive a FREE RADON POSTER depicting information about radon in a colorful format and a STORYBOOK about a Native American child and his experience with radon in his home.

**1. Which Radon Alert lesson plan(s) did you use?**

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**2. How useful did you find it/them (check one) ?**

- Not useful  
 Slightly useful  
 Moderately useful  
 Very useful  
 Extremely useful

**3. Do you plan to use them again in the future?  Yes  No**

**4. In your view, what would make the lesson plans MORE useful:**

**Your name:** \_\_\_\_\_ **Phone Number:** \_\_\_\_\_

**Subject area:** \_\_\_\_\_ **Grade:** \_\_\_\_\_

**Mailing address:**

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To receive your FREE RADON POSTER and STORYBOOK, mail or fax this completed form to:

**NJDEP Radon Program, P. O. Box 415, Trenton, NJ 08625**

**Fax: 609-984-5595.**

**(Questions? Call the Radon Program at 1-800-648-0394.)**