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**TEACHER'S NOTES 8****HOW MUCH RADON IS AROUND YOU?**

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**BACKGROUND**

Students will conduct a radon audit of their homes in this exercise. It is intended to allow them to estimate and evaluate the major potential sources of radon entry into their homes and also to become aware of the many “unseen” routes of ventilation in the typical home. Also, it should reinforce the concept that preventing radon entry into the home and ventilating or diluting radon levels are the two processes that make effective differences in terms of reducing the inhabitants' risk from radon. The main focus of this exercise is the ventilation component, because measuring radon entry requires the purchase and processing of one or more radon detectors (*if you have the financial resources, this would be a useful addition*). Please inform the students not to take for granted that a leaky house is *necessarily* low in radon. Conducting a radon audit and drawing a schematic diagram of their homes will take a fair amount of time. These would best be done as a homework assignment. If students live in apartments above the second floor, have them work together with classmates who live on lower floors when conducting this exercise. Alternatively, they could conduct an audit of part of the school building.

*Note:* Remind students that when conducting a radon audit of their homes, there are places that can't be seen, and therefore will not be included when calculating total ventilation.

**MINIMUM RECOMMENDED TIME ALLOCATION**

Allow two days for the homework portions (home audit and schematic drawing) and one class period for analysis and discussion.

**STUDENT RESPONSES**

Question 3: Answers will vary.

Question 6: Answers will vary.

Question 7: Typical responses might include:

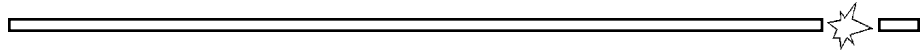
- increase air flows (ventilation) to rid the house of excess radon
- seal cracks in basement floor or foundation
- spend less time in the basement
- sleep in room with window open

Question 8: The information in this exercise provides absolutely zero information regarding the radon concentrations in any home. It merely helps the students evaluate the factors that might exacerbate or ameliorate what ever radon problem exists. They need to know *how much* radon is leaking in from underground. The only way to get an estimate of that is to take some radon measurements in the home.

**EXTENDED ACTIVITIES**

1. If a student in the class has had radon measurements taken at his/her home, have that student do a special assignment to report to class what was done, why, and what the results were.

2. Purchase one or two short-term radon detectors and use them to measure the radon levels in the classroom or some other portion of the school. See Resources, Information Resources.





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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.)**