

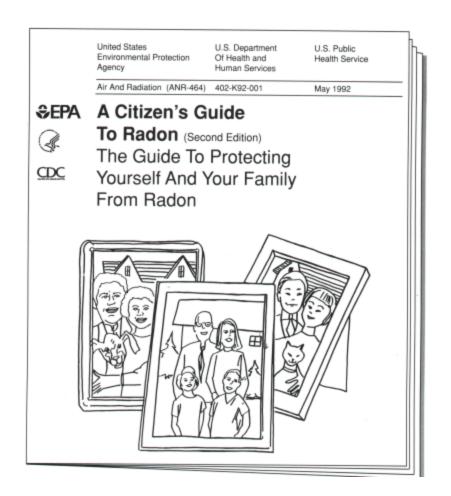
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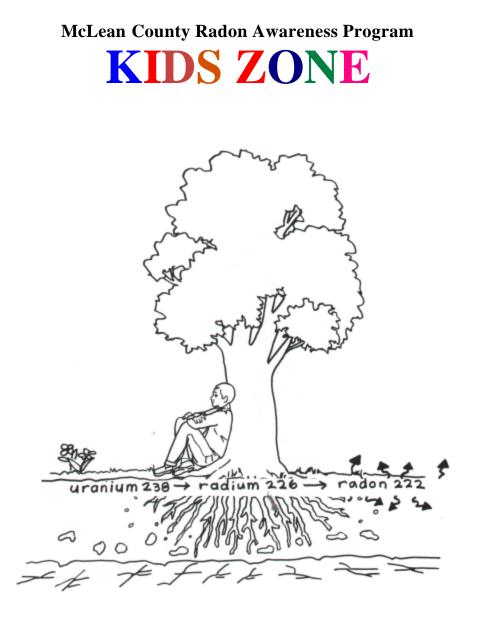


Nature has many mysteries that have fascinated people over the centuries. Where do tornadoes come from? What causes a dry summer or a wet spring? There are many things that humans have wondered about and studied. Jason Andrews has been looking for a subject for his science report. Jason has been sitting and thinking about nature's mysteries.

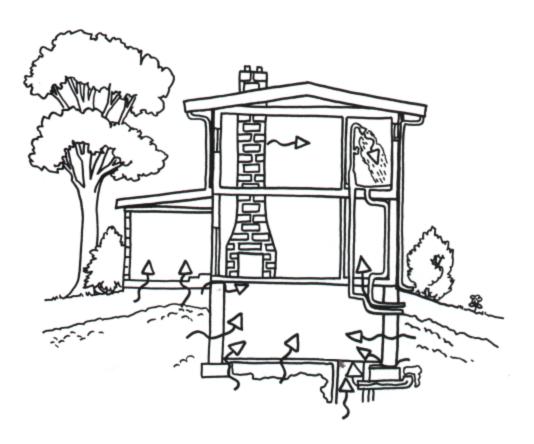




Jason checked his local library. He read a brochure called "A Citizen's Guide to Radon". This brochure said that radon is a natural radioactive gas. You can't see, smell or taste radon, but it may harm your lungs if you breathe it.



Jason learned that radon comes from the breakdown, or decay, of a natural radioactive element called uranium-238. Uranium occurs in small amounts in all soil. When it decays, it first becomes another element called radium before it changes again and becomes radon. If the radon is near the surface or in the water in a well, it can sometimes get inside our homes and schools and get trapped there.



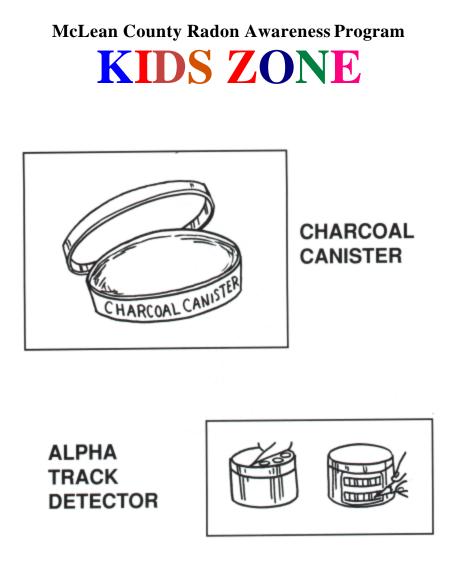
Jason studied different ways that radon could get into his home. He learned that radon could get in through openings in the house around pipes and where the floor and walls join, as well as through cracks in the basement floor. Radon could enter through the space under his family room. Jason learned that radon could get in any tiny space that came in contact with the earth.



The brochure that Jason read at the library said the only way to that he could find out if he had radon in his home was to test for it. Jason learned that he could buy a radon test kit at his local hardware store. Jason told his friend Ben about the radon test kit.

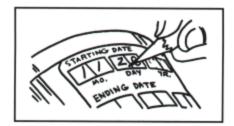


Jason told his dad about his science project and asked if they could buy a radon test kit. Jason's dad said he would take Jason to the hardware store. Ben called and said he and his dad were going to the hardware store to get a radon test kit, too. So they all went together.



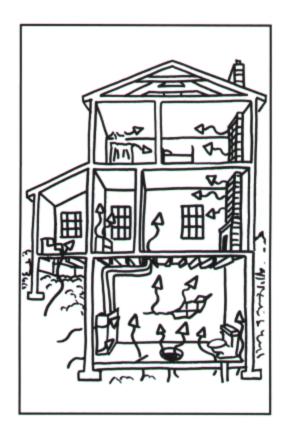
There were two types of kits at the hardware store where Jason and Ben went. One kit that tested for radon was called a charcoal canister. Another type was called an alpha track detector. Jason decided he would use the alpha track detector. His friend bought a charcoal canister.





That night Jason explained the radon test to his family. Jason's mother helped him follow the directions. Jason and his mother knew they had to place the test in the lowest livable part of their home. Since they don't use the basement often, they placed the test kit in the family room.





Jason's mother said the alpha track detector is a "long term" test and that it would be three months before they sent it back to the laboratory to find out how much radon they had.





Ben had to keep the windows closed and all the fans off while his family tested because Ben's charcoal canister is a "short-term" test. The canister is kept in the house for two to seven days before being sent to the laboratory. Results from both test kits are usually returned in a couple of weeks.





Jason's mother explained to the family that the test kit should not be touched or else they would have to redo he test.



Ben got his results back about two weeks after he returned the charcoal canister. Ben did not have a radon problem at his house. Jason forgot about his test. He thought that since both families lived on the same street, there would not be a radon problem in his home either. Jason read two mystery books while the test kit sat on the shelf.



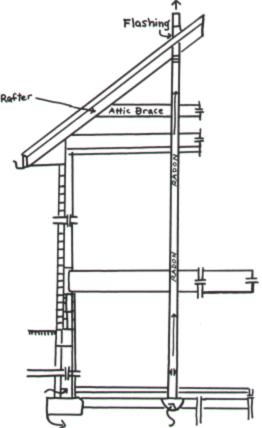


Jason finished his report about radon and gave it to his teacher. She was so interested that she asked Jason if he would report to the class in three months when his radon test was complete. She said she wanted to know what to do if there was radon in a home or building.

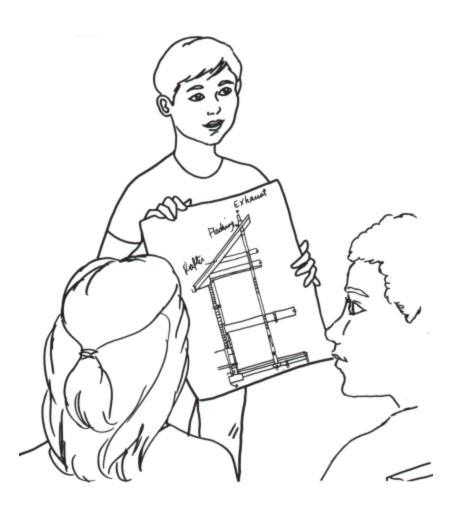
McLean County Radon Awareness Program

	Mr i Mrs John Andrews Por Mein Street Raytown, Illinois 60001
	Test Result 10.8 Cill
	EPA Guideline is 4.0pCi/L. EPA recommends that you fix your thouse if you have a radon level more than 4.0pCi/L (picocuries per lide)
//	than 4.0 pCi/L (picocuries per liter)
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Three months passed. Jason and his mother wrote the time and date of the test on the alpha track detector. Then they carefully placed the alpha track detector back in the box. The alpha track detector was mailed to the laboratory and they waited for the results.



One day after school Jason's mother called him into the kitchen and told him that their radon test results had arrived. The test said that they had too much radon in their home. Jason and his mother did a second radon test to be sure that the first test was correct. Again the test said that they had too much radon in their home.



The next week, while the contractor was fixing the radon problem at Jason's house, Jason was giving his report to his classmates. He explained that radon can be fixed by sealing cracks in floors, using a seal around pipes and sometimes placing a pipe in the home. He show them the picture that his mother had shown to him while explaining how their radon problem would be solved. He told the class that the professionals that fix radon problems are called "mitigators".



Jason's teacher was very pleased with Jason's report. She said the class had learned that radon was not really a mystery after all. Radon is just another gas that occurs in nature and as long as we are aware of how to take care of it, radon is just another part of our world.