

Instructions: You should refer to the instruction notebook you received in our two-day MET certification. In addition, refer to the state's information site [www.NJRadon.org](http://www.NJRadon.org).

Note: A number of questions have several correct answers. You should indicate all answers that satisfy the question.

1. Radon is \_\_\_\_\_.
  - a. an industrial byproduct of nuclear electricity generation
  - b. a naturally occurring chemical element that is a liquid at +15° F
  - c. a radioactive gas
  - d. a gas that can be seen in the dark
  
2. The atomic number of radon is \_\_\_\_\_.
  - a. 48
  - b. 64
  - c. 86
  - d. 92

**Match the following nuclear parts with the correct number for radon.**

3. Protons
  - a. 64
  - b. 86
  - c. 92
  - d. 136
  
4. Electrons
  - a. 64
  - b. 86
  - c. 92
  - d. 136
  
5. Neutrons
  - a. 64
  - b. 86
  - c. 92
  - d. 136
  
6. What form or forms of radiation does radon emit?
  - a. Alpha particles
  - b. Beta particles
  - c. X-rays
  - d. Gamma rays

7. What are the units in which radioactivity is measured?
  - a. Fermis
  - b. Particles of radiation emitted per second
  - c. Curies
  - d. Radioactive decays per second
  
8. Which of these agencies regulates the fields of radon measurement and radon abatement?
  - a. US EPA
  - b. NJ DEP
  - c. US DEPT of HHS
  - d. County Health Offices
  
9. In general, in New Jersey, who is permitted to measure radon as a commercial service?
  - a. Medical doctors
  - b. Certified Radon Measurement Professionals
  - c. Certified Radon Mitigation Professionals
  - d. Hospital technicians with full time employment credentials
  
10. Of the radioactive particles emitted by radon, which ones cause the most damage to people?
  - a. Alphas
  - b. Betas
  - c. Gammas
  - d. X-rays
  
11. How does this radiation harm people?
  - a. Kidney impairment
  - b. Heart failure
  - c. Liver disease
  - d. Lung cancer
  
12. If the mitigation system is of the soil gas depressurization method, where should the fan or fans be located?
  - a. Above occupied space
  - b. Outdoors, at least 25 feet from the house
  - c. Outdoors with its exhaust at least ten feet from any window
  - d. Outdoors with its exhaust above the roofline
  - e. Outdoors with the exhaust at least ten feet from any window or at least two feet above any window
  
13. In New Jersey, your MET license is good for one year until it expires. How many days grace are allowed to continue testing until you receive renewal?
  - a. 30 days
  - b. 15 days

- c. 10 days
  - d. 0 days
14. There are many methods used to measure radon gas and radon radioactive decay products. Indicate from this list which methods are only used to measure radon gas.
- a. Charcoal Canisters
  - b. Working Level Monitors
  - c. Continuous Radon Monitors
  - d. Gamma Ray Dosimeters
  - e. X-Ray Detectors
  - f. Electret Devices
  - g. Alpha Track Detectors
  - h. Film Badges
15. What is the average daily exposure to environmental radiation for a US resident at sea level?
- a. 1 milli-REM per day
  - b. 0.36 REMs per year
  - c. 10 REM/year
  - d. 0.2 WLM per month
16. What is the largest source of this radiation?
- a. Cosmic rays
  - b. Radioactive elements in building materials
  - c. Radioactive elements in your body
  - d. Radon in the environment
17. If your client is concerned about the high fluctuations that are typical of short term radon measurements, what is your advice outside of a real estate transaction?
- a. Repeat the short term test at least three times at 30 day intervals
  - b. Take at least three short term tests and average the results
  - c. Do a long term test for at least 90 days using an alpha track device
  - d. Repeat the test using a continuous radon
18. If you see a radon mitigation system installed in a home, and it does not fully comply with the latest standards, what should you do?
- a. If it was installed prior to the regulations, you need do nothing; it is grandfathered.
  - b. Nothing is required if you cannot document the installation date.
  - c. Note the non-compliance on a deficiency report.
  - d. Turn system off until it can be brought up to current standards.
19. Can you legally sell a radon test kit to a customer?
- a. Yes
  - b. No

20. Can the customer then legally use the test result to satisfy the need for a test in a real estate deal?
- Yes
  - No
21. If your test exceeds the following level, the DEP recommends retesting.
- 4.0 pCi/L
  - 8.0 pCi/L
  - 20.0 pCi/L
  - It does not after any elevated test conducted under clear conditions.
22. Is it ok for a homeowner to purchase a radon test kit from a certified Radon Measurement Business and then test his home and give you, the inspector, the lab result for you to use in your inspection report?
- Yes
  - No
23. What are the NJ regulations for continuing education for METs?
- 16 hours every two years
  - 8 hours every two years
  - 8 hours each year
  - 4 hours each year
24. In the Periodic Table of Elements, which element is the immediate radioactive parent of Radon?
- Uranium
  - Bismuth
  - Radium
  - Thorium
25. Which of the following things is it ok for the homeowner to do before, during, or after the radon test?
- Thoroughly ventilate the house to eliminate radon that was present before the test, no less than 12 hours prior to the start of the radon test.
  - Seal the house closing windows and doors just before the inspector is due to arrive.
  - Move the test kit during the exposure time as long as it remains in the same room and height above the floor.
  - Under the instruction of home inspectors, reseal the test and put it in the mail to the laboratory.
  - On the instruction of the home inspector permit another MET to enter the house and reseal the test kit and send it to the lab.
  - When he/she gets the lab report, send it to their lawyer.