1. Who is credited for discovering the X-ray?
2. Who is the only person to receive the Nobel Prize for science twice?
3. ALARA stand for:
4. What are radiographers trying to achieve with ALARA? Explain:
5. Define the R/hr explaining what it is measuring:
6. 1 Rontgen = how many mr?
7. Which of the following are used primarily in radiography?
   1. Gamma sources
   2. Radio Waves
   3. X-rays
   4. Microwaves
   5. Both A and C
8. What are the components of an atom?
   1. Neutrinos, electrons, protons.
   2. Positrons, neutrinos, electrons.
   3. Electrons, neutrons, positrons, negatrons.
   4. Protons, electrons, neutrons,
9. The elements, Cobalt and Nickel are shown as stable elements on the periodic Table.
   1. True
   2. False
10. Radiation is defined as:
    1. Ionized Beta Alpha particles
    2. Energy in transit, either as particles or electromagnetic waves
    3. Heat and light emitting only from gamma sources like uranium or the sun
    4. Energy that does not burn or ionize
11. An Ion:
    1. An atom or part of an atom with a + or a – charge
    2. A long, long time
    3. Is not harmful to humans
    4. None of the above
12. Two distinct types of radiation are:
    1. Alpha and Omega
    2. Particulate and Electromagnetic
    3. Positive and negative
    4. None of the above
13. An Alpha particle:
    1. Is a type of ionizing radiation
    2. Is not harmful to humans IF it remains outside the body and is not inhaled
    3. Is not considered as harmful to humans as Beta or Gamma radiation
    4. All of the above are correct
14. Beta Particles:
    1. Have almost zero mass and travel at almost the speed of light
    2. Travel several meters in air
    3. Has either a + or – charge
    4. All of the above are true
15. Only Gamma radiation can ionize matter.
    1. True
    2. False
16. Which of the following are two types of electromagnetic radiation used for industrial radiography?
    1. X-rays and Microwaves
    2. Gamma and X-rays
    3. Gamma and Radio waves
    4. Infrared and UV
17. What is the safe dosage rate for the public?
    1. 2 R/hr
    2. 20 mr/hr
    3. 2 lamda per M
    4. 2 mr/hr
18. Three factors to keep us safe in regards to working with radiation are:
    1. Time, distance and shielding
    2. Water, sunscreen, and math
    3. Inverse Square Law, OSHA, and lead
    4. None of the above