Question 1: Complete the table below regarding the four types of radiation.

	Mass	Charge
alpha particle		
beta particle		
positron		
gamma rays		

Question 2: Which objects may be used to block radiation from alpha particles, beta particles, and gamma particles?

alpha particles:

beta particles:

gamma rays:

Question 3: List three ways to reduce exposure to radiation.

Question 4: Technetium-99 is the most commonly used radioisotope used in medicine with approximately 40 million procedures performed worldwide each year. It has a half life of 6.00 hours. If a patient is given 2.08 grams of Tc-99, how many grams of the sample is remaining after 24 hours?

Question 5: Strontium-89 is a radioisotope used to treat cancer-induced bone pain. It has a half life of 50.5 days. If a patient receives a dose of 426 mg, how many mg of the sample remains after 151.5 days?

Question 6: Why do radioisotopes used in medicine have relatively short half-lives?

Question 7: List three types of medical imaging techniques that use radiation.