Read through the articles on Bone Mineral Density and How X-Rays Work. Answer the following questions as you read on your own sheet of paper.

**Bone Mineral Density**

1.) What are three methods of testing BMD?
2.) How is this information used?
3.) What is it called when our bones naturally become thinner?
4.) What are some ways to increase bone density and strength?
5.) What is the most accurate way to measure BMD?
6.) What does DEXA stand for?
7.) What are two reasons DEXA is a beneficial method to measure BMD?
8.) What is one drawback form using DEXA?
9.) What is one disadvantage in using P-DEXA?
10.) In what areas of the body is DPA used to measure BMD?
11.) What are three advantages of ultrasound?
12.) What is one disadvantage of ultrasound?
13.) What is QCT?
14.) What are disadvantages of QCT?

**How X-Rays Work**

15.) X-rays were invented accidentally in 1895 by what German physicist?
16.) What are modified x-rays used for?
17.) What three events occur when atoms emit light?
18.) What are some other ways that x-rays are used (outside of medicine)?
19.) Extra energy is released in the form of what type of photon?
20.) In an x-ray negative, how do hard and soft materials appear?
21.) Doctors can bring different materials into focus by doing what?
22.) What are contrast media?