

Structure and Function in Living Systems

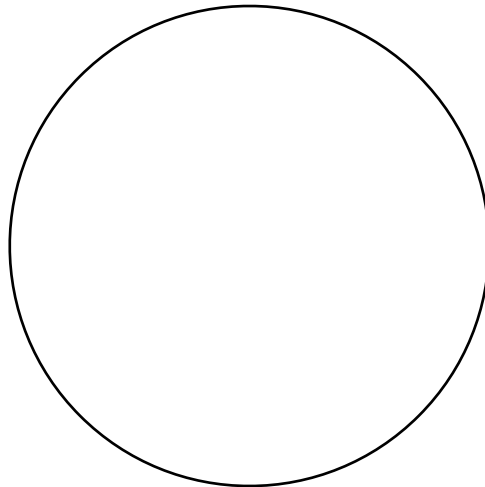
Name:

Bone Cells

Period:

Use the slide strip #102 and a plastic microscope for this. Use colored pencils to make a drawing in the circle of what you see. Then, answer the questions using what you observed and information from the paragraph below.

Circle #7 shows different kinds of cells in a bone. The bone has been cut in half, and you are looking at the end of the cut. When you draw, do NOT draw the letters and lines you see on the photo!



1. The dark spots labeled A are cells that make minerals for the bone. What are these special cells called? [p.473]

2. Minerals help to make the bone strong. Which of the two types of bone would you expect to have more of these special cells in it? [p.473] _____
3. Which of the two types of bone would you expect to have fewer of these special cells in it? [p.473]

4. In the center of the photo is a dark, round object. This is a tube that carries blood in it, called a blood vessel. It will go from inside the bone to the rest of the body. What kind of tissue in the bone creates blood? [p.473]

5. What kind of tissue in a bone stores fat? [p.473] _____
6. Often, treatment of cancer involves giving the patient lots of chemicals to combat the cancer. This is called chemotherapy. Sometimes, chemotherapy reduces the production of red and white blood cells in the patient's body. What part of a bone would be affected by this kind of chemotherapy?

7. Your bones are made of lots of tissues working together. What does this make your bone? [p.468]
A bone is an... _____
8. Do all of these cells ... have the same size? _____ ... have the same shape? _____
... do the same job? _____
9. Write the terms **osteoblast** and **blood vessel** outside of the circle, and draw a line from the term to part of your drawing so it touches that part in the drawing.