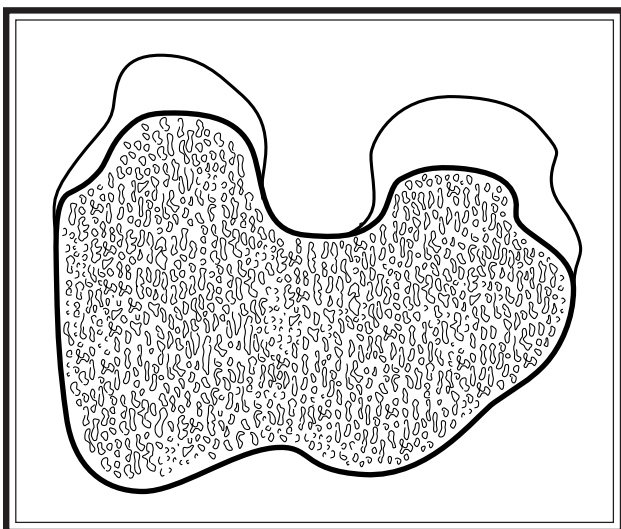


## ACTIVITY 4B: DETERMINATION OF BONE DENSITY WITH BONE SPECIMENS

### ANALYSIS QUESTIONS — Answer Key

1. The greatest bone density should be from a bone specimen cut toward the middle of the shaft of the long bone. The smallest bone density should be from a bone specimen cut located at the end of the long bone.
2. The average bone density of all the bones should be greatest towards the middle of the shaft of the long bone. The smallest average bone density of all the bones should be at the ends of the long bone.
3. The graph of the class' average bone densities should follow a similar pattern with the group's bone density values. The greatest bone density values should be toward the middle of the shaft of the long bone, and the smallest bone density values should be at the ends of the long bone.
4. Differences in bone density values for each bone specimen cut among the bones used in the different lab groups could be due to the age of the animal, disease, nutrition, and accuracy of measurement.

SKETCH OF AN END  
OF A LONG BONE



SKETCH OF A MID-SECTION  
OF A LONG BONE

