

Tuesday 02/06 Worksheet

1. Where in the bone are all blood and immune cells produced?
2. Define a long bone. Where is most of its length found? Describe its shape.
3. Define a flat bone? What are some of its characteristics? Give some examples.
4. How is the term “cortical bone” fitting for compact bone?
5. What are concentric lamellae, interstitial lamellae, and circumferential lamellae and where are they located with respect to one another?
6. Is there an example of a very short “long bone” mentioned in class? If so, name an example.
7. Know the “Sandwich” organization of flat bone.
8. Why are ribs not considered to be long bones?
9. The combination of Haversian and Volkmann’s Canals within the bone creates what within the bone? What direction do each of these canals run in? Explain.
10. What is osteoid? What is the ground substance?
11. How does the organic matrix and the inorganic matrix (what term describes the major component of the inorganic matrix) combine “synergistically” or “emergently” to make the bone strong, both in term of “tensile strength” and “compressive strength”?
12. What is the major component that lends compression strength to a bone?
13. What is the major component that lends tensile strength to a bone?
14. What soft tissue is the skeleton made of before ossification?

15. What is the name of the tissue between the epiphysis and diaphysis that drives long bone growth?