

Down

1. Bat bones do this as you go toward the tip to reduce mass.
3. Your skeleton was made of this before the chondrocytes made the matrix.
4. These attach muscles to bones.
6. This is a process that occurs when calcium and other minerals are deposited around cartilage to make bones hard.
7. These cells act like microscopic construction workers – constantly remodeling and reshaping your bones because of everyday stresses.
8. This is the bone in the upper arm.
10. Bat bones are designed to conserve this, which they are very efficient at doing.
13. This is the type of bone in your leg.

Across

2. This is a force that results from the tendency of objects with mass to accelerate toward each other.
5. Bat wing bones display this type of scaling, as shown in analytical studies of bats versus other non-flying animals.
9. This is on the outside of the bone. It provides that bone with protection and nutrition.
11. Studies have shown that bat bones undergo this force while flying, which can be characterized as a “twisting” motion.
12. These cells lay down minerals like calcium and are the first cells brought in after blood vessels form in your bones!
14. Most mammalian bones move at these points in the body, such as the hip, elbow, and knee.

Answer Key

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