

Discovery Channel Body Story: Breaking Down

Lisa Mason - Broken Bone

1. The human body has an amazing capacity for _____ and _____.
2. Bones resist compression forces that are _____ that of concrete yet are _____ the weight of steel.
3. The arches in bone are made of the minerals _____ -- and _____ and a flexible protein called _____.
4. If the way you walk changes, then the arches that make bone strong _____.
5. Beneath the skin bones are teeming with life including blood _____ and _____.
6. Microscopic organisms keep your skeleton in a state of _____ youth.
7. _____ squirt an acid that can burn through sheet metal. It eats through the mineral layers and collagen. ("bone destroyers")
8. _____ follow in their step laying down new collagen and fresh minerals. ("bone builders")
9. The bone builders work continually and _____% of your bones are replaced every year.
10. Your skeleton is never more than _____ years old!
11. When she falls, the bones are subjected to a force _____X her body weight.
12. Her _____ bone snaps to prevent further injury. Battered pain _____ fibers send signals to the _____.
13. Her brain releases _____ that mute the pain to almost nothing so that she can escape further danger.
14. Pain is now necessary so we can evaluate (assess) _____ damage.
15. _____ the area releases more but milder endorphins.
16. On her hand special blood cells called _____ turn into _____ to block the wound.
17. Invisible protein strands made of _____ net the wound pulling the edges together.
18. _____ is caused by blood vessels dilating to flood the area with _____ and _____.
19. _____ has a purpose of protection so the injury is not aggravated.
20. A _____ is a huge blood clot that envelopes the fracture.
21. Thousands of bone building cells called _____ - cells are factories that form a new cell now every minute.
22. As hemoglobin is broken down the color of a _____ goes through all the color hues!
23. The scab loosens as new _____ cells are pushed up.



24. The broken bones are _____ together. The new bone is _____ as thick and strong as the old bone.
25. Osteoblasts go to work in this area and it is _____ until perfect. For _____ year they will continue to sculpt.

Bob Bridges - Aging

26. _____ cells replace cells all over the body.
27. As you age; you are exposed to more pollution and UV light. Even without those factors, cells produce their own _____ .
28. The cells of the _____ and _____ can't renew themselves, as other organs can.
29. Products of cell activity, called _____



- _____ can damage anything in the body that they collide with. When _____ is damaged, it usually repairs itself. Cells with damaged DNA commit _____ . As you age, many cells die.
30. If free radicals kill nerve cells in the legs _____ is affected.
31. Free radicals can damage nerve cells in the brain, causing it to shrink. This can affect _____ and _____ .
32. _____ is an electrolyte, which conducts electricity in the body. It can affect the rhythm of the heart.
33. The body's production of morphine reduces a _____ and _____ .
34. After _____ death, the rest of the body's cells may continue with cell activities for a while, but eventually they will stop and body heat will drop to room temperature.