

## **Health Sciences 1111 Module 20-Aging**

### **Laboratory Activities**

Watch the "The Death Knell of Old Age" video

- Answer the questions on your laboratory worksheet.

There are no graphics for this exam

## Module 20-Aging Laboratory Worksheet

Answer the following questions as you watch the "The Death Knell of Old Age" video

1. What process undertaken by the body allows us to survive?
2. \_\_\_\_\_ are specialist cells in charge of producing new and healthy cells to replace the old.
3. There are things that stem cells are responsible for replacing. They are \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
4. The \_\_\_\_\_ and the \_\_\_\_\_ are two organs that cannot be replaced.
5. One type of pollution produced by cells during normal processes are called \_\_\_\_\_ radicals. These are produced as part of the \_\_\_\_\_ process.
6. Free radicals specifically damage \_\_\_\_\_ in the nucleus of the cell.
7. To prevent a mutation of the DNA from spreading caused by free radicals cells are designed to \_\_\_\_\_.
8. Free radicals have also affected Bob's movement by destroying \_\_\_\_\_ in the spinal cord.
9. What is Bob's most precious organ?
10. The hippocampus translates experience into \_\_\_\_\_.

11. Older people are usually \_\_\_\_\_ than younger people.
12. Bob's cause of death was a \_\_\_\_\_  
\_\_\_\_\_.
13. After death what happens to your body temperature?
14. Over time the surface area aiding the absorption of oxygen \_\_\_\_\_. Tissue will also lose its \_\_\_\_\_ and has been damaged by pollutants.
15. A decrease of muscle \_\_\_\_\_ in the heart affects the transport of \_\_\_\_\_ and \_\_\_\_\_ to the body.
16. The effect of age on Bob's brain hasn't affected his \_\_\_\_\_ memory, but his \_\_\_\_\_ memory has been decreasing his ability to assimilate new information.
17. As we age our hearing is affected. Gradually. As time goes by our \_\_\_\_\_ hearing is the first to decrease.
18. The lens of the eye coats itself causing the lens to be less \_\_\_\_\_ and more \_\_\_\_\_.
19. Repetitive use of our brain cells helps to prevent them from \_\_\_\_\_.
20. Blood vessels become filled with \_\_\_\_\_ and other harmful substances affecting our ability to conserve body \_\_\_\_\_ through \_\_\_\_\_.

21. Bob's stomach cells were not able to replace the lining allowing for a \_\_\_\_\_.  
Normally the body would constrict the blood vessels to stop the bleeding, but the blood vessels have become \_\_\_\_\_ because of \_\_\_\_\_ preventing them from constricting.
22. Bob's heart tries to compensate for blood loss by \_\_\_\_\_.
23. As the blood is being digested it releases \_\_\_\_\_ affecting the normal rhythm of the heart.
24. Brain cells are highly vulnerable to sudden drops in \_\_\_\_\_.
25. As brain cells start to die they release morphine like chemicals called \_\_\_\_\_.
26. Spontaneous firing of cells in the visual cortex may be the cause of seeing a \_\_\_\_\_ of \_\_\_\_\_ prior to death.
27. Brain cells \_\_\_\_\_ from one another leading to brain death.
28. The body continues to make \_\_\_\_\_ for a few minutes and \_\_\_\_\_ live on for a few more hours after death.

No graphics on Module 20 Exam.

## Answers for video questions

1. CELL REPLACEMENT
2. STEM CELLS
3. BONE; BLOOD CELLS; STOMACH TISSUE (LINING)
4. HEART; BRAIN
5. FREE; OXIDATION
6. DNA
7. DIE; COMMIT CELL SUICIDE
8. NERVE CELLS OR NEURONS
9. BRAIN
10. MEMORIES
11. COLDER
12. BLEEDING STOMACH ULCER
13. DECREASES TO ROOM TEMPERATURE
14. DECREASES; ELASTICITY
15. MASS; BLOOD; OXYGEN
16. LONG TERM; SHORT TERM
17. HIGH PITCH
18. FLEXIBLE; RIGID
19. DYING
20. PLAQUE; HEAT; VASOCONSTRICTION
21. GASTRIC BLEED; STIFF; ARTERIOSCLEROSIS
22. INCREASING HEART RATE
23. POTASSIUM
24. BLOOD PRESSURE
25. ENDORPHINS
26. TUNNEL OF LIGHT
27. DETACH
28. SKIN CELLS; MUSCLES