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   A. mutations in DNA for the protein which activates repair enzymes
   B. mutation in genes for inhibiting the cell cycle
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   D. active telomerase
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8. A mutation in the Bax gene results in:
   A. less likelihood of apoptosis
   B. less Bax protein present
   C. possible tumor formation
   D. All of the choices are correct.

9. Ras oncogenes
   A. produce cyclin.
   B. activate repair enzymes.
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   D. activate cyclin.

10. Which of the following mutated genes ultimately results in increased cyclin activity?
    A. p16
    B. Ras
    C. p53
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11. Stimulatory pathways are:
    A. proto-oncogenes
    B. tumor suppressor genes
12. Inhibitory pathways are:
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13. Cancer causing genes are
   A. apoptosis
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15. Cancer of blood forming cells is
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16. What are telomeres?
   A. specific proteins
   B. repair enzymes
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17. What is the role of telomeres?
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   B. act as molecular handles
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18. An oncogene:

A. is the gene that causes p53 to be readily available  
B. is a gene that causes a cell to become differentiated  
C. is a gene that codes for the lipid component of the plasma membrane  
D. can make cyclin available at all times

19. The regulatory network in cells that controls cell growth includes:

A. growth factor receptors in the plasma membrane  
B. signaling proteins in the cytoplasm  
C. genes in the nucleus  
D. All of the choices are correct.

20. Which is NOT associated with the development of cancer?

A. plasma membrane receptors  
B. the Golgi apparatus  
C. cytoplasmic enzymes  
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21. Which is NOT associated with the development of cancer?

A. plasma membrane receptors  
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A. is a cancer-causing gene  
B. is a gene that codes for inhibitory proteins that prevent cell division and promote apoptosis  
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D. is a gene that stops a tumor once it has developed

23. During the formation of cancer, which of the following occurs?

A. initiation  
B. promotion  
C. progression  
D. All of the choices are correct.
24. The uncontrolled division of cells is called:
   A. cancer
   B. mitosis
   C. mutation
   D. metastasis

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   A. bolus
   B. diverticulum
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   A. smoking cigars and drinking alcohol  
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