

Name: _____ Per: _____ Date: _____

Genetic basis of Cancer Reading Guide

H. Bio

Use pages 224-227 of your text to answer questions:

1) Define oncogene and describe how an oncogene enter a healthy cell: _____

2) How does a proto-oncogene differ from an oncogene? _____

3) What do most proto-oncogenes code for? _____

4) Describe three changes that can occur in DNA causing proto-oncogenes to become oncogenes:

- _____
- _____
- _____

5) What role does a tumor-suppressor gene play in cancer?

6) Why does cancer usually take a long time to develop?

7) Describe how the mutation of a relay protein involved in the stimulation of cell division can cause cancer: _____

8) Describe how a mutation to a tumor suppressor protein can impact cell division:

9) What is a carcinogen? _____.

10) What are the greatest known cancer causing agents? List the top five:

1)

2)

3)

4)

5)

Which surprised you the most and why:

11) How can carcinogens cause cancer?
