**Understanding Cancer**

Use the resources provided in class and on the website to complete this worksheet.

**Section 1: Factors Reported to Be Associated with Cancer**

View the News *Alert!* videos with the class and use the information provided to identify what each video suggests is the cause of cancer and what evidence supports that claim.

|  |  |  |
| --- | --- | --- |
| *News Alert/* Video | Factor Proposed to Cause Cancer | Evidence |
| *Cancer and Chemical Poisons* |  |  |
| *Cancer and Your Family History* |  |  |
| *Cancer and Radiation Exposure* |  |  |
| *Cancer and UV Light* |  |  |

**Section 2: Building an Explanation for the Cause of Cancer**

View the *Cell Cycle* animations with the class. Think about the information each animation presents, then write a one-sentence statement for each that summarizes what you learned.

*Animation 1*

Cancer involves . . .

*Animation* 2

Cell division normally is . . .

##### Animation 3

Cell cycle regulation is accomplished by . . .

##### Animation 4

Cancer-causing agents often . . .

##### Animation 5

When damage occurs to genes that regulate the cell cycle . .

**Section 3: Explaining Factors Associated with Cancer**

Using your notes from Section 1, write a sentence describing how our current understanding of cancer explains the role that each factor plays in causing cancer.

*Cancer and Chemical Poisons*

*Cancer and Your Family History*

*Cancer and Radiation Exposure*

 *Cancer and UV Light*

**Colon Cancer Incidence by Age**

### Examine following graph, and use it to answer the questions below.

### **Incidence of Colon Cancer by Age**

350

300

250

200

150

100

50

0

**number of people (per 100,000)**

0 20 40 60 80 100

**age**

1. How likely is it that you will develop colon cancer this year?

2. How likely is it that someone who is 60 years old will develop colon cancer this year?

3. How likely is it that someone who is 80 years old will develop colon cancer this year?

4. How can we explain this change in the risk of a person developing colon cancer?