NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE:\_\_\_\_\_\_\_\_\_\_\_ HOUR:\_\_\_\_\_\_

**NIH – Cell Cycle and Cancer Activity**

*Use the resources provided on the website to complete this worksheet.*

<http://science.education.nih.gov/supplements/nih1/cancer/activities/activity2_videos.htm>

**Part I: Factors Reported to be Associated with Cancer**

View the *News Alert!* videos 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* |  |  |

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

View the *Cell Cycle Animations* found as a link on the original website. As you are watching each animation, carefully think about the information the animation presents. Write a short summary of the information you learned from each animation.

*Animation #1*

*Animation #2*

*Animation #3*

*Animation #4*

*Animation #5*

**Instructional Notes: NIH Cell Cycle and Cancer Activity**

**Pre-activity Discussion**

Ask students the following questions. What do you know about cancer? What are some types of cancer? What does cancer do to the human body? What does cancer do to a cell? How do you get cancer? How do you know?

**Activity Performance Notes**

Each video describes a cancer, its causes and the evidence to support the claim. Fill in the table with the appropriate information. After each video segment, stop and discuss the major points. Ask how the understanding of the causes of cancer has changed.

After viewing the news alert videos, click on the cell cycle animations. This group of videos looks at cancer from a cellular perspective. After viewing animation one, use the slide view and look at the growth of the tumor frame by frame. Discuss how melanoma can be easily overlooked and deadly.

For each of the animations have students write a summary statement.

**Post-activity Discussion**

Discuss how cancer is related to the cell cycle. Include a discussion of cancer and tumors, including causes and possible preventive measures. Discuss with students the different types of tumors.