**3-2-2 Short Answer: Question for Study Assignment**

Learning how to ask good questions helps shape our learning. Science is constantly building on the work of those who came before. Review the news story you chose to complete the topic exploration graphic organizer from Theme 1 and respond to the question below.

What question related to the topic in the news story you chose would you, assuming the role of a natural scientist, like to study? **What causes cancer is the question I would like to study.**

Use your response to this question and the list of questions that you posed in Project 1: Topic Exploration Graphic Organizer (submitted at the end of Theme: Understanding the Scientific Process) to select one question that interests you and that you would like to focus on as you continue your project work in the course. **WHAT CAUSES CANCER**

As you complete this assignment, keep in mind that your answer to this question or closely related questions will be part of your Project 2 submission, the question development worksheet. It is recommended that, in addition to entering the answer to the question below, you save your answer in a Word document that you can refer to later when completing Project 2.

Cancer develops over many years and has many different causing factors. Looking at the environment, it plays a role in about 2/3 of all cancer cases in the United States. There are many life style factors like smoking, drinking alcohol, poor diet and lack of exercise and sun exposure. other factors include exposure to certain medical drugs, hormones, radiation, viruses, bacteria and environmental chemicals that may be present in our food, water and work place. Cancer risks associated with many environmental chemicals have been identified through studies done with occupational groups who have higher exposure rates to these chemicals than the general population. Lifestyle factors like being over weight, diet and exercise can play a major role in certain cancers like breast and prosate whereas the H-pylori bacteria is a risk factor for stomach cancer. Different environmental exposures that are linked to cancer are asbestos, benzidine and tobacco smoke. Asbestos can cause lung cancer, benzidine can lead to bladder cancer and exposure to tobacco smoke can lead to cancers of the lung, bladder, mouth, colon, kidney, throat, voice box, esophagus, lip, stomach, cervix, liver, and pancreas. A person does not only have to worry about the environmental exposures putting them at risk for developing certain cancers, they also have to worry about factors inside their body, Genetics is also another risk factor for developing cancer.

<https://www.niehs.nih.gov/health/materials/cancer_and_the_environment_508.pdf>

**3-4-1 Short Answer: Prior Knowledge and Assumptions**

It will be the last section after completion of choosing the question to explore in the question of study assignment.

Learning how to ask good questions helps shape our learning. Science is constantly building on the work of those who came before. Review the news story you chose to complete the topic exploration graphic organizer from Theme 1 and respond to the question below.

What question related to the topic in the news story you chose would you, assuming the role of a natural scientist, like to study?

Use your response to this question and the list of questions that you posed in Project 1: Topic Exploration Graphic Organizer (submitted at the end of Theme: Understanding the Scientific Process) to select one question that interests you and that you would like to focus on as you continue your project work in the course.

As you complete this assignment, keep in mind that your answer to this question or closely related questions will be part of your Project 2 submission, the question development worksheet. It is recommended that, in addition to entering the answer to the question below, you save your answer in a Word document that you can refer to later when completing Project 2.

Stanford Medicine. "We are bombarded by thousands of diverse species and chemicals." ScienceDaily. ScienceDaily, 20 September 2018. <[www.sciencedaily.com/releases/2018/09/180920161041.htm](http://www.sciencedaily.com/releases/2018/09/180920161041.htm)>.

<https://www.sciencedaily.com/releases/2018/09/180920161041.htm>