Name: _____ Course: _____ Date: _____

3. GLOBAL RESEARCH

Important information on this topic has been pre-researched for you. Register online with the URL that your teacher will provide. Then check out the websites and videos on the Library of Links.

User Name: _____ Password: _____

Information from these web links will answer your Research Questions in Section 3, inform your responses to the Critical Thinking Questions in Section 5, and support the Presentation you will be preparing for Section 7.

Discuss and compare different perspectives with other members of your group.

Research Questions

Based on what you have learned in your research, answer the following questions. Group discussions are encouraged but answers to the research questions are to be written independently. To avoid plagiarism, your answers must be in your own words. Please list the links you used to answer your questions.

3.1 Explain the process of **Ocean Acidification.**

> **Did you know…?**
>
> One third of all carbon dioxide emitted by humanity has been absorbed by the world's oceans. This is making them more acidic than they have been for tens of millions of years.
>
> ~ *NOAA*

List the links you referenced:

3.2 The carbon cycle is a natural process where the Earth creates a balance between carbon released into the atmosphere and carbon absorbed by the different natural sinks. Before the industrial era, human activity produced some **carbon emissions**, but not enough to affect this natural cycle. Human activities are now creating such excessive amounts of carbon that the planetary life-support systems are struggling to keep balanced.

List three major sources of human produced CO_2 and some activities associated with each source.

List the links you referenced:

3.3 How does *ocean acidification* affect shellfish, corals, and other calcifying organisms?

List the links you referenced:

3.4 What are some changes in peoples' lifestyles over the past 50-60 years that have led to the increase of the production of *carbon emissions*? Give at least three examples below.

List the links you referenced:

Taking Action

Choose ONE (or MORE) action(s) from your **ACTION SURVEY** in the front of your Action Pack, check it off in **Column B** and record it below. Do the action(s) now.

My chosen action is: _____

I will complete it by: _____