**Biology Summer Task**

**Title:** Controversy in Biology

**Aim:** To investigate one of the most current controversial issues in Biology, Global warming.

**Background:** Watch the following videos about this issue and look at the following articles:

<https://www.ted.com/talks/ilissa_ocko_the_fastest_way_to_slow_climate_change_now?language=en>

<https://www.nationalgeographic.com/environment/article/global-warming-real>

<https://edition.cnn.com/2014/02/24/opinion/costello-debate-climate-change/index.html>

NASA – how do we know Climate change is real? - [Evidence | Facts – Climate Change: Vital Signs of the Planet (nasa.gov)](https://climate.nasa.gov/evidence/)

 Libre texts Biology – climate change [https://bio.libretexts.org/Bookshelves/Human\_Biology/Human\_Biology\_(Wakim\_and\_Grewal)/24%3A\_Ecology/24.09%3A\_Climate\_Change](https://bio.libretexts.org/Bookshelves/Human_Biology/Human_Biology_%28Wakim_and_Grewal%29/24%3A_Ecology/24.09%3A_Climate_Change)

SCIENCE DAILY – Global warming - [Global warming controversy (sciencedaily.com)](https://www.sciencedaily.com/terms/global_warming_controversy.htm)

Try and answer the following questions:

1. How have human actions enhanced the natural Greenhouse effect?
2. List the top three greenhouse gases in Earth’s atmosphere in terms of their effect on

climate.

1. Why is carbon dioxide the most significant cause of the enhanced greenhouse effect?
2. How does carbon dioxide enter the atmosphere?
3. Describe how atmospheric carbon dioxide concentrations have changed over the past millennium.
4. Define climate change.
5. Identify the main cause of recent and ongoing climate change on Earth.
6. Describe direct and indirect evidence for global warming.
7. Outline spatial variation in global warming.
8. How much is the global surface temperature predicted to increase in the future? Give the range of values based on climate models.
9. What factor is mainly responsible for the variation in model projections?
10. What is the greatest increase in temperature that most climate experts recommend avoiding the most catastrophic effects of global warming?
11. Identify several potential impacts of future global warming.
12. What is the single most important way to control global warming?

**Bring this work with you in September.**

**Course structure:** Edexcel A level Biology B

Specification content is arranged into distinct topics and linked to clear descriptive statements, so you know the depth of understanding that’s expected. Topics cover Human, Animal, Plant and Ecological Biology and also Biochemistry and Microbiology. Topics also build on each other to give you a broad knowledge base for assessment, and for progression to further study and the workplace.

**This document and more resources are available on Firefly,** ￼￼**udents can access a taster of the site via the Highams Park School website. Follow the Firefly link, choose 'Site login (Firefly)' then enter username: hps6thform and password: hps6thform. Current Highams Park students can access all resources using their existing login.**

<https://qualifications.pearson.com/content/dam/pdf/A%20Level/biology-b/2015/specification-and-sample-assessment-materials/9781446930892-gce2015-a-biob-spec.pdf>



