Chem 1 Hour\_\_\_\_\_ Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Wexler/Steinhorst  
Climate Change Questionnaire  
Date:

**Directions**: Answer each question to the best of your abilities; this test score will not count towards your grade. Please write your answers *neatly* on the lines provided.

**Section 1 – True/False**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Climate change is causing the world to heat up.
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Permafrost is a refrigerator brand name.
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Coral reefs are very important because they provide homes to over half of all the species that live in the ocean.
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ “Non-renewable resources” refers to a resource that will never run out.
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ We can be 100% sure of how climate change will affect different regions of the world.
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ The warming of the world’s oceans will not affect anything.
7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Renewable energy is energy that we can keep using over and over again.
8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Some populations of northern animals that cannot adapt to the changes caused by climate change may suffer.
9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ One way you can help reduce greenhouse gas emissions is by walking or riding your bike somewhere instead of using a car.
10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Solar heat refers to energy created by the sun.
11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Humans contribute greatly to climate change because we add too many greenhouse gases to the atmosphere.
12. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ The greenhouse effect is the trapping of solar heat by a “blanket” of greenhouse gases in the atmosphere.
13. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Fossil fuels include oil, gasoline and coal.
14. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Fossil fuels are non-renewable resources that produce greenhouse gases when they are used.
15. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Coral reefs need warmer ocean water to survive and will benefit from climate change.
16. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Solar energy can be used to generate electricity and heat.
17. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ As of 2012, the United States produces the most carbon dioxide emissions per-capita.
18. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ The term “atmosphere” refers to the thin layer of life on Earth.
19. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ As temperatures warm up, we can expect to see southern diseases and parasites moving north.
20. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ The term climate change refers to natural and human caused changes in climate that last less than a month.
21. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Climate refers to the average weather conditions of a region over a long period of time.
22. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Some people do not believe that our climate is changing.
23. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Some people think that climate change is not caused by people.
24. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Carbon dioxide is a smelly gas that is not found naturally.
25. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Some ocean species like otters and whales may benefit from climate change because there will be more open water so they can have access to more food.
26. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Climate change may cause water levels to rise because ice bergs are melting.
27. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Climate change may cause water levels to rise because glaciers and polar ice are melting.
28. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Reducing the amount of energy you waste will probably reduce greenhouse gas emissions.
29. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Most scientists do not agree that climate is changing.
30. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Climate change will affect the entire globe in the same way.
31. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ The ozone hole has been restored to “normal.”
32. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Chlorofluorocarbons (CFCs) cause global warming.
33. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Scientists have no way to look into the past.
34. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ The carbon dioxide put in the atmosphere only stays there for 10 years.
35. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Natural processes that remove carbon dioxide from the atmosphere can keep up with the amount humans put into the atmosphere.
36. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Deforestation (cutting down lots of trees) doesn’t affect global climate.
37. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ The Arctic regions will benefit from climate change.
38. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Climate change will cause more severe storms.
39. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Human health is not affected by climate change.
40. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Food supply is not affected by climate change.
41. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Increased amounts of water vapor in the atmosphere is harmless.

**Section 2 – Personal Opinion True/False**   
(There is no right/wrong answer… these are meant to reflect **your** opinions! True means that you agree with the statement, false means that you disagree with the statement.)

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ I think the climate is changing.
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ I think that climate changes naturally.
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ I think that climate change is accelerated due to human causes.
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ I think that a temperature increase (by the year 2100) of 2-30C is no big deal.
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ I think that a sea-level rise (by the year 2100) of 2 meters is no big deal.
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ I think that sea-level rise will not affect me because Colorado is not near the ocean.
7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ I think that scientists don’t know anything about what will happen if the global temperature increases.
8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ I think global warming is natural and there is nothing humans can do about it.
9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ I try not to waste energy/electricity.

Many questions adapted from Climate Change Challenge at climatechangenorth.ca.