

## Fairfield Prep Environmental Science Summer Assignment — due August 30.

***Please submit this assignment in hard-copy (printed out) at our second class of the year – this gives you a chance to ask questions before submitting it. Each part should begin on its own page and should be labeled “Part I”, “Part II”, “Part III”.***

The purpose of this assignment is to prepare you for your senior-year elective, Environmental Science. I want you to think about what this course is about, think about your expectations for this course, and relate this course to your own life.

***There are three parts to this summer assignment:***

**Part I. Tell me about yourself and why you are taking this course** - who are you, what do you do (extra-curriculars, job, sports, activities...) , what is important to you, and why did you choose Environmental Science? You had several choices of electives and your participation in the class affects all of us who are a part of it. I will assume you want to take this course and you are eager to begin!

**Part II. How do you see your own environmental impact and that of your family?** Rank yourself and your family on a scale of 1 to 10, 1 being extremely low environmental impact and 10 being extremely high. Describe the five things you and your family do routinely that probably have the most impact on our environment. Describe five things you do that reduce your impact.

**Part III. Complete the student information questionnaire below** – all of the items have some relationship to EnSci. You will need parent help to answer several questions – give yourself plenty of time to get this done.

***CUT-PASTE the questions below into an editable document and answer each below the question.***

1. Where do you live – include your address and type of neighborhood in which you live (urban, small lot suburban, large lot suburban, rural...). *Locate your home on a Google Map and insert an image of it into this document.*
2. How do you usually get to school? Do you travel alone or with others? What would be required to use transportation other than driving in a family car to get to Fairfield Prep.
3. How many cars does your family have and how far are they driven each year? *You probably need parent help to get this information – for each car note its current mileage - you need this info for a project at the end of the course.*
4. Where does your water come from? Is it treated from a public supply or is it well-water? Is it plentiful? What does it cost you – get a copy of the most recent bill if you purchase it (Aquarion is the largest local water supply company). Estimate the total quantity of water your family uses in a year – describe how you arrived at your answer.
5. Do you routinely use bottled water? How much per year? What is its estimated cost – describe your method for getting the answer to this question.
6. What provides the energy for heating water in your home? *(It is likely electricity, oil, or natural gas).*
7. What supplies the energy for heating the air in your home? *(It is likely electricity, oil, or natural gas).*

8. If you have air conditioning, what type do you have (whole-house or window) and what is the energy source?
9. What provides the energy for cooking food at your home? *(It is likely electricity or natural gas).*
10. Get a printed copy of your most recent electric bill – many of us have EVERSOURCE as our electricity provider. Using the information on the bill estimate the total amount used last year and its cost – describe your method for getting the answer. *YOU NEED TO SAVE YOUR ELECTRIC BILLS FOR THE YEAR OR SET UP AN ON-LINE ACCOUNT WITH YOUR SUPPLIER SO YOU HAVE THIS INFORMATION FOR YOUR SENIOR-COMP.*
11. If you use oil for your furnace, determine how much oil you use in a year and how much it costs. Get a bill. *YOU NEED TO SAVE YOUR OIL BILLS FOR THE YEAR OR SET UP AN ON-LINE ACCOUNT WITH YOUR SUPPLIER SO YOU HAVE THIS INFORMATION FOR YOUR SENIOR-COMP.*
12. If you use natural gas for heating and/or cooking estimate how much you use in a year and how much it costs. *YOU NEED TO SAVE YOUR GAS BILLS FOR THE YEAR OR SET UP AN ON-LINE ACCOUNT WITH YOUR SUPPLIER SO YOU HAVE THIS INFORMATION FOR YOUR SENIOR-COMP. (Again, EVERSOURCE is a common provider of natural gas and electricity.)*
13. Do you have solar panels, a windmill, or any other “alternative” energy source for your home – if so describe and estimate what percent of your energy needs it fills?
14. What type of diet do you routinely eat – vegan, vegetarian, occasional meat-eater, meat-eater, but little beef, red-meat everyday.... How much of your food is home-prepared versus eaten out?
15. Do you help prepare family meals? If so, what food preparation chores do you routinely do?
16. Do you routinely participate in food shopping?
17. Do you have a vegetable garden at home? What is your role in planting & maintaining it?
18. Do you have a compost pile at home? What type of things go into it?
19. Describe how often you and your family travel by airplane in a typical year.
20. How affluent are you – estimate how your family compares to your town, state, country, and the world. Estimate a percentile compared to the rest of the world.
21. Please tell me anything else about you and your family that may be relevant to this course – volunteer work, eco-vacations, involvement in organizations (Audubon, Boy Scouts, 4H Club, etc...)

Finally, other course information that is good to know before you first come to class:

**Many of the labs we do for Environmental Science are out-of-doors – we often do field trips on and off campus. We can't let bad weather get in the way of being outdoors when we get the chance.**

**“There is no bad weather, only bad clothing, poor preparation, and a bad attitude.”**

To that end, there are things you need to be able to participate in EnSci off-campus. Please get what you need for the start of the course.

Stuff you need for Environmental Science:

1. A good rain-jacket – it should be waterproof, not just water resistant. It should be large enough to accommodate an insulating layer underneath. *Hooded sweatshirts are not rain-jackets.*
2. Good sturdy boots that can be worn when it is wet.
3. Pants that meet Prep dress-code, but can be worn outside for field work.
4. A clipboard. Make a plastic cover for it to protect notes from rain.
5. A three-ring binder for notes. I require notes in written form and a place to keep handouts. A 3-ring binder does this well.

At the start of the course I will give you:

- A lab-safety agreement for you and your parents to sign.
- A class policies agreement for you and your parents to sign; and
- You will also need to sign an off-campus travel permission form and you will need a way to travel local field trip sites – for most trips students are on their own to get where they must go. Parents may drive and may participate in the field trip if they wish. Students must follow all applicable laws regarding their driving and who may travel with them.

If you have questions about this assignment you may email me at [rford@fairfieldprep.org](mailto:rford@fairfieldprep.org).

However, I may be slow to respond since I will be traveling and out of touch right when you have a question. You can probably handle this without me. Have a nice summer.