Course Goals

- . Grow and expand your non-fiction reading skills
- Analyze scientific data, evidence, and information to make conclusions
- Draw connections between biology and everyday life
- Develop problem-solving skills using the scientific method
- . Be well prepared for the New York State Living Environment Regents Exam

What do I do if I'm absent?

There will probably times when you are absent from school this year. It is <u>YOUF</u> responsibility to obtain and complete any notes, assignments, and other activities that you miss.

For each day you miss, you will have an additional day to complete and submit th missing assignment. You will need to speak with Jonathan if you require extra time beyond this.

Ways to check for absent work:

- Email, text, or SnapChat a classmate
- Check the class website
- Email Jonathan

Living Environment

Welcome to Living Environment! I am very excited to be your guide as you progress toward the NYS Living Environment Regents Exam.

During our time together, we will explore all there is to know about living things, including ecology, biochemistry, molecular and human genetics, evolution, and human physiology.



Contact Info Jonathan Ryberg <u>Email</u>: jonathan@tywls-astoria.org <u>Website</u>: www.jonathansclassroom.com Regents Exam: June ___, 2018

Grading, Evidence, and Learning Targets

Grading Policy

Throughout the school year, you will be provided <u>multiple opportunities</u> to demonstrate your level of mastery within the <u>TYWLS-Astoria Scienc</u> <u>Learning Targets</u>.

You will *earn* one of the following grades for each piece of <u>evidence</u> and <u>Learning Target</u>:

• Exceeding Standard (ES): "I am consistently performing above my grade level."

- Meeting Standard (MS): "I am consistently performing at my grade level."
- Not Yet (NY): "I am still working on my skills."

Late Evidence Policy

If a student is unable to submit a <u>daily assignmen</u> she will have <u>2 days</u> to submit it.

If she misses a project deadline, she will have $5 \frac{1}{2}$ days to submit the project.

Evidence Revision Policy

Once evidence is graded and handed back to the student, she will have <u>7 days to revise and resubr</u> the evidence and rubric.

If a student <u>does not submit</u> an assignment by its deadline, she will <u>miss</u> her opportunity to revise her assignment.



Supply List

- Pens and Pencils
- Notebook
- Calculator
- Ruler
- Colored Pencils
- Tissues
- Hand Sanitizer
- Graph Paper (optional)

Tips and Tricks for Success!!!

- 1. Be on time and ready to learn every day.
- 2. Listen carefully to ALL instructions and opinions.
- 3. Show respect to each person in this classroom, including YOURSELF!
- 4. Science is FULL of vocabulary! Practice and learn new words by studying, speaking, and writing EVERYDAY!
- 5. Technology can be helpful...don't let it become a <u>distraction</u> from learning
- 6. We want to hear your opinion. Join in on the conversation and discussions! Remember, YOU MATTER!
- 7. Be curious and ask questions, especially if you are unsure about something.

What will be studying?

Unit 1: Characteristics of Living Things

In this introductory unit, we will investigate the different domains and kingdoms and life, and will begin learning about the history of life on Earth.

Unit 2: Nutrients, Energy, & Biochemical Processes

We will investigate the contents of different foods, the breakdown of those foods through digestion, and the ways in which body systems supply nutrients and energy to cells.

Unit 3: Homeostasis in Human Body Systems

In this unit, we will explore how body systems interact to effectively monitor and respond to both internal and external environmental changes.

Unit 4: Disease and Disruption of Homeostasis

Accessing data from maps and graphs, we will evaluate evidence and draw conclusions about why certain diseases disappear while others emerge and thrive.

Unit 5: Diversity of Life

In this unit, we learn about the continuity and diversity of life in a variety of organisms, including humans, and use our findings to discern evolutionary relationships.

Unit 6: Genetics, Biotechnology, and Bioethics

In this unit, we will investigate genetic processes including protein synthesis, inheritance, and gene expression. We will then learn about modifications of these processes through the lens of genetic engineering and biotechnology.

Unit 7: Ecosystems and Invasive Species

In this unit, we will learn about the biotic and abiotic factors in the Hudson River ecosystem, by investigating the impact of an invasive species (zebra mussels) on this ecosystem.

Unit 8: Climate Change and Human Impact

We will research the profound impacts that human population growth, globalization, and industrialization are having on the long term health and stability of ecosystems. We will then propose and present plans to address the population decline of endangered species and what actions may be taken to preserve biodiversity.

