

Earth Science Study Guide

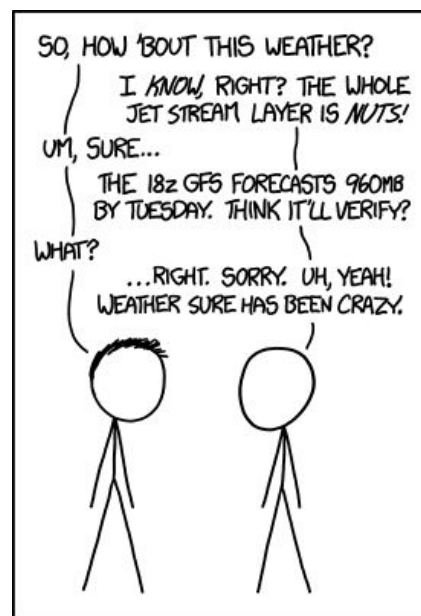
Cycle 3: Weeks 1 & 2

We live in a world bathed in 5,000 times more energy than we consume as a species in the year, in the form of solar energy. It's just not in usable form yet.

--Peter Diamandis

Overview and Objectives

In this cycle of study we will continue understanding Earth's atmospheric content and processes and introduce the hydrologic cycle. We will be able to relate how the sun's energy drives atmospheric processes including weather. We will be able to describe what makes up weather and the instruments used to predict weather. We will be able to articulate and argue points on the climate change debate by logically and systematically examining the data. Lastly, we will understand and be able to explain the Earth's water cycle and all of its processes. (USOE Stds. 3.1-3 & 4.1)



WEATHER GEEKS HAVE IT TOUGH.

Essential questions:

- How do atmospheric patterns affect the patterns of human growth and expansion?
- How have atmospheric patterns made you who you are and what you believe?

Week 1: DUE Friday, February 3

- _____ 1. Participate in and take notes on the lesson: Reading a Barometer: The Highs and Lows
- _____ 2. Complete the worksheet: Reading a Barometer.
- _____ 3. Read and Annotate pp. 148-158 of the Earth Science Textbook.
- _____ 4. Answer questions 1-15 on pp. 143-44 of the textbook. Complete sentences and grammatical accuracy are necessary to show mastery.
- _____ 5. Participate in and take notes on the lesson: Air Masses.
- _____ 6. Complete the activity and handout: Air Masses
- _____ 7. Read and Annotate pp. 175-183 of the Earth Science Textbook.

Week 2: DUE Friday, February 10

- _____ 8. Complete the activity and handout: Pressure Activity.
- _____ 9. Participate in the lesson: Weather Stations and Instruments of Weather
- _____ 10. Receive your weather station Key and be sure you understand how to use it.

Name _____ Period: _____

Cycle 3: Earth Sci. Jan 30 – March 17

_____ 11. Participate in and take notes on the lesson: Weather Fronts.

_____ 12. Complete the graphic organizer: Types of Weather Fronts.

_____ 13. Participate in the lessons and create your map for Part I of The Ozone Hole.

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Cycle 3: Weeks 3 & 4

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Essential questions:

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Week 3: DUE Friday, February 17

_____ 14. Participate in the lessons, analyze the data for, and complete the discussions questions for Part II of The Ozone Hole.

_____ 15. Complete the Sea Surface Map and questions (in class).

_____ 16. Read and Annotate pp. 161-165 of the Earth Science Textbook.

Week 4: DUE Friday, February 24

_____ 17. Participate in the lesson on Differences in Weather and Climate. Complete essay questions (in class).

_____ 18. Read and take notes on pp. 184-186 of the Earth Science textbook.

_____ 19. Participate in a discussion regarding the impact of climate change in Djibouti.

_____ 20. Read and Annotate pp. 187-207 of the Earth Science Textbook.

_____ 21. Watch the short film: Ecology of Climate Change

_____ 22. Participate in the Socratic Dialogue: Climate Change: The long and short of it.

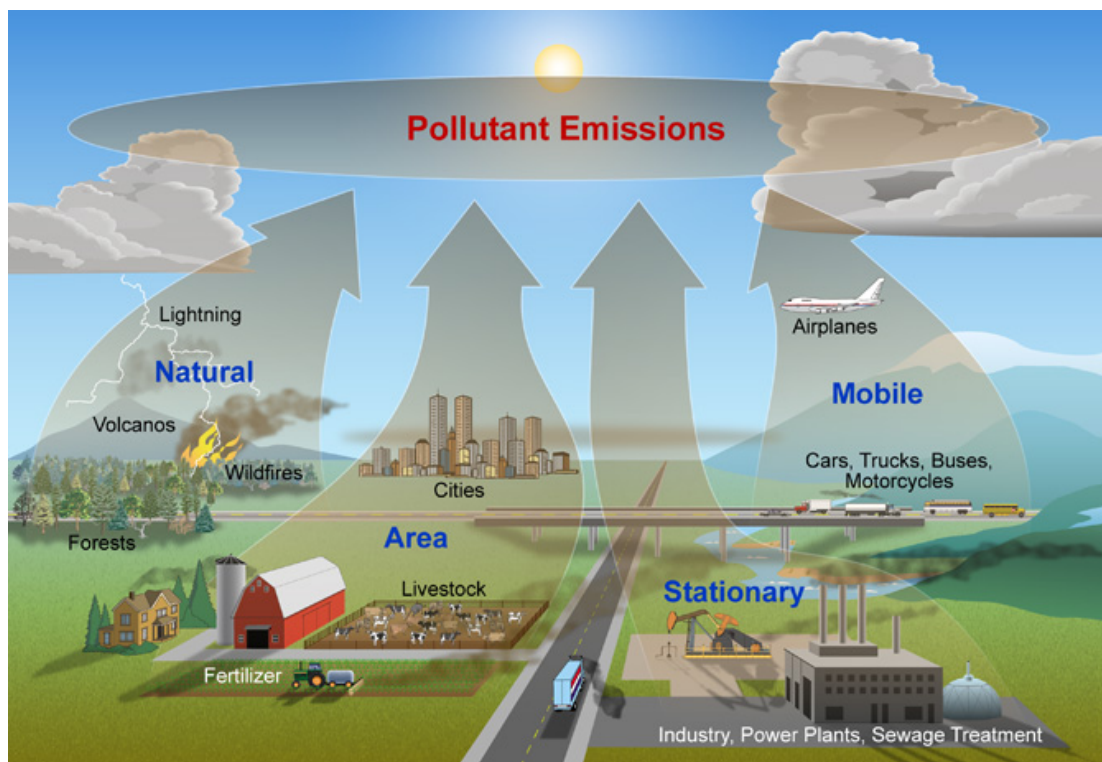
Earth Science Study Guide

Cycle 3: Weeks 5, 6 & 7

Overview and Objectives

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by logically and systematically examining the data. Lastly, we will understand and be able to explain the Earth's water cycle and all of its processes. (USOE Stds. 3.1-3 & 4.1)



Essential questions:

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Week 5: DUE Friday, March 3

- _____ 23. Participate in and take notes on the lesson: Air Pollution and Activism
- _____ 24. Participate in and take notes on the lesson: Cloud Formation and Types
- _____ 25. Complete the Cloud Types Graphic Organizer.
- _____ 26. Review for your Atmosphere Unit Final Exam.
- _____ 27. Take the Atmosphere Unit Final.

Week 6: DUE Friday, March 10

- _____ 28. Review your Atmosphere Unit Final.
- _____ 29. Participate in and take notes on the Lesson: Salinity and the Water Cycle
- _____ 30. Complete the Graphic Organizer: The Water Cycle

Name _____ Period: _____

Cycle 3: Earth Sci. Jan 30 – March 17

Week 7: DUE Friday, February

_____ 31. I am able to name at least 10 bodies of water.

_____ 32. Participate in the Lesson: Where's The Water?

_____ 33. Participate in the discussion and work: How Much Water Do You Use?

_____ 34. Begin the Lab Activity: What's my Environment (part I and II)