

Environmental Science

Information and assignment sheet for COVID-19 school break.

- Sign up for Remind, #81010 body of text: @envirocook
- Also you will need to use Microsoft Teams, go to office.com, use your @dorchester2.k12.sc.us and login/password for powerschool
- I will be available for online office hours from 10 - 11 am and 2 - 3 pm.
- My email: edcook@dorchester2.k12.sc.us
- You can also reach me through Remind.
- If you want, download the Microsoft Teams App for your phone. It will be useful.

You will complete the following Tic-Tac-Toe Boards for the Land, Water and Air Units.

You will also complete the midterm review question packet.

Everything will be uploaded to Microsoft Teams. It is crucial that you login and join Teams.

I will post powerpoints from the relevant units. If you email me, I may be able to send you missing assignments to complete.

The focus currently is on midterm review.

Each completed Tic-Tac-Toe board will be worth 100 pts: for a total of 300 pts.

You can use your phone to complete the needed research or a desktop computer.

ENVIRONMENTAL MIDTERM TIC TAC TOE REVIEW

Choose three assignments from the tic-tac-toe board below. You must choose one assignment from each row and one assignment from each column

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ENVIRONMENTAL MIDTERM TIC-TAC-TOE REVIEW

Choose three assignments from the tic-tac-toe board below. You must choose one assignment from each row and one assignment from each column
UNIT: LAND AND WATER YOUR PHONE SHOULD WORK FINE FOR ANY RESEARCH NEEDED: CAN ALSO USE A DESKTOP IF YOU HAVE ACCESS

<p>Create a vocabulary list of 15 terms from the unit. Give the term, definition, and example</p> <p>Use an online search: environmental science land vocab or environmental science water vocab</p>	<p>Create a visual including 5 vocabulary terms from the unit in one graphic</p> <p>Visual may be print or digital. Options: infographic, PowToon, comic strip, Flipbook etc</p>	<p>Create and record yourself giving a 5 minute lesson on the topic to someone - or -create a narrated PowerPoint or YouTube video</p>
<p>Make a poster – it can be as colorful and creative as you like. It must include at least 1 vocabulary term from the unit and have a visual example to explain it.</p>	<p>Write a story using a topic from the unit</p> <p>Role: Who or what are you as the writer for example: student, a teacher, environmental scientist or a public/history</p> <p>Choose 1 audience from the following: 1) early elementary aged child 2) grandparent 3) peer</p> <p>Format: Written clearly or typed</p>	<p>Create a total of 10 questions including at least 5 that have real world/cultural examples with an answer key</p> <p>You may also write short answer and word problems.</p>
<p>Watch a video related to a land or water disaster and take one page of notes (examples: 3 mile Island, Chernobyl, pollution, remediation, superfund sites, Deep Water Horizon)</p>	<p>Write a school appropriate song, rap or create a tic tock to demonstrate, teach or review a topic in the unit</p> <p>Submit it in print or with a link to the online access</p>	<p>Read an online website about the unit and write your own thorough notes</p> <p>Environmental Science Water</p> <p>Environmental Science Land</p>

ENVIRONMENTAL MIDTERM TAC TO REVIEW

Choose three assignments from the tic-tac-toe board below. You must choose one assignment from each row and one assignment from each column
UNIT: AIR YOUR PHONE SHOULD WORK FINE FOR ANY RESEARCH NEEDED: CAN ALSO USE A DESKTOP IF YOU HAVE ACCESS

<p>Create a vocabulary list of 15 terms from the unit. Give the term, definition, and example</p> <p>Use an online search: environmental science air vocab</p>	<p>Create a visual including 5 vocabulary terms from the unit in one graphic</p> <p>Visual may be print or digital. Options: infographic, PowToon, comic strip, Flipbook etc</p>	<p>Create and record yourself giving a 5 minute lesson on the topic to someone - or -create a narrated PowerPoint or YouTube video</p>
<p>Make a poster – it can be as colorful and creative as you like. It must include at least 1 vocabulary term from the unit and have a visual example to explain it.</p>	<p>Write a story using a topic from the unit</p> <p>Role: Who or what are you as the writer for example: student, a teacher, environmental scientist or a public/history</p> <p>Choose 1 audience from the following: 1) early elementary aged child 2) grandparent 3) peer</p> <p>Format: Written clearly or typed</p>	<p>Create a total of 10 questions including at least 5 that have real world/cultural examples with an answer key</p> <p>Use the midterm study guide questions as examples to format multiple choice questions. You may also write short answer and word problems.</p>
<p>Watch a video related to an air related environmental topic (pollution, ozone layer, acid rain, etc.) and take one page of notes</p>	<p>Write a school appropriate song, rap or create a tic tock to demonstrate, teach or review a topic in the unit</p> <p>Submit it in print or with a link to the online access</p>	<p>Read an online website about the unit and write your own thorough notes</p> <p>Environmental Science Air</p>

Unit 1 – Why Study Environmental Science?

1. During which period did work shift from human and animal power to machine power?
2. When did most hunter-gatherer societies become extinct?
3. Which period impacted the environment by increasing the use of fossil fuels?
4. Most of today's environmental problems began during:
5. Hunter-gatherers generally have a stable population size because:
6. An ecological footprint is:
7. Which federal agency is in charge of enforcing the Endangered Species Act?
8. Which federal agency is responsible for enforcing the Clean Water Act?

Unit 2 – Land

9. Leaving the land unused for a time is one method to sustain the productivity of:
10. Why is deforestation an especially serious problem in tropical rain forests?

11. The designation of a wilderness area provides:

12. Removing CO₂ from the air is one of the most important ecosystem services provided by:

13. Environmental damage to wilderness areas may worsen as:

14. The most common use of rangeland in the U.S. is for:

15. Which environmental problem was addressed by Hardin's "Tragedy of the Commons" essay?

16. Given that most people live in urban areas, why should rural areas be preserved?

Unit 3 – Water

17. What percent of the world's water is saltwater?

18. Where is most of the freshwater on Earth located?

19. The temperature on land near Polly Beach is warmer than the temperature on land in Summerville. This is because water resists a change in temperature. What is this property of water called?

20. What is another name for a drainage basin?

21. Conserving water, reducing water pollution, and developing new methods to provide fresh water are all methods to address what problem?

22. What is the largest water shed in the U.S.?

23. Why are only a few desalination plants in use?

24. Determine which of the following are sources of point-source pollution and which are sources of non-point-source pollution:

Runoff from city streets

acid precipitation

An unlined landfill

a leak in a gas tank

Runoff from a farm

25. The level beneath the ground where rocks and soil are saturated with water is called:

26. Which living organism transmits malaria?

27. What is the largest source of nutrients that cause artificial eutrophication?

28. Phosphorus from detergents that is discharged into surface water causes:

29. The American Bald Eagle was threatened by the pesticide DDT. DDT caused their egg shells to be so thin the eggs could not be incubated by the parents. The interaction between the bald eagle and DDT is an example of:

30. Which living organism transmits malaria?

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31. Potable water is water that can be:

32. The increased presence of nutrients such as phosphorous in the water is largely due to poor farming practices such as high use of fertilizers and presence of livestock near water supplies, as well as effluent and run-off from towns and nearby waterways. These increased nutrients may cause:

Unit 4 – Air

33. Anything that absorbs more carbon than it releases is called a:

34. Where does thinning of the ozone layer occur?

35. An increase in frequency of major storms and an increase in frequency of major droughts are possible consequences of:

36. Which activity contributes most to acid precipitation?

37. Chlorofluorocarbons (CFCs) are environmentally significant because their _____ can destroy many ozone molecules.

38. What is the primary producer of air pollution in the US?

39. Which type of building is most likely to have poor indoor air quality?

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40. What traps heat that is radiated upward from Earth?

51. The Acid Rain Program is a result of the _____ Act.

41. What pollutant forms when automobile emissions react with oxygen gas and ultraviolet rays?

52. Electric generators work by converting _____ energy into _____ energy.

42. Which pollutant is most likely to reach unhealthy levels in an office building?

53. Categorize each as a renewable or nonrenewable energy source:

43. The Earth's atmosphere acts like:

Wind solar

Coal gas

Oil

Unit 5 – Energy

Unit 6 - Waste

44. Why are fossil fuels considered non-renewable even though they are still forming today?

54. A material is biodegradable if _____

45. Internal combustion engines release _____ into the atmosphere.

55. What are the two requirements for building a modern day landfill?

46. What is the main reason why fewer nuclear power plants are being built today compared to 40 years ago?

56. What two problems are associated with landfills?

47. Most of the energy consumed in the US is used for _____

57. Which items make up the largest percent of waste produced by households and businesses?

48. What does a hybrid car use for power?

58. What is a common characteristic of all hazardous-waste land-disposal facilities?

49. What are the 4 main uses of fuel?

59. Which activity produces the most solid waste?

50. How does a geothermal power plant get energy?