

Earth's Spheres WebQuest Task Sheet

Directions

You will be exploring the following internet resources for information about the Earth's Spheres. Starting with Task 1, investigate the websites to discover ***how the Earth's Spheres interact to support life on our planet.*** Follow the teacher's directions on how to access the websites. Complete all the tasks to finish your Quest! There are 4 Tasks.

WRITE YOUR ANSWERS ON A SEPARATE SHEET OF PAPER, LABELING EACH WITH THE TASK NUMBER AND ITEM NUMBER.

Task 1 – Identifying Earth's Spheres

http://www.classzone.com/books/earth_science/terc/content/visualizations/es0102/es0102page01.cfm?chapter_no=visualization

Click "Play" to observe a visual model of Earth's Spheres. Using the text as a guide, record the names of the four spheres shown and write a description of each. Write the description in your own words; do not copy directly from the text.

1. _____ - _____
2. _____ - _____
3. _____ - _____
4. _____ - _____

Task 2 – Cryosphere

http://www.earthonlinemedia.com/ebooks/tpe_3e/hydrosphere/hydrosphere.html

Read the informational text to learn more about the Hydrosphere. The Hydrosphere is composed of all the water on the planet, including its solid, liquid and gaseous forms. The Cryosphere is part of the Hydrosphere and includes all of the frozen water on the planet.

Click "Play" to take a tour of the Cryosphere (about 7 minutes). Answer the following questions based on information from the video segment.

1. What percentage of Earth's fresh water is contained in Antarctica? _____
2. What is a glacier? _____
3. What is an iceberg? _____
4. What is permafrost? _____
5. How do the poles help cool the Earth's temperature? _____

[Type here]

Task 3 – Interactions between Earth’s Spheres

Everything that happens on Earth depends on complex interactions between the Atmosphere, Biosphere, Geosphere, and Hydrosphere (including the Cryosphere).

Read through the eight “Steps” (pages) of information in the link below about the interactions between the spheres and look at the descriptions of the images.

https://www.classzone.com/books/earth_science/terc/content/investigations/es0103/es0103page01.cfm

Choose two images from the link you just went to. Describe how Earth’s spheres are interacting in the photograph that you chose.

Image #1

Describe the image you chose _____

How are Earth’s Spheres interacting in this image? _____

Image #2

Chose a second image and describe it. _____

How are Earth’s Spheres interacting in this image? _____

[Type here]

Task 4: Write About It

<http://www.cotf.edu/ete/ESS/ESSspheres.html>

<http://ice.nasa.gov/aboutCryosphere/>

Read through the information for each sphere keeping in mind the writing prompt below.

Note: The Geosphere is sometimes called the Lithosphere, as it is on this site.

Think about what you have learned about Earth's Spheres. Each sphere is unique in its own way, yet depends on other spheres to help sustain life on our planet. If you had to choose one sphere to label as the "most important" sphere, which one would you claim it to be? Support your opinion with factual evidence that supports your claims.

Your essay should be at least 7-9 sentences long and at least contain a topic sentence, 2-3 pieces of evidence, and a conclusion.

Focus on the following while writing your argument.

- Introduce claim(s) and organize the reasons and evidence clearly.
- Support claim(s) with clear reasons and relevant evidence, using credible sources.
- Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons.
- Provide a concluding statement or section that follows from the argument presented.

[Type here]