# 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 (4 tasks) to finish your Quest! **Do not forget to label your** *tasks if you write your answers in your homework journal!* 

### Task 1 – Identifying Earth's Spheres

http://www.classzone.com/books/earth\_science/terc/content/visualizations/es0102/es0102page 01.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 Antartica?
- 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?

# Task 3 – Interactions between Earth's Spheres

http://www.ucmp.berkeley.edu/education/dynamic/session4/sess4\_interactions.htm Investigate the chart to see examples of how Earth's spheres can interact.

https://www.classzone.com/books/earth\_science/terc/content/investigations/es0103/es0103pag e01.cfm

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 about the interactions between the spheres and look at the descriptions of the images.

Choose two images shown on Step 5. Describe how Earth's spheres are interacting in the photograph that you chose. For examples of how Earth's spheres interact in other images, revisit Step 3 and 4.

#### 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?

### 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.

#### Focus on the following while writing your arguement.

- 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.

#### Paper Requirements:

- Separate sheet of paper from your notes.
- 12 font, double spaced, typed
- Title, name, date
- Minimum 1 page, 3 paragraphs (Introduction, body, and conclusion)