

# Earth's Spheres

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## CHAPTER

## 1

# Earth's Spheres

**Does this look familiar?**

Gases, water, rock, and living organisms are all found at Earth's surface. These materials are also found above or below the surface. They interact with each other and in doing so alter each other. For example, the hydrosphere may cause some of the lithosphere to wash away.

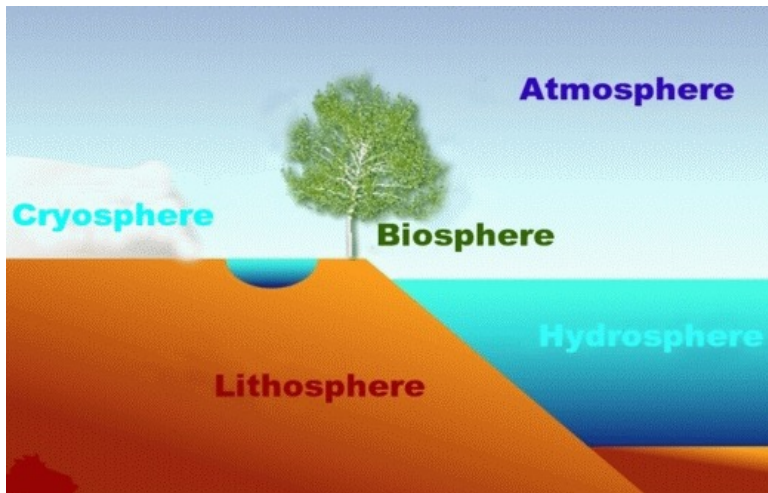
**Spheres**

Earth is made of layers. Since Earth is round, the layers all have the ending "-sphere" (**Figure 1.1**).

Some of the different parts of the Earth are the:

- **Atmosphere:** The thin layer of air, mostly nitrogen and oxygen, that surrounds the Earth.
- **Hydrosphere:** All the water on Earth.
- **Biosphere:** All the living organisms on Earth.
- **Lithosphere:** The solid rock part of Earth, including mountains, valleys, continents, and all of the rock beneath the oceans.
- **Cryosphere:** The frozen water part of the Earth.

All of Earth's layers interact. Therefore, Earth's surface is constantly undergoing changes.



**FIGURE 1.1**

Earth has five layers: atmosphere, cryosphere, biosphere, hydrosphere and the lithosphere.

### Summary

- Earth is made of layers. The names end in sphere because Earth is round.
- Some of the layers are: atmosphere, biosphere, hydrosphere, and lithosphere.
- The lithosphere is the brittle crust and uppermost mantle.

### Explore More

Use the resource below to answer the questions that follow.

- **Big Ideas in Geoscience: Earth's Systems Interact** at <http://www.youtube.com/watch?v=BnpF0ndXk-8> (5:49)



### MEDIA

Click image to the left or use the URL below.

URL: <http://www.ck12.org/flx/render/embeddedobject/58888>

1. What are the four major systems of Earth?
2. What are the components of the geosphere?
3. What is the hydrosphere?
4. Where does Earth's energy come from?
5. What are ecosystems?
6. What is feedback?

### Review

1. What is the atmosphere?
2. What is the lithosphere?

3. Where is the hydrosphere?
4. How do Earth's layers interact? Give an example.

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## References

1. CK-12 Foundation. Earth has four layers: atmosphere, hydrosphere, biosphere, and lithosphere.

