

# The biosphere: biogeochemical cycles

**EST**
 PAGES 254–261

 Complete this concept  
 review handout and  
 keep it as a record of  
 what you have learned.

## Definitions

- The biosphere is \_\_\_\_\_  
\_\_\_\_\_
- A biogeochemical cycle is \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- The carbon cycle is \_\_\_\_\_  
\_\_\_\_\_
- The nitrogen cycle is \_\_\_\_\_  
\_\_\_\_\_
- The phosphorus cycle is \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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## Layers of the Earth

Layer	Corresponds to
Lithosphere	The solid surface

## Processes involved in biogeochemical cycles

Process	Examples
Biological	<ul style="list-style-type: none"> <li>• Respiration</li> <li>• Digestion</li> </ul>
	_____ _____
	_____ _____



Carbon, nitrogen and phosphorus cycles

Element	Biological utility	Transformations
	<ul style="list-style-type: none"><li>Makes up the tissues of living organisms.</li></ul>	<ul style="list-style-type: none"><li>Photosynthesis</li></ul> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>
	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	<ul style="list-style-type: none"><li>Nitrogen fixation</li></ul> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>
	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	<ul style="list-style-type: none"><li>Erosion</li></ul> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>

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