



“Water is the solvent of life on earth...” describe 4 properties of water what make this true and give an example of an application of the property in your everyday environment.

Characteristics of Water	
Property	Application/connection
1.	
2.	
3.	
4.	

CHNOPS are elements essential to life on earth and the cell is the building block of life on earth. Find how each of the elements essential to life are incorporated in a structure/component/organelle of a cell and justify why the properties of that element is essential to its function in the cell.

Element	Cellular Structure(s)	Explain how <i>element's</i> chemical structure assists cellular function
C		
H		
N		
O		
P		
S		

Buffers take up or release H⁺ or OH⁻ to prevent changes in pH. In the bicarbonate system, H₂CO₃ disassociates with H⁺ acting as a base acceptor and HCO₃⁻ acting as an acid acceptor. On the back of this page, explain how the bicarbonate system works in either blood plasma or the ocean. **Use labeled diagrams** to support your explanation.