

Day 3

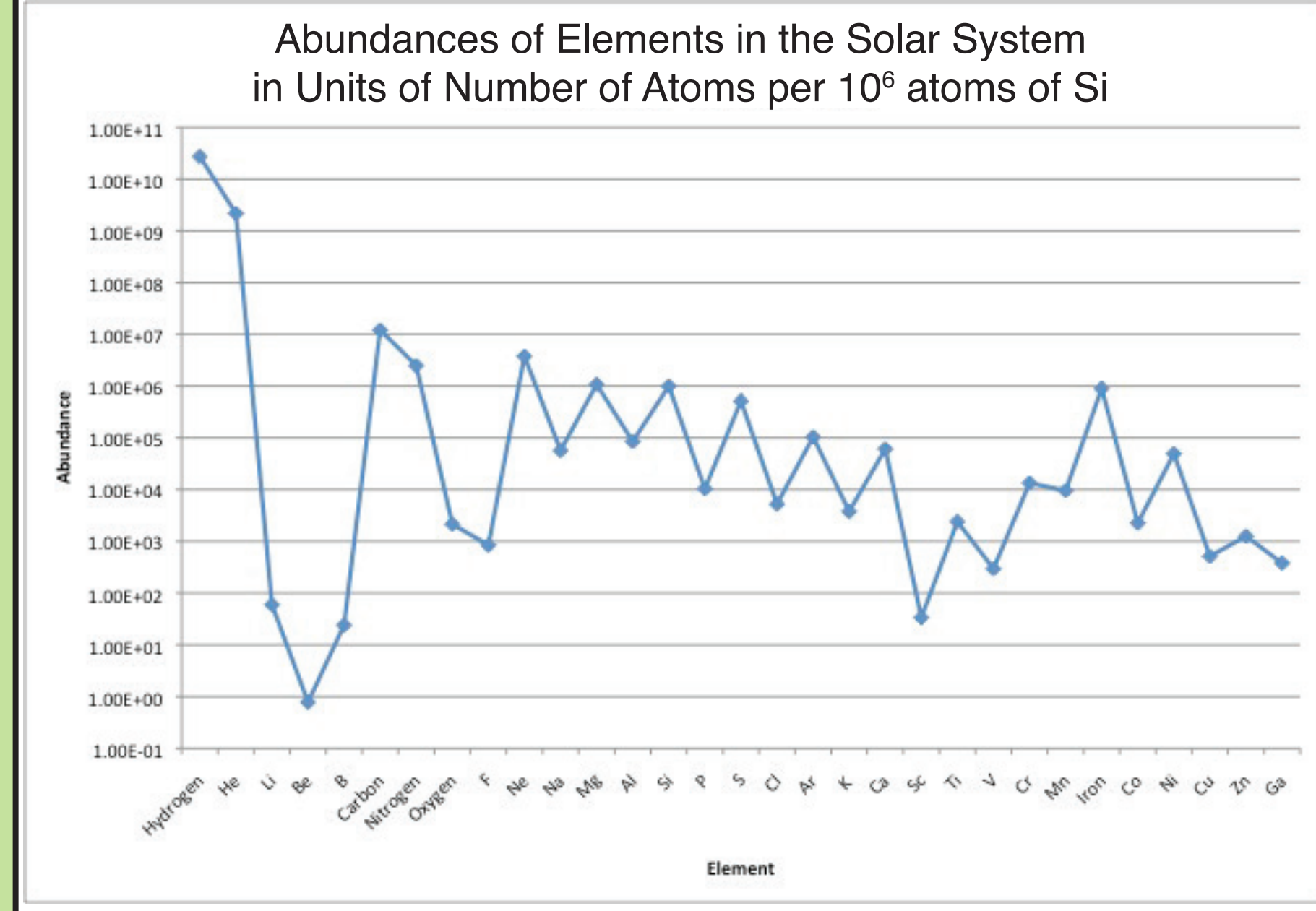
THE EARTH'S CRUST IS DESIGNED FOR LIFE

Earth's crust contains the elements that are necessary for life

As materials are cycled through the mantle and crust, certain minerals become concentrated in the denser oceanic crust and some become concentrated in the continental crust we live on. Those that are found most abundantly in the continental crust are the minerals that sustain life:

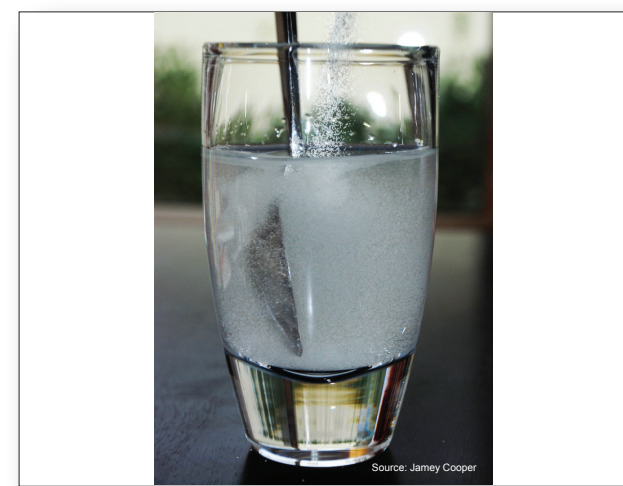
- ♦ Hydrogen - a part of what is needed for a water molecule
- ♦ Carbon - the basis for living tissue
- ♦ Nitrogen - a major component of proteins
- ♦ Oxygen - the other component of water and necessary for animal circulatory systems
- ♦ Iron - a major component in our blood

Notice that there is a spike in the abundance for each of these necessary elements.

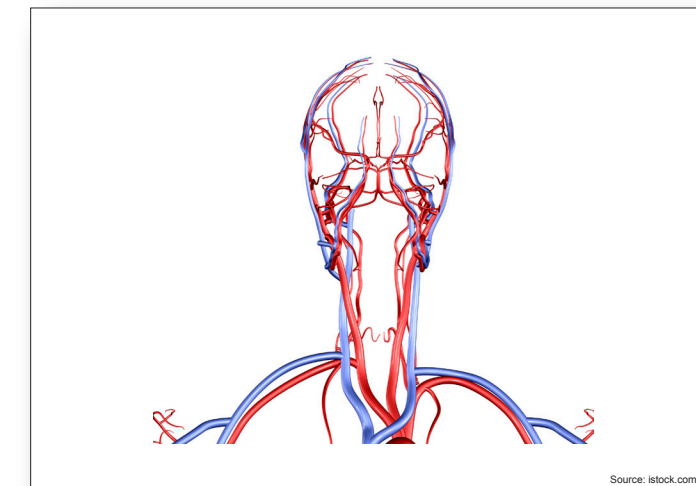


Earth is the only planet with sufficient water to sustain life Water has many qualities that make it fit for life

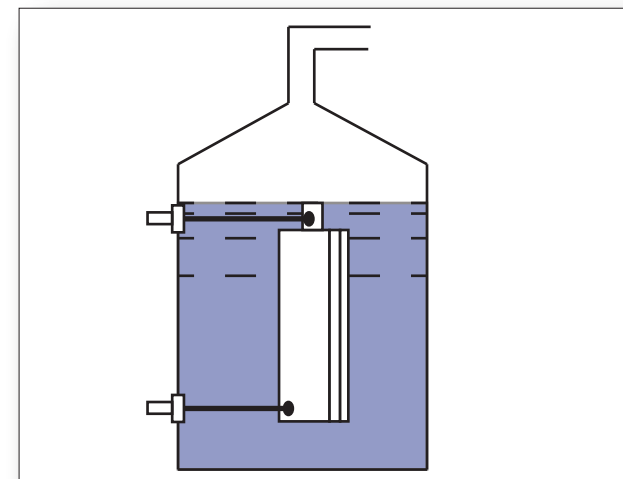
1 - Water is a good solvent. This means that it can carry dissolved minerals.



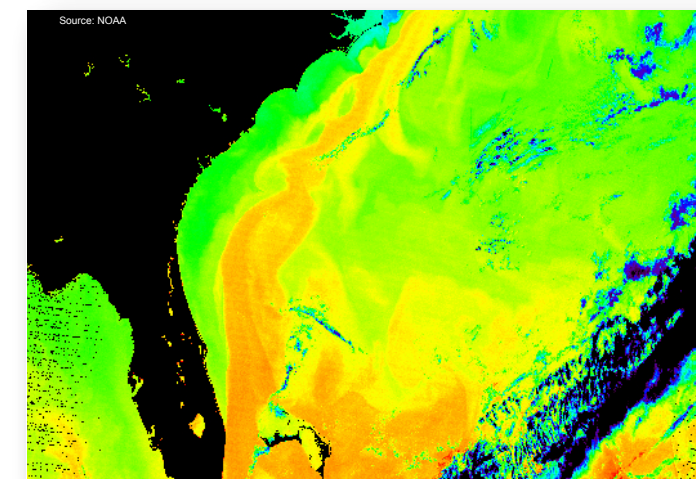
Water transports nutrients throughout the body.



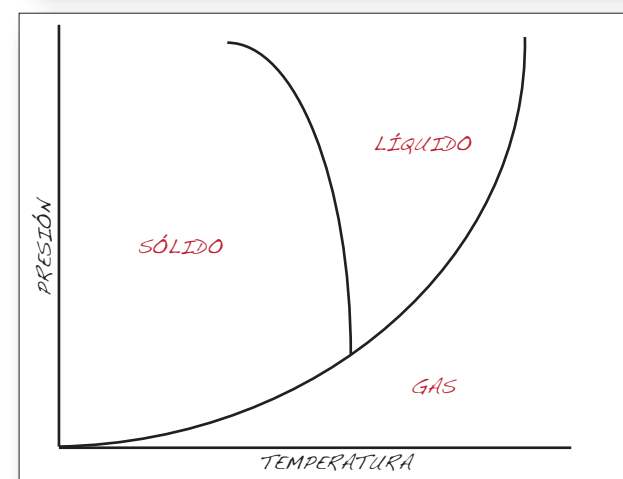
2 - Water is a good heat capacitor. This means ocean temperatures remain relatively constant.



Ocean currents such as the Gulf Stream carry heat toward the poles, moderating the climate.



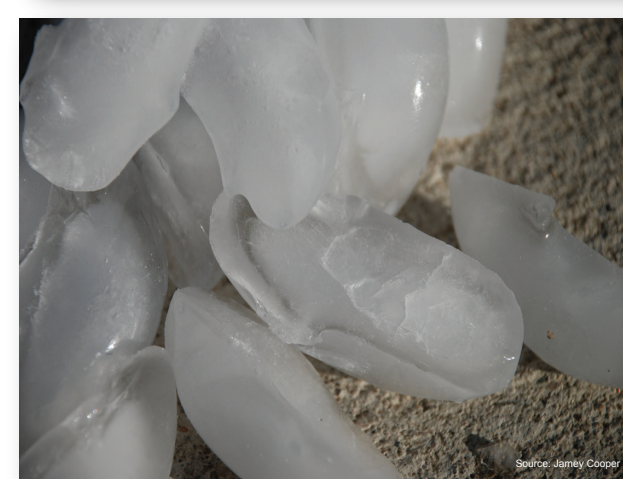
3 - Water can exist in all three phases at temperatures compatible with life.



This allows water to recycle and sustain life.



4 - Water expands when it freezes.



Decreased density causes the ice to rise to the surface. The ice can then act as an insulator allowing animals to live in the water throughout the winter.



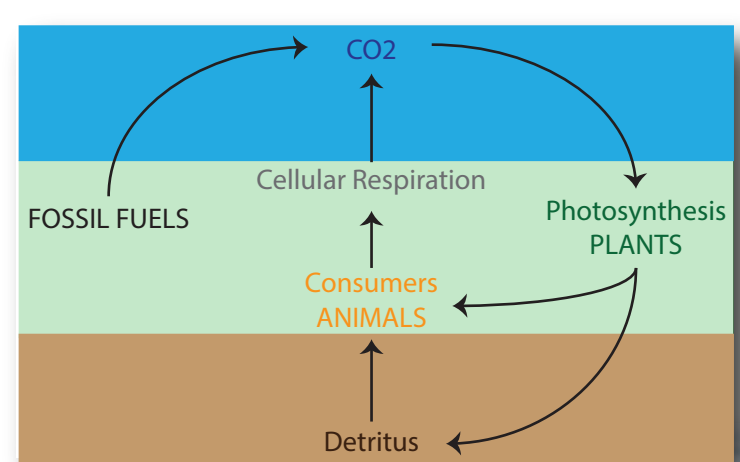
5 - Water flows easily.



Which means water isn't stuck in one place. That makes it available to everyone.



Plants are designed to support animal life



Plants support animal life by capturing carbon dioxide and producing oxygen. Without the plants, the carbon cycle would stop and animals would be unable to live.



Recycling nutrients from the soil is also an important job for plants. They help break down rocks into soil, and enrich the soil with the minerals we all need for life.

We rely on plants to feed us, clothe us, and provide us a place to live.



And God said, "Let the water under the sky be gathered to one place, and let dry ground appear." And it was so. God called the dry ground "land," and the gathered waters he called "seas." And God saw that it was good. Then God said, "Let the land produce vegetation: seed-bearing plants and trees on the land that bear fruit with seed in it, according to their various kinds." And it was so. And God saw that it was good. And there was evening, and there was morning - the third day. -Genesis 1:9-13 (NIV)