

Habitable Environments

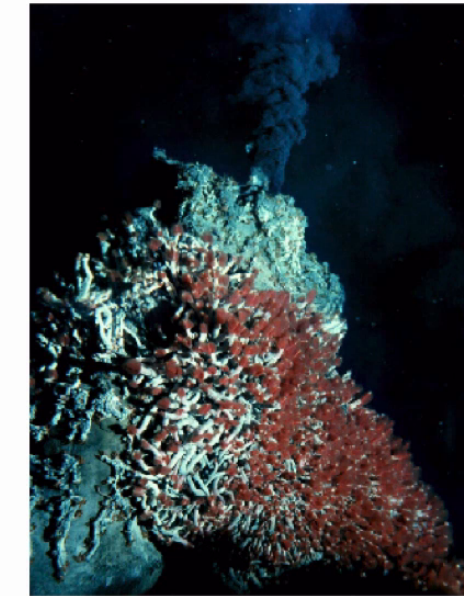
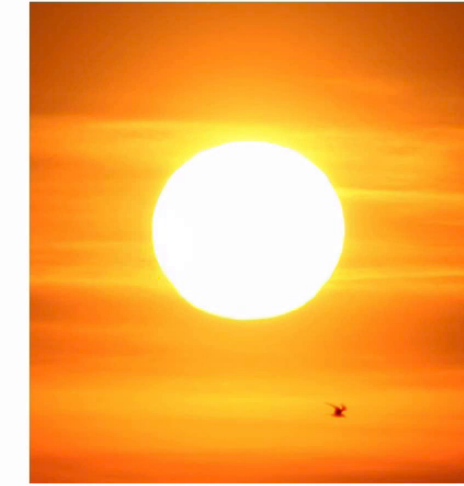
1

Life (as we know it) requires Carbon, Hydrogen, Nitrogen, Oxygen, Phosphorus and Sulfur (CHNOPS). These are abundant in giant molecular clouds (where stars & planets form)



3

Life requires a source of energy. On Earth, the Sun is the primary source, but others exist



2

Life requires a solvent, to allow chemicals to mix and react. Liquid water seems to be the best universal solvent



4

Complex life (e.g., humans) requires a narrow range of temperature, acidity, etc. But some bacteria (*extremophiles*) can thrive in much harsher conditions

