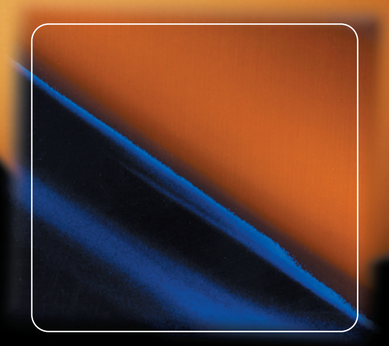
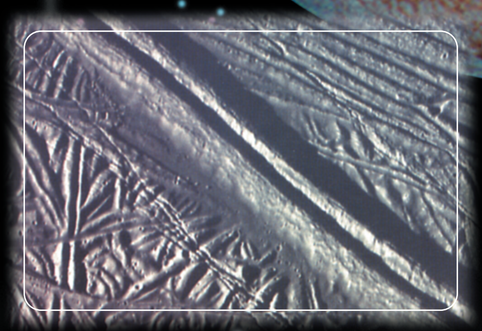
LIFE: What is it? Where is it? How do we find it?

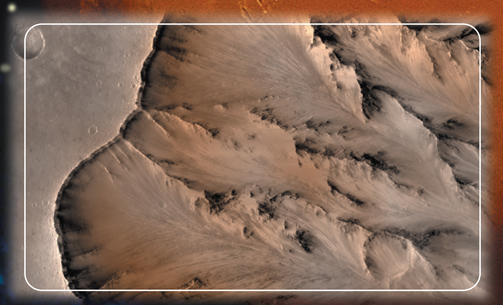
What is below **Titan's** thick atmosphere?

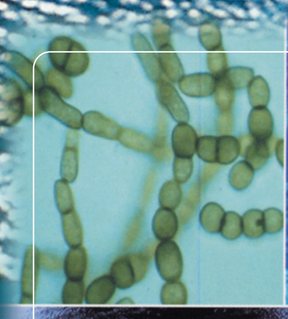


Could life survive in a liquid water ocean on **Europa**?

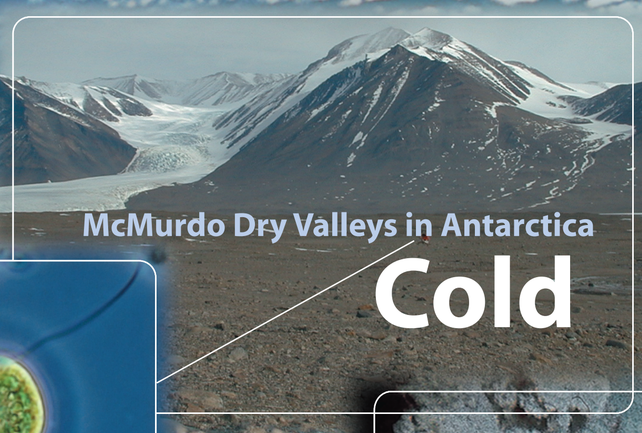


Did liquid water once flow on **Mars**?





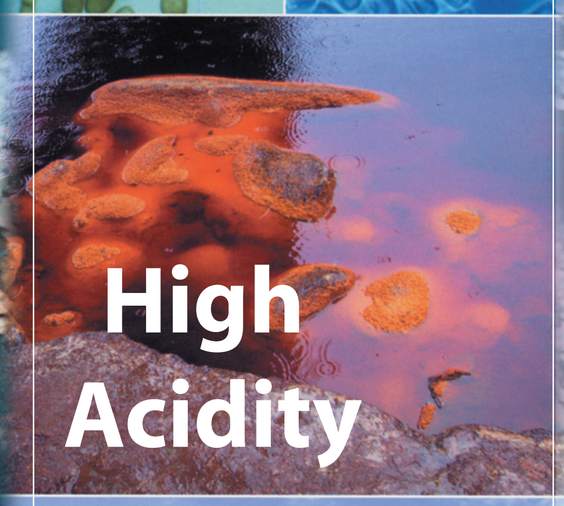
These microbes generate energy from reactions with iron and sulfur in the water.



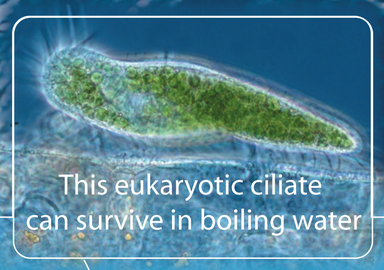
McMurdo Dry Valleys in Antarctica

Cold

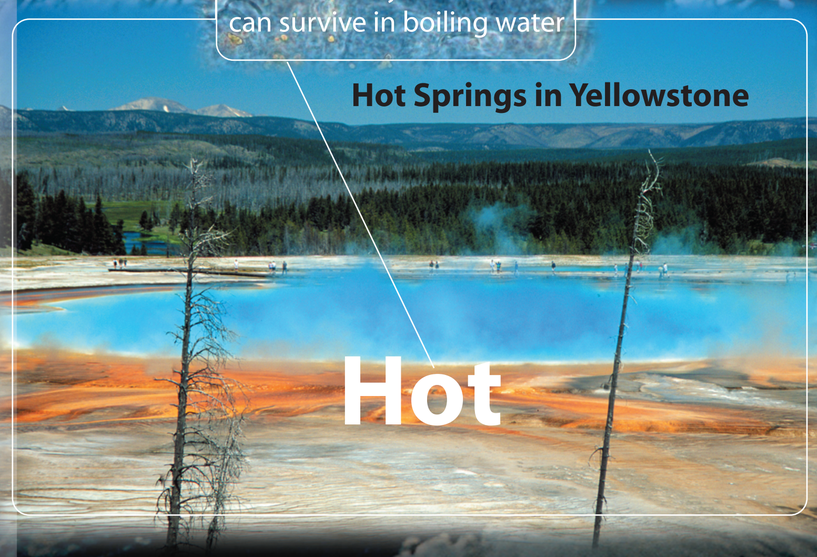
Chlamydomonas survives six feet deep in the ice.



High Acidity

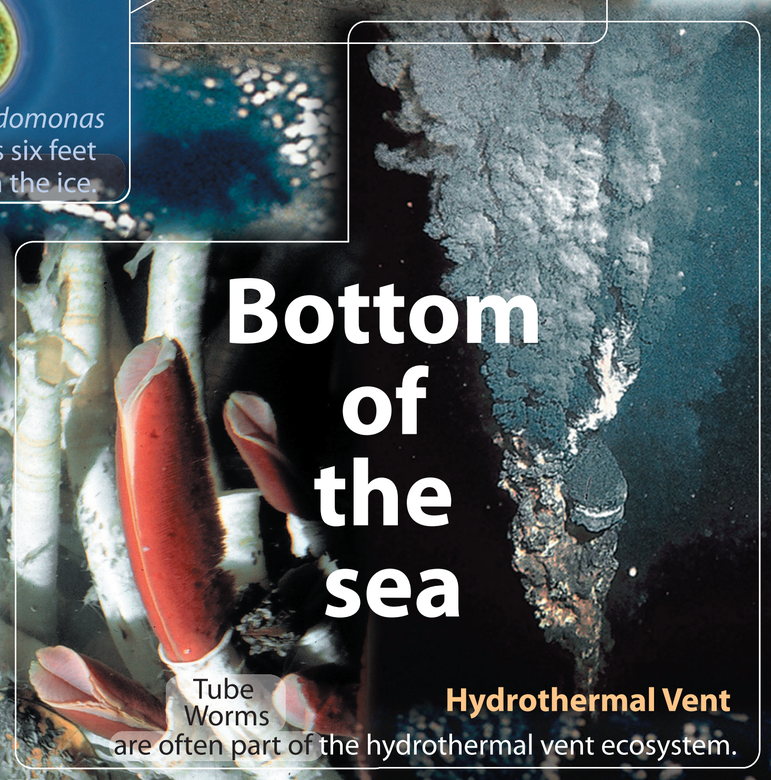


This eukaryotic ciliate can survive in boiling water



Hot Springs in Yellowstone

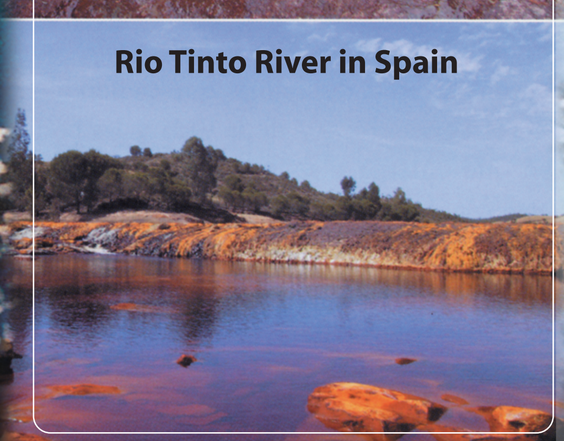
Hot



Bottom of the sea

Tube Worms are often part of the hydrothermal vent ecosystem.

Hydrothermal Vent



Rio Tinto River in Spain

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