Europa
Icy Moon of Jupiter
Objectives
By the end of this lesson you will be able to:
• Understand the composition of Europa
• Explain the formation of the cracks on Europa’s surface
• Describe the nature of Europa's subsurface oceans
• Explore extremophiles and life in space
Europa captured by the Galileo mission
(NASA/JPL-Caltech/Seti Institute, late 1990s)
Geology of Europa
Europa’s surface
Europa's Chaos Terrain
Europa’s Sub-surface ocean
How salt lowers the freezing point of water
Life in extreme cold Temperatures: Extremophiles
Do you think there could be life on Europa?
Recap

Now we can...

1. Describe the geology and composition of Europa
2. Understand interactions between the subsurface ocean and crust
3. Understand extremophiles and the potential for life on Europa