

<p><b>Geology on Mars</b> <b>Earth Science</b> <b>Unit 10 sessions</b></p> <p>Field Trial instruction begins on January 16, 2015</p> <p>All materials returned by March 2, 2015</p>	<p>For thousands of years, people have looked up into the night sky and wondered if we are alone in the universe. As scientists seek the answer to this question, they look first to our planet, Earth, to examine the conditions that make it a place where life can survive. Our understanding of habitability on our own planet guides the search for the right conditions for living things to survive in other places in our solar system and universe. There are three major ingredients that help make Earth habitable: life on Earth needs liquid water, an energy source (such as the Sun), and certain chemicals that are the building blocks of living things. When scientists search for evidence of extraterrestrial life in other places, they look for these three things.</p> <p>In their role on a team of geologists working to explore the planet Mars, your students will search for evidence of running liquid water on the surface, a necessary indicator for habitability. Specifically, students will observe satellite images and data collected by rovers as they consider two possible claims for what may have formed a long channel on the surface of Mars—lava or water. By comparing this geological feature to other analogous structures on Earth’s surface, students are able to gather evidence and to evaluate if the evidence supports the possibility of liquid water flowing over the land in the past or not. At the conclusion of the unit, students construct arguments to support the claim that they think is best supported by the evidence.</p>	<p>MS-ESS1-3. Analyze and interpret data to determine scale properties of objects in the solar system.</p>
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