

Unit 9: Hydrogeology Learning Targets Guide

Self Evaluation			Learning Targets	Date
I've got it! <input type="checkbox"/>	I've sort of got it. <input type="checkbox"/>	I don't get it. <input type="checkbox"/>	<p>E2.1C: I can explain, using specific examples, how a change in one system affects other Earth systems.</p> <p>Clarification: <i>The shape of the land within a watershed and the sediment load of rivers results from the interaction between the geosphere (rock type), the atmosphere (climate) and hydrosphere (surface runoff).</i></p>	
Example or Explain:				
I've got it! <input type="checkbox"/>	I've sort of got it. <input type="checkbox"/>	I don't get it. <input type="checkbox"/>	<p>E2.3b: I can explain why small amounts of some chemical forms may be beneficial for life but poisonous in large quantities (e.g., dead zone in Gulf of Mexico, Lake Nyos in Africa, fluoride in drinking water).</p> <p>Clarification: <i>The "dead zone" in the Gulf of Mexico results from Mississippi watershed runoff with excessive nutrients that lead to a profound depletion of dissolved oxygen.</i></p>	
Example or Explain:				
I've got it! <input type="checkbox"/>	I've sort of got it. <input type="checkbox"/>	I don't get it. <input type="checkbox"/>	<p>E2.3c: I can explain how the nitrogen cycle is part of the Earth system.</p> <p>Clarification: <i>Nitrogen is part of nutrients that effect water quality.</i></p>	
Example or Explain:				
I've got it! <input type="checkbox"/>	I've sort of got it. <input type="checkbox"/>	I don't get it. <input type="checkbox"/>	<p>E4.1A: I can compare and contrast surface water systems (lakes, rivers, streams, wetlands) and groundwater in regard to their relative sizes as Earth's freshwater reservoirs and the dynamics of water movement (inputs and outputs, residence times, sustainability).</p>	
Example or Explain:				

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I've got it! <input type="checkbox"/>	I've sort of got it. <input type="checkbox"/>	I don't get it. <input type="checkbox"/>	<p>E4.1B: I can explain the features and processes of groundwater systems and how the sustainability of North American aquifers has changed in recent history (e.g., the past 100 years) qualitatively using the concepts of recharge, residence time, inputs and outputs.</p>	
Example or Explain:				
I've got it! <input type="checkbox"/>	I've sort of got it. <input type="checkbox"/>	I don't get it. <input type="checkbox"/>	<p>E4.1C: I can explain how water quality in both groundwater and surface systems is impacted by land use decisions.</p> <p>Clarification: <i>Agricultural practices, urbanization and industrialization impact water quality.</i></p>	
Example or Explain:				
Unit Notes & Clarifications:				