

Competency Goal 1: The learner will conduct investigations to build an understanding of the interdependence of plants and animals

- 1.01 Describe and compare several common ecosystems (communities of organisms and their interaction with the environment)
 - o WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe
- 1.03 Explain why an ecosystem can support a variety of organisms
 - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe
- 1.04 Discuss and determine the role of light, temperature, and soil composition in an ecosystem's capacity to support life
 - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe
- 1.06 Explain and evaluate some ways that humans affect ecosystems
 - o WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe

Competency Goal 2: The learner will make observations and conduct investigations to build an understanding of landforms

- 2.01 Identify and analyze forces that cause change in landforms over time including
 - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters

www.wonderworksonline.com



- 2.02 Investigate and discuss the role of the water cycle and how movement of water over and through the landscape helps shape land forms
 - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters
- 2.03 discuss and consider the wearing away and movement of rock and soil in erosion and its importance in forming: canyons, valleys, meanders, tributaries
 - o WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters
- 2.04 Describe the deposition of eroded material and its importance in establishing landforms including: deltas, flood plains
 - o <u>WonderWorks Applicable Exhibits:</u> Earth Tic-Tac-Toe, Natural Disasters
- 2.05 Discuss how the flow of water and the slope of the land affect erosion
 - o <u>WonderWorks Applicable Exhibits:</u> Earth Tic-Tac-Toe, Natural Disasters
- 2.06 Identify and use models, maps, and aerial photographs as ways of representing landforms
 - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters, Fighter Jets, Space Shuttle
 Simulators, Space Update
- 2.07 Discuss and analyze how humans influence erosion and deposition in local communities, including school grounds, as a result of: clearing land, planting vegetation, and building dams
 - o WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters



Competency Goal 3: The learner will conduct investigations and use appropriate technology to build an understanding of weather and climate

- 3.01 Investigate the water cycle including the processes of: evaporation, condensation, precipitation, run-off
 - o WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters
- 3.02 Discuss and determine how the following are affected by predictable patterns of weather: temperature, wind direction and speed, precipitation, cloud cover, air pressure
 - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters, Hurricane Wind Shack, How Cold is it?, Space Info Center
- 3.04 Explain how global atmospheric movement patterns affect local weather
 - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters, Hurricane Wind Shack, How Cold is it?, Space Info Center, Tesla Coil
- 3.06 Discuss and determine the influence of geography on weather and climate
 - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters, Hurricane Wind Shack, How Cold is it?, Tesla Coil, Fighter Jets, Space Info Center, Space Shuttle Simulators, Space Update

Competency Goal 4: The learner will conduct investigations and use appropriate technologies to build an understanding of forces and motion in technological designs

- 4.01 Determine the motion of an object by following and measuring its position over time
 - WonderWorks Applicable Exhibits: Pulley Power, Anti-Gravity Chamber, Xtreme 360, Virtual Sports, Coin
 Orbiter

www.wonderworksonline.com



- 4.02 Evaluate how pushing or pulling forces can change the position and motion of an object
 - WonderWorks Applicable Exhibits: Pulley Power, Anti-Gravity Chamber, Xtreme 360, Virtual Sports, Coin
 Orbiter, Virtual Hockey, Alien Stomp Dome, Recollections Room, Strike a Pose, Floor Piano
- 4.03 Explain how energy is needed to make machines move: moving air, gravity
 - WonderWorks Applicable Exhibits: Pulley Power, Anti-Gravity Chamber, Xtreme 360, Virtual Sports, Coin
 Orbiter, Virtual Hockey, Alien Stomp Dome, Recollections Room, Strike a Pose, Floor Piano, Hurricane Wind
 Shack, How high can you jump?, Tesla Coil
- 4.04 Determine that an unbalanced force is needed to move an object or change its direction
 - O WonderWorks Applicable Exhibits: Pulley Power, Anti-Gravity Chamber, Virtual Sports, Xtreme 360, Coin Orbiter, Virtual Hockey, Alien Stomp Dome, Recollections Room, Strike a Pose, Floor Piano, Hurricane Wind Shack, Swim with the Sharks, How high can you jump?
- 4.05 Determine factors that affect motion including: force, friction, inertia, momentum
 - WonderWorks Applicable Exhibits: Pulley Power, Anti-Gravity Chamber, Virtual Sports, Xtreme 360, Coin Orbiter, Virtual Hockey, Alien Stomp Dome, Recollections Room, Strike a Pose, Floor Piano, Hurricane Wind Shack, Swim with the Sharks, Kidz Pace Bike, Kidz Pace Snow Jam, How high can you jump?
- 4.07 Determine how people use simple machines to solve problems
 - WonderWorks Applicable Exhibits: Pulley Power, Coin Orbiter