

Stratford Public Schools Unit Design
6th Grade

Unit Name: Science Earth's Changing Surface Est. # of Weeks: 4 weeks Synopsis: – <i>Students will explain how weathering and erosion change the surface of the Earth.</i>	
STUDENT LEARNING GOALS	
Content-Specific Powered Standards 7.3.b ... weathering and erosion change the Earth's surface by moving earth materials from place to place.	Interdisciplinary Standards (as appropriate) Key Vocabulary Chemical Erosion Deposition Floodplain Ice wedging Glacier Mechanical Mountains Uniformitarianism Valley Weathering
Enduring Understandings 1. Weathering and erosion work together as destructive natural forces. Both are forces that break down rock into small particles called sediments. 2. Weathering is caused by physical, chemical or biological means. Rock properties, such as hardness, porosity or mineral content, influence susceptibility to weathering. 3. Erosion loosens and transports sediment formed by weathering. Moving water and wind cause changes to existing landforms and create new landforms such as valleys, floodplains, plateaus, canyons, caves or dunes.	Essential Questions What landforms are the results of the interaction of constructive and destructive forces over time?
Learning Objectives / Grade Level Expectations Students will: <ol style="list-style-type: none"> Examine and compare geological features that result from constructive forces shaping the surface of the Earth over time (e.g., mountains, ridges, volcanoes) with geological features that result from destructive forces shaping the surface of the Earth over time. Compare and contrast the major agents of erosion and deposition of sediments: running water, moving ice, wave action, wind and mass movement due to gravity Distinguish between weathering and erosion. 	
ASSESSMENT PLAN	
Summative Assessment(s) ➤ <i>Student Notebooks</i> ➤ <i>In class activity sheets</i> ➤ <i>models</i> ➤ <i>Project Completion</i>	Formative and Diagnostic Assessment(s) Pre and Post Tests by Chapter

LEARNING PLAN COMPONENTS

Prentice Hall: Earth's Changing Surface Text Book

National Geographic Water

Erosion (Delta)

Adapted Reading and Study workbook

National Geographic Ice

Read Background Info on Glaciers:

<http://www.lpb.org/education/classroom/itv/envirotacklebox/teacherguide/module4/4gla.htm>

Erosion and Deposition activity for a school playground: Note refer to pages 12-14 only of website document: <http://www.ctsciencecenter.org/documents/PD/STD-7.3-landforms.pdf>

“Weathering and Erosion” activity - from Dinah Zike’s Big Book of Science: p. 114 and pages 134-135

“Glacier” activity - Dinah Zike’s Big Book of Science: p. 68

Dig In! Embedded Task – Connecticut State 6th Grade Embedded Task

Geological Society website on Erosion and Deposition:

<http://www.geolsoc.org.uk/gsl/education/resources/rockcycle/page3462.html>

<http://www.kineticcity.com/mindgames/warper/>

Annenburg Media “Weathering and Soils”

http://www.learner.org/vod/vod_window.html?pid=326

Discovery Education:

<http://school.discoveryeducation.com/lessonplans/programs/iceberg/index.html>

PBS

<http://videos.howstuffworks.com/hsw/21685-glaciers-video.htm>

28 Glaciers

<http://www.learner.org/vod/v>

<http://www.learner.org/resources/series78.html>

<http://www.nationalgeographic.com/forcesofnature/interactive/index.html>

Glaciers from the Anneberg Media video

www.learner.org/vod/vod_window.html?pid=334

Glaciers: Movers & Shapers

<http://www.amphi.com/~tlcf/nichols/web2/mntggla.htm>

GLACIERS - Teacher's Guide - "Model Glaciers"

<http://www.nps.gov/glac/forteachers/4-6-unit-two-activity-3-model-glaciers.htm>

PhET Simulations

<http://phet.colorado.edu/en/simulation/glaciers>

Activities with CT rocks

<http://www.wesleyan.edu/ctgeology/>

<http://www.wesleyan.edu/ctgeology/TeachingPlans/ConnecticutRocksExercises.html>

<http://www.wesleyan.edu/ctgeology/CtLandscapes/CTlandscapes.html>

<http://www.wesleyan.edu/ctgeology/Glacial/GlacialGeology.html>