LISBON SCHOOL DEPARTMENT
UNIT DESIGN OUTLINE

Unit Title: Unit 6: Surface Processes on Earth:

Unit Designers: Jill Denniston

Level(s): Freshmen Time Span: 2 weeks

Content Area:

☐Career Prep ☐Health/PE ☐M&C Languages ☐Social Studies
☐English Language Arts ☐Mathematics ☒Science & Tech ☐Visual & Per. Arts

Summary of Unit:

In this unit students will be introduced to basic key concepts related to the study of Earth's Changing Surface. Students will explain the role of weathering in recycling Earth materials and shaping of the landscape. Students will also be asked to explain the importance of groundwater and list some concerns about future groundwater use. Students will distinguish among geologic eras, periods, and epochs and explain how scientist decided when a geologic time period ends and another begins.

Content Standards/Performance Indicators:

B.1. Students methodically plan, conduct, analyze data from, and communicate results of in-dept scientific investigations, including experiments guided by a testable hypothesis.
D.2. Students describe and analyze the biological, physical, energy and human influences that shape and alter Earth Systems.
c. Describe and analyze the effects of biological and geophysical influences on the origin and changing nature of earth Systems

Key Pre-Requisites:

Knowledge

Review vocabulary: sediment, physical change, porosity, radioactivity, igneous rock and metamorphic rock.

***Skills*:**

Applying metric measurement tools and units

Enduring Understandings:

Biological, physical, and human influences work together to shape and alter Earth Systems.

Essential Questions that Guide and Focus This Unit:

What are some variables in weathering and the role of weathering in recycling?
Earth materials
How does mechanical and chemical weathering impact the Earth's surface?
What type of landforms are created by deposition of eroded material
What role does the water cycle play in shaping and altering Earth system?
What are geologic eras, periods, and epochs?
How does absolute dating and relative dating used to determine geological time scale?

Key Knowledge and Skills students will acquire as a result of this unit:

Knowledge:

To understand the effects of weathering on the earth and what impact it may have for all living creatures.

To understand and explain the difference between absolute dating and relative dating and how it is used to determine geological time.

Skills

Make accurate observations using tools.

Analyze situations

How will students provide evidence of their understandings?

Lab activity: Geological time line. D2

Students will create a graphic organizer explaining one of the 6 essential questions. D2

Teaching and Learning experiences used to help students understand:

Lectures

Demos

Labs and activities

Reading textbook

Taking notes

Use of Internet for research

Use of computer-lab probes.

Provisions for Extending Learning:

Students will learn a new computer graphic organizer program to present information

How will technology be used to increase student achievement?

Instructional Resources:

Attach a copy of the unit assessment tool, including criteria for evaluation of student performance/product.

Dating Rocks