WASHINGTON STATE LASER

Alignment of Washington 6-8 Science Standards by EALR/Domain for

SEPUP

Studying Soil Scientifically

November 1, 2010

Alignment of Washington 6-8 Science Standards with
SEPUP Studying Soil Scientifically
Inquiry ~ INQC

Content Standard Collecting, analyzing, and displaying data are essential aspects of all investigations.

Performance Expectation
• Communicate results using pictures, tables, charts, diagrams, graphic displays, and text that are clear, accurate, and informative.
• Recognize and interpret patterns – as well as variations from previously learned or observed patterns – in data, diagrams, symbols, and words.
• Use statistical procedures (e.g., median, mean, or mode) to analyze data and make inferences about relationships.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Activity 02	**Aligned as designed**	SG pp. A-13-14; TG pp. A-29-32	
Activity 03	**Aligned as designed**	SG pp A-13-14; TG pp A-29-32	
Activity 04	**Aligned as designed**	SG pp A-15-17; TG pp A-36-38; Student Sheet 4.1	
Activity 06	**Aligned as designed**	SG pp A-26-27; TG p A-56; Student Sheet 6.1	

Alignment of Washington 6-8 Science Standards with
SEPUP Studying Soil Scientifically
Inquiry ~ INQC

Content Standard Collecting, analyzing, and displaying data are essential aspects of all investigations.

Performance Expectation
- Communicate results using pictures, tables, charts, diagrams, graphic displays, and text that are clear, accurate, and informative.
- Recognize and interpret patterns – as well as variations from previously learned or observed patterns – in data, diagrams, symbols, and words.
- Use statistical procedures (e.g., median, mean, or mode) to analyze data and make inferences about relationships.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Activity 07	**Aligned with modifications (see comments)**	SG pp A-29-32; TG pp A-68-69; Student Sheet 7.1	The unit/lesson is strong in analyzing and displaying data but students do not collect their own data.
Activity 10	**Aligned as designed**	SG pp A-46-47; TG pp A-95-96	

Alignment of Washington 6-8 Science Standards with
SEPUP Studying Soil Scientifically
Inquiry ~ INQF

Content Standard It is important to distinguish between the results of a particular investigation and general conclusions drawn from these results.

Performance Expectation
- Generate a scientific conclusion from an investigation using inferential logic, and clearly distinguish between results (e.g., evidence) and conclusions (e.g., explanation).
- Describe the differences between an objective summary of the findings and an inference made from the findings.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Activity 02	**Aligned with modifications (see comments)**	SG p A-11; Student Sheet 2.2; TG p A-19	Teachers need to emphasize the difference between opinion, inference and evidence.
Activity 05	**Aligned as designed**	SG p A-23 Analysis Question 4; TG p A-48 Question 4	
Activity 06	**Aligned as designed**	SG p A-28; TG pp A-58-59	
Activity 07	**Aligned with modifications (see comments)**	SG p A-32; TG p A-69	Teachers need to emphasize the use of evidence in explanations.

Alignment of Washington 6-8 Science Standards with
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Inquiry ~ INQF

Content Standard It is important to distinguish between the results of a particular investigation and general conclusions drawn from these results.

Performance Expectation
• Generate a scientific conclusion from an investigation using inferential logic, and clearly distinguish between results (e.g., evidence) and conclusions (e.g., explanation).
• Describe the differences between an objective summary of the findings and an inference made from the findings.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Activity 10	**Aligned as designed**	SG p A-48; TG p A-96	This unit/lesson is a part of a conceptual sequence.
Activity 11	**Aligned as designed**	SG p A-52; TG p A-107; Student Sheet 11.3	

Alignment of Washington 6-8 Science Standards with
SEPUP Studying Soil Scientifically
Inquiry ~ INQH

Content Standard

Science advances through openness to new ideas, honesty, and legitimate skepticism. Asking thoughtful questions, querying other scientists' explanations, and evaluating one's own thinking in response to the ideas of others are abilities of scientific inquiry.

Performance Expectation

• Recognize flaws in scientific claims, such as uncontrolled variables, over generalizations from limited data, and experimenter bias.
• Listen actively and respectfully to research reports by other students. Critique their presentations respectfully, using logical argument and evidence.
• Engage in reflection and self-evaluation.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Activity 11	**Aligned as designed**	SG pp A-50-52; TG pp A-104-106; Student Sheet 11.2	

Alignment of Washington 6-8 Science Standards with
SEPUP Studying Soil Scientifically
Application ~ APPA

Content Standard People have always used technology to solve problems. Advances in human civilization are linked to advances in technology.

Performance Expectation
• Describe how a technology has changed over time in response to societal challenges.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Activity 08	**Aligned as designed**	SG p A-39; TG pp A-74-78	

Alignment of Washington 6-8 Science Standards with
SEPUP Studying Soil Scientifically
Earth Science ~ ES2G

Content Standard Land forms are created by processes that build up structures and processes that break down and carry away material through erosion and weathering.

Performance Expectation • Explain how a given land form (e.g., mountain) has been shaped by processes that build up structures (e.g., uplift) and by processes that break down and carry away material (e.g., weathering and erosion).

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Activity 05	**Aligned with modifications (see comments)**	SG pp A-18-19; TG p A-44	The unit/lesson is strong in processes that break down, but not build up, land forms.

Alignment of Washington 6-8 Science Standards with
SEPUP Studying Soil Scientifically
Life Science ~ LS2C

Content Standard The major source of energy for ecosystems on Earth's surface is sunlight. Producers transform the energy of sunlight into the chemical energy of food through photosynthesis. This food energy is used by plants, and all other organisms to carry on life processes. Nearly all organisms on the surface of Earth depend on this energy source.

Performance Expectation
• Explain how energy from the Sun is transformed through photosynthesis to produce chemical energy in food.
• Explain that producers are the only organisms that make their own food. Animals cannot survive without producers because animals get food by eating producers or other animals that eat producers.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Activity 09	**Aligned with modifications (see comments)**	SG p A-83;TG p A-19	This unit/lesson is a part of a conceptual sequence.

Alignment of Washington 6-8 Science Standards with
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Life Science ~ LS2E

Content Standard Investigations of environmental issues should uncover factors causing the problem and relevant scientific concepts and findings that may inform an analysis of different ways to address the issue.

Performance Expectation
• Investigate a local environmental issue by defining the problem, researching possible causative factors, understanding the underlying science, and evaluating the benefits and risks of alternative solutions.
• Identify resource uses that reduce the capacity of ecosystems to support various populations (e.g., use of pesticides, construction).

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Activity 11	**Aligned as designed**	SG pp A-50-51; TG pp A-104-106; Student Sheet 11.1	