

WASHINGTON STATE LASER

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

FOSS/MS

Weather & Water

November 1, 2010

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Systems ~ SYSA**

Content Standard

Any system may be thought of as containing subsystems and as being a subsystem of a larger system.

Performance Expectation

- Given a system, identify subsystems and a larger encompassing system

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 01	Aligned with modifications (see comments)	Investigation 1 part 2 pp 48-56; Lab Notebook p 1	Teacher must be intentional about use of the terms (vocabulary) ex: air pressure, humidity are parts of the large weather system.
Investigation 02	Aligned with modifications (see comments)	Investigation 2 part 2 pp 76-82; Lab Notebook page 5; CD-ROM: "Elevator to Space"; Resource book pp 8-11	Teacher must be intentional about use of the terms (vocabulary) ex: stratosphere, troposphere are part of the larger atmosphere system.
Investigation 04	Aligned with modifications (see comments)	Investigation 4 part 2 pp 131-140; Lab Notebook p 19	Teacher must be intentional about use of the terms (vocabulary) e.g., the inside vial is a subsystem of the larger beaker.
Investigation 07	Aligned with modifications (see comments)	Investigation 7 parts 1 and 2 pp 223-244; Lab Notebook p 43; CD-ROM: "Water Cycle"	The investigation contains opportunities to address the standards in discussing the water cycle, but the teacher must be intentional in using the terms system and subsystems. Example: the water cycle is a larger system with smaller subsystems such as water into soil, into plants and transpiration.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Systems ~ SYSB**

Content Standard The boundaries of a system can be drawn differently depending on the features of the system being investigated, the size of the system, and the purpose of the investigation.

Performance Expectation • Explain how the boundaries of a system can be drawn to fit the purpose of the study (e.g., to study how insect populations change, a system might be a forest, a meadow in the forest, or a single tree).

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 02	Aligned with modifications (see comments)	Investigation 2 part 2 pp 76-82; Lab Notebook p 5; CD-ROM: "Elevator to Space"; Resource book pp 8-11	Teacher must be intentional about use of the terms (vocabulary) ex: different layers of the atmosphere each have boundaries, but are all part of the whole system.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Systems ~ SYSC**

Content Standard

The output of one system can become the input of another system.

Performance Expectation

- Give an example of how output of matter or energy from a system can become input for another system

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 06	Aligned with modifications (see comments)	Investigation 6 part 2 pp 194-199; Lab Notebook p 31	This investigation contains opportunities to address the standards but the teacher must be intentional in using the terms input and output; for example: when addressing the output of water vapor in evaporation as an input to the air (humidity).
Investigation 07	Aligned with modifications (see comments)	Investigation 7 parts 1 and 2 pp 223-244; Lab Notebook p 35; CD-ROM: "Water Cycle"	The investigation contains opportunities to address the standards but the teacher must be intentional in using the terms input and output for example when addressing the output of water in transpiration as an input to condensation.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Systems ~ SYSD**

Content Standard In an open system, matter flows into and out of the system. In a closed system, energy may flow into or out of the system, but matter stays within the system.

Performance Expectation • Given a description of a system, analyze and defend whether it is open or closed.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 05	Aligned with modifications (see comments)	Investigation 5 parts 2-3, pp 163-174; Lab Notebook pp 27, 29; CD-ROM: "Heat and Energy"; Resource book pp 32-33	Teacher must be intentional about use of the terms (vocabulary) e.g., vials represent closed systems and the convection chamber is a closed system.
Investigation 07	Aligned with modifications (see comments)	Investigation 7 parts 1 and 2 pp 232-244; Lab Notebook p 43; Multimedia game; CD-ROM: "Water Cycle"; Resource book pp 82-83	Teacher must be intentional about use of the terms (vocabulary) e.g., water cycle is a closed system.
Investigation 08	Aligned with modifications (see comments)	Investigation 8 part 1 pp 258-264; Lab Notebook page 45; CD-ROM: "Gas in a Syringe"; Resource book pp 48-52	Teacher must be intentional about use of the terms (vocabulary) ex: Both the Pressure Indicator and Gas in Syringe are a closed systems. Barometers discussed in the reading are open systems.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Systems ~ SYSE**

Content Standard

If the input of matter or energy is the same as the output, then the amount of matter or energy in the system won't change; but if the input is more or less than the output, then the amount of matter or energy in the system will change.

Performance Expectation

• Measure the flow of matter into and out of an open system and predict how the system is likely to change (e.g., a bottle of water with a hole in the bottom, an ecosystem, an electric circuit).

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 02	Aligned with modifications (see comments)	Investigation 2 part 1 pp 69-76	Teacher must be intentional about use of the terms (vocabulary) ex: when balloon pops the energy in the system changes because there was an output of matter.
Investigation 09	Aligned with modifications (see comments)	Investigation 9 part 4 pp 315-320; Lab Notebook p 43; CD-ROM: "Water Cycle"; Resource book pp 63-66	Teacher must be intentional about use of the terms in the standard e.g., with heat being reemitted by greenhouse gases, the balance of the earth's system is changing (more heat input into the earth system). Investigation 9 part 4 contains the opportunity to discuss predictions of how the system is likely to change in step 7 p 318.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Systems ~ SYSF**

Content Standard

The natural and designed world is complex; it is too large and complicated to investigate and comprehend all at once. Scientists and students learn to define small portions for the convenience of investigation. The units of investigation can be referred to as “systems.”

Performance Expectation

- Given a complex societal issue with strong science and technology components (e.g., overfishing, global warming), describe the issue from a systems point of view, highlighting how changes in one part of the system are likely to influence other parts of the system.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 03	Aligned as designed	Investigation 3 parts 2-3 pp 97-110; Lab Notebook pp 9,11 and 13; Extending the Experience pp 111-112; CD -ROM: "Seasons", "Pacific Coast Daily", "Pacific Coast Sunset"	
Investigation 04	Aligned as designed	Investigation 4 parts 1-2 pp 113-140; Lab Notebook pp 14-19; Resource Book pp 22-26; CD-ROM: "Heat and Energy"	
Investigation 05	Aligned as designed	Investigation 5 parts 1-3 pp 141-176	
Investigation 07	Aligned as designed	Investigation 7 parts 1-2 pp 223-244	

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Systems ~ SYSF**

Content Standard

The natural and designed world is complex; it is too large and complicated to investigate and comprehend all at once. Scientists and students learn to define small portions for the convenience of investigation. The units of investigation can be referred to as “systems.”

Performance Expectation

- Given a complex societal issue with strong science and technology components (e.g., overfishing, global warming), describe the issue from a systems point of view, highlighting how changes in one part of the system are likely to influence other parts of the system.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 08	Aligned as designed	Investigation 8 parts 1-4 pp 245-280	
Investigation 09	Aligned as designed	Investigation 9 part 4 pp 315-320; Lab Notebook p 43; CD-ROM: "Water Cycle"; Resource Book pp 63-66	

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Inquiry ~ INQA**

Content Standard Scientific inquiry involves asking and answering questions and comparing the answer with what scientists already know about the world.

Performance Expectation • Generate a question that can be answered through scientific investigation. This may involve refining or refocusing a broad and ill-defined question.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 02	Aligned as designed	Investigation 2 part 1 pp 57-75; Lab Notebook p 3	Students are asked to write three questions in step 5 on p 71.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Inquiry ~ INQB**

Content Standard

Different kinds of questions suggest different kinds of scientific investigations.

Performance Expectation

- Plan and conduct a scientific investigation (e.g., field study, systematic observation, controlled experiment, model, or simulation) that is appropriate for the question being asked.
- Propose a hypothesis, give a reason for the hypothesis, and explain how the planned investigation will test the hypothesis.
- Work collaboratively with other students to carry out the investigations.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 02	Aligned with modifications (see comments)	Investigation 2 part 1 pp 57-75; Lab Notebook p 3	The investigation contains many opportunities to address the standards but the teacher must be intentional in using the terms given in the performance expectation.
Investigation 05	Aligned with modifications (see comments)	Investigation 5 part 2 pp 163-168; Lab Notebook p 27	The investigation contains many opportunities to address the standards but the teacher must be intentional about allowing the students to write their own investigation using the scientific method terms in the standard. Students should be given the opportunity to do the write-up independently, replacing the lab notebook p 27.
Investigation 06	Aligned with modifications (see comments)	Investigation 6 part 1 pp 192-193	Teacher must be intentional about sharing how questions drive types of investigations.
Investigation 08	Aligned with modifications (see comments)	Investigation 8 part 1 pp 260-264; Lab Notebook p 45	The investigation contains many opportunities to address the standards but the teacher must be intentional about allowing the students to write their own investigation using the scientific method terms in the standard. Students should be given the opportunity to do the write-up independently, replacing the lab notebook p 45.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Inquiry ~ INQC**

Content Standard

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

- Communicate results using pictures, tables, charts, diagrams, graphic displays, and text that are clear, accurate, and informative.

Performance Expectation

- 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
Investigation 03	Aligned as designed	Investigation 3 part 1 pp 93-96; Lab Notebook p 7	
Investigation 04	Aligned as designed	Investigation 4 parts 1-2 pp 121-139; Extending the experience p 140; Lab Notebook pp 14-19; CD-ROM: "Heat Capacity"	
Investigation 06	Aligned as designed	Investigation 6 part 1 pp 190-193	
Investigation 08	Aligned as designed	Investigation 8 parts 2-4 pp 265-280; CD-ROM: "Local Wind"; Lab notebook pp 48-49, and 53	

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Inquiry ~ INQD**

Content Standard

For an experiment to be valid, all (controlled) variables must be kept the same whenever possible, except for the manipulated (independent) variable being tested and the responding (dependent) variable being measured and recorded. If a variable cannot be controlled, it must be reported and accounted for.

Performance Expectation

• Plan and conduct a controlled experiment to test a hypothesis about a relationship between two variables. Determine which variables should be kept the same (controlled), which (independent) variable should be systematically manipulated, and which responding (dependent) variable is to be measured and recorded. Report any variables not controlled and explain how they might affect results.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 04	Module/Unit requires changes (see comments)	Investigation 4 part 1 pp 121-130; Lab Notebook pp 14-15	Teacher must be intentional about use of the terms (vocabulary) and modify the activity to include a control sample.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Inquiry ~ INQE**

Content Standard Models are used to represent objects, events, systems, and processes. Models can be used to test hypotheses and better understand phenomena, but they have limitations.

Performance Expectation • Create a model or simulation to represent the behavior of objects, events, systems, or processes. Use the model to explore the relationship between two variables and point out how the model or simulation is similar to or different from the actual phenomenon.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 02	Aligned as designed	Investigation 2 CD-ROM: "Gas in a Syringe"	
Investigation 03	Aligned as designed	Investigation 3 parts 2-3 pp 97-110; Lab Notebook pp 9,11 and 13; Extending the Experience pp 111-112; CD-ROM: "Seasons", "Pacific Coast Daily", Pacific Coast Sunset"	
Investigation 04	Aligned as designed	Investigation 4 CD-ROM: "Heat Capacity" and "Molecules in Solids Liquids and Gases", "Heat and Energy", "Thermometer"	
Investigation 05	Aligned as designed	Investigation 5 part 3 pp 169-176; CD-ROM: "Convection Chamber", Lab Notebook p 29	

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Inquiry ~ INQE**

Content Standard Models are used to represent objects, events, systems, and processes. Models can be used to test hypotheses and better understand phenomena, but they have limitations.

Performance Expectation • Create a model or simulation to represent the behavior of objects, events, systems, or processes. Use the model to explore the relationship between two variables and point out how the model or simulation is similar to or different from the actual phenomenon.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 06	Aligned as designed	Investigation 6 part 4 pp 206-213; Lab Notebook p 37; CD-ROM Video Resources: "Cloud in a Bottle"; Resource book p 80	
Investigation 07	Aligned as designed	Investigation 7 parts 1 and 2 pp 232-244; Lab Notebook p 43; Multimedia game CD-ROM: "Water Cycle"; Resource book pp 82-83	
Investigation 08	Aligned as designed	Investigation 8 parts 1-4 pp 245-280; CD-ROM: "Gas in a Syringe", "Weather-Balloon Launch", "Elevator to Space", "Local Wind"; Lab Notebook pp 50-51, 53; Resource book p 54 (image)	
Investigation 09	Aligned as designed	Investigation 9 parts 1, 2, and 4 pp 296-302, 303-310, 315-320; CD-ROM: "Solar Balloon", "Weather and Land forms", and "Water Cycle"; Lab Notebook pp 55 and 57, 59; Resource book pp 84-88	

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Inquiry ~ INQF**

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

- 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.

Performance Expectation

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 05	Aligned with modifications (see comments)	Investigation 5 part 2 pp 163-168; Lab Notebook p 27	The investigation contains many opportunities to address the standards but the teacher must be intentional in distinguishing between results and conclusion.
Investigation 06	Aligned with modifications (see comments)	Investigation 6 part 1 pp 190-193	The investigation contains many opportunities to address the standards but the teacher must be intentional in distinguishing between results and conclusion.
Investigation 08	Aligned with modifications (see comments)	Investigation 8 parts 2 and 3 pp 265-275; Lab Notebook pp 48-49	The investigation contains many opportunities to address the standards but the teacher must be intentional in distinguishing between results and conclusion.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Inquiry ~ INQG**

Content Standard

Scientific reports should enable another investigator to repeat the study to check the results.

Performance Expectation

• Prepare a written report of an investigation by clearly describing the question being investigated, what was done, and an objective summary of results. The report should provide evidence to accept or reject the hypothesis, explain the relationship between two or more variables, and identify limitations of the investigation.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 05	Aligned with modifications (see comments)	Investigation 5 part 2, pp 163-168; Lab Notebook p 27	The investigation contains many opportunities to address the standards but the teacher must be intentional in using the terms from the standard and providing students with the opportunity to independently create their own scientific report, replacing the Lab Notebook sheet.
Investigation 08	Aligned with modifications (see comments)	Investigation 8 part 1 pp 258-264; Lab notebook p 45	The investigation contains many opportunities to address the standards but the teacher must be intentional about allowing the students to write their own investigation using the scientific method terms in the standard. Students should be given the opportunity to do the write-up independently, replacing the lab notebook p 45.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
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
Investigation 01	Aligned with modifications (see comments)	Investigation 1 part 1 and 2 pp 33-56; Scientific and Historical background pp 36-42; Resource book pp 3-5	The investigation contains many opportunities to address the standards but the teacher must be intentional in using weather issues (severe weather and its problems) to show how current technology improves our understanding of weather and therefore improves our society (ex: people can be evacuated ahead of severe weather). Students are asked to discuss things people have done to try to lessen hurricane damage in step 7 on p 45 in Conducting Part 1.
Investigation 09	Aligned with modifications (see comments)	Investigation 9 Extension 3 Extending the Experience p 320	The extension 3 contains a great opportunity to apply how technology can be used to solve problems in urban areas. Teachers must be intentional about sharing technology advances in roofing and paving that helps solve urban heat island issues. (See http://www.epa.gov/hiri/mitigation/index.htm) for technology ideas.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Application ~ APPB**

Content Standard Scientists and technological designers (including engineers) have different goals. Scientists answer questions about the natural world; technological designers solve problems that help people reach their goals.

Performance Expectation • Investigate several professions in which an understanding of science and technology is required. Explain why that understanding is necessary for success in each profession.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 07	Aligned as designed	Investigation 7 part 1 pp 234-239, Video: "Water Works: Careers in Hydrology"	

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Application ~ APPC**

Content Standard Science and technology are interdependent. Science drives technology by demanding better instruments and suggesting ideas for new designs. Technology drives science by providing instruments and research methods.

Performance Expectation • Give examples to illustrate how scientists have helped solve technological problems (e.g., how the science of biology has helped sustain fisheries) and how engineers have aided science (e.g., designing telescopes to discover distant planets).

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 01	Aligned as designed	Investigation 1 part 1-2 pp 33-56; Resource book p 5; CD-ROM: Video Resources: "Weather Satellite"	
Investigation 06	Aligned as designed	Investigation 6 part 5 pp 214-220; Lab Notebook pp 39, 40, 41; CD-ROM: Atmospheric Data: Weather Balloon; Resource book pp 43-44, 81	The investigation contains many opportunities to discuss how science drives technology by demanding better instruments and suggesting ideas for new designs (switching from kite to weather balloon).

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Application ~ APPD**

Content Standard

The process of technological design begins by defining a problem and identifying criteria for a successful solution, followed by research to better understand the problem and brainstorming to arrive at potential solutions.

Performance Expectation

- Define a problem that can be solved by technological design and identify criteria for success.
- Research how others solved similar problems.
- Brainstorm different solutions.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 09	Aligned with modifications (see comments)	Investigation 9 part 4 pp 315-320; Resource book pp 63-66	The investigation contains many opportunities to address the standard but the teacher must be intentional extending the learning to give the students opportunities to brainstorm potential solutions to global warming.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Physical Science ~ PS2A**

Content Standard Substances have characteristic intrinsic properties such as density, solubility, boiling point, and melting point, all of which are independent of the amount of the sample.

Performance Expectation • Use characteristic intrinsic properties such as density, boiling point, and melting point to identify an unknown substance.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 05	Aligned as designed	Investigation 5 part 1 pp 144-162; Extending the Experience p 175; Lab Notebook pp 21-23; Resource book pp 27-31; CD-ROM Video Resources: "Density of Gases" (Extension)	Investigation 5 part 1 is strong in density.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Physical Science ~ PS3B**

Content Standard

Conduction, radiation, and convection, or mechanical mixing, are means of energy transfer.

Performance Expectation

• Use everyday examples of conduction, radiation, and convection, or mechanical mixing, to illustrate the transfer of energy from warmer objects to cooler ones until the objects reach the same temperature.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 05	Aligned as designed	Investigation 5 part 2-3 pp 165-174; CD-ROM: "Heat and Energy"; Resource book pp 32-33; Lab Notebook pp 27, 29	Investigation 5 is strong in meeting the standard.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Physical Science ~ PS3C**

Content Standard

Heat (thermal energy) consists of random motion and the vibrations of atoms and molecules. The higher the temperature, the greater the atomic or molecular motion. Thermal insulators are materials that resist the flow of heat.

Performance Expectation

• Explain how various types of insulation slow transfer of heat energy based on the atomic-molecular model of heat (thermal energy).

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 04	Aligned as designed	Investigation 4 part 2 pp 131-140; Resource Book pp 22-26; Lab Notebook pp 17 and 19; CD-ROM: "Molecules in Solids, Liquids and Gases", "Thermometer"; Video Resources: "Conduction through Metals"	

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Earth Science ~ ES2A**

Content Standard The atmosphere is a mixture of nitrogen, oxygen, and trace gases that include water vapor. The atmosphere has different properties at different elevations.

Performance Expectation • Describe the composition and properties of the troposphere and stratosphere.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 02	Aligned as designed	Investigation 2 part 2 pp 78-82; Lab Notebook pages 5; CD-ROM: Elevator to Space; Resource book pp 6-7 and 8-11	Part 2 is strong in meeting the standard. Part 1 is an integral part of a learning progression.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Earth Science ~ ES2B**

Content Standard The Sun is the major source of energy for phenomena on Earth's surface, such as winds, ocean currents, and the water cycle.

- Performance Expectation**
- Connect the uneven heating of Earth's surface by the Sun to global wind and ocean currents.
 - Describe the role of the Sun in the water cycle.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 03	Aligned as designed	Investigation 3 pp 83-112; Lab Notebook pp 11-13; Resource book pp 12-19; CD-ROM "Water Cycles", "Seasons"	Investigation 3 is strong in "the sun is the major source of energy..." Investigation 3 parts 1 and 2 are an integral part of a learning progression.
Investigation 04	Aligned as designed	Investigation 4 parts 1-2 pp 113-140; Lab Notebook pp 14-19; Resource Book pp 22-26; CD-ROM: Heat and Energy	Investigation 4 is strong in addressing that the energy from the sun the sun is a major source of energy for conduction. This investigation is an integral part of a learning progression.
Investigation 05	Aligned as designed	Investigation 5 parts 2-3 pp 164-174; Resource book pp 32-33; Lab Notebook book pp 27, 29; CD-ROM: "Heat and Energy", "Convection Chamber"	Investigation 5 is an integral part of a learning progression. Investigation 5 is a part of a conceptual sequence. Investigation is strong in how energy drives the water cycle.
Investigation 08	Aligned as designed	Investigation 8 part 2 pp 267-270; Lab Notebook pp 48-49; CD-ROM: "Climate Factors, Local Wind"; Resource Book pp 53-56 and 57-62	Investigation 8 part 2 is strong in "sun is the major source for phenomena on Earth's surface, such as winds". Investigation 8 part 1 is a part of a conceptual sequence.

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Earth Science ~ ES2C**

Content Standard In the water cycle, water evaporates from Earth’s surface, rises and cools, condenses to form clouds and falls as rain or snow and collects in bodies of water.

Performance Expectation • Describe the water cycle and give local examples of where parts of the water cycle can be seen.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 05	Aligned as designed	Investigation 5 part 2-3 pp 163-176; Lab Notebook pp 27, 29; CD-ROM: "Heat and Energy" and "Convection Chamber"; Resource book pp 32-33	All parts of investigation 5 are part of a conceptual sequence that lead up to the water cycle.
Investigation 06	Aligned as designed	Investigation 6 parts 1-3, pp 192-213; Lab Notebook pp 31, 35 and 37; CD-ROM Video Resources: "Cloud in a Bottle"; Resource book pp 34-36, 37-42, 79, 80	
Investigation 07	Aligned as designed	Investigation 7 part 1-2 pp 223-244; CD ROM: "Cycles: Water Cycle"; Lab Notebook p 43; Resource book pp 45-47	

**Alignment of Washington 6-8 Science Standards with
FOSS/MS Weather & Water
Earth Science ~ ES2D**

Content Standard Water is a solvent. As it passes through the water cycle, it dissolves minerals and gases and carries them to the oceans.

Performance Expectation • Distinguish between bodies of saltwater and fresh water and explain how saltwater became salty.

Lesson Number	Alignment	Evidence of Alignment	AlignmentComments
Investigation 07	Module/Unit requires changes (see comments)	Investigation 7 part 1 pp 234-239; Resource book pp 45-47	Teacher needs to design activities to support the concept of how dissolved minerals are transported by water molecules to oceans to form saltwater. Investigation 7 is strong in fresh water and salt water distribution on earth.