SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.1 Field & Laboratory Investigations: Environmentally Appropriate & Ethical (A) demonstrate safe practices during field and laboratory investigations	**Prerequisites** 4.1 Field & Laboratory Investigations: Environmentally Appropriate & Ethical (A) demonstrate safe practices during field and laboratory investigations
	Subsequent Knowledge and Skills 6.1 Field & Laboratory Investigations: Environmentally Appropriate & Ethical (A) demonstrate safe practices during field and laboratory investigations

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	goggles scientific method dispose mixture property black box model	FOSS Modules: • Solar Energy • Mixtures and Solutions • Environments • Models and Designs
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective: 1

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard A *abilities necessary to do science inquiry *understanding about scientific inquiry Standard F *personal health *characteristics and changes in populations *types of resources *changes and technology in local challenges

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.1 Field & Laboratory Investigations: (B) use and conserve resources and dispose or recycle materials	**Prerequisites** 4.1 Field & Laboratory Investigations: (B) use and conserve resources and dispose or recycle materials
	Subsequent Knowledge and Skills 6.1 Field & Laboratory Investigations: (B) use and conserve resources and dispose or recycle materials

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	conserve dispose recycle solution dissolving siphon conceptual model physical model collaborate traction wheel circuit switch design engineer axel bearing friction hub	FOSS Modules: • Solar Energy • Mixtures and Solutions • Environments • Models and Designs
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective:

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard A *abilities necessary to do science inquiry *understanding about scientific inquiry Standard F *personal health *characteristics and changes in populations *types of resources *changes and technology in local challenges

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td rowspan="2">Grade 5th
5.2 Scientific Inquiry: Field & Laboratory
(A) plan and implement descriptive and simple investigations – ask well – defined questions, formulate hypotheses, select and use equipment and technology</td><td>Prerequisites
4.2 Scientific Inquiry: Field & Laboratory
(A) plan and implement descriptive investigations – ask well – defined questions, formulate hypotheses, select and use equipment and technology</td></tr>
<tr><td>Subsequent Knowledge and Skills
6.2 Scientific Inquiry: Field & Laboratory
(A) plan and implement investigative procedures – ask well – defined questions, formulate hypotheses, select and use equipment and technology</td></tr>
<tr><td colspan="3">Instructional Support</td></tr>
<tr><td>Evidence of Student Learning</td><td>Key Vocabulary/Concepts/skills</td><td>Curriculum Resources</td></tr>
<tr><td>See clarifying activities at:
www.utdanacenter.org/ssi/</td><td>Controlled shadow orientation
Variable compass sun
Design direction thermometer
Hypothesis elapsed time absorb
scientific method heat sink reflect
earth material energy transfer
space heating
passive solar energy
active solar energy
greenhouse effect</td><td>FOSS Modules:
• Solar Energy
• Mixtures and Solutions
• Environments
• Models and Designs</td></tr>
<tr><td>Professional Development</td><td>Support for LEP and other Special Populations</td><td>Interdisciplinary Connection</td></tr>
<tr><td>TEXTEAMS
Introduction to Inquiry
Science Notebooks</td><td>Science Notebook
FOSS Word Bank
ESL Learning Strategies (Appendix)</td><td>Language Arts: Journal Writing</td></tr>
<tr><td colspan="3">Assessment</td></tr>
<tr><td colspan="2">Evidences of Success/Classroom Assessment</td><td>TAKS/Other Assessments</td></tr>
<tr><td colspan="2">Student observationduring activities (safety/observation checklist)
Student science notebook or journal
FOSS activity sheets</td><td>TAKS Objective:1</td></tr>
<tr><td colspan="3">Correlations/ Resources</td></tr>
<tr><td colspan="2">Additional Resources</td><td>National Science Standard</td></tr>
<tr><td colspan="2">Texas Statewide Systemic Initiative
www.utdanacenter.org/ssi/
FOSS Website
www.fossweb.com</td><td>Standard A
*abilities necessary to do science inquiry
*understanding about scientific inquiry

Standard E
*abilities of technological design
*understanding about science and technology</td></tr>
</table>

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.2 Scientific Inquiry: Field & Laboratory (B) collect information – observe and measure	**Prerequisites** 4.2 Scientific Inquiry: Field & Laboratory (B) collect information – observe and measure
	Subsequent Knowledge and Skills 6.2 Scientific Inquiry: Field & Laboratory (B) collect data – observe and measure

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	measurement syringe carbon dioxide controlled experiment range of tolerance surface area solubility indicator mass	FOSS Modules: • Solar Energy • Mixtures and Solutions • Environments • Models and Designs
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective: 1

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard A *abilities necessary to do science inquiry *understanding about scientific inquiry Standard E *abilities of technological design *understanding about science and technology

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.2 Scientific Inquiry: Field & Laboratory (C) analyze and interpret information to construct explanations from direct and indirect evidence	**Prerequisites** 4.2 Scientific Inquiry: Field & Laboratory (C) analyze and interpret information to construct explanations from direct and indirect evidence **Subsequent Knowledge and Skills** 6.2 Scientific Inquiry: Field & Laboratory (C) analyze and interpret information to construct explanations from direct and indirect evidence

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	technology variable optimum model range of tolerance salt tolerance preferred environment black box conceptual model axel friction traction models siphon physical wheel collaborate circuit switch design engineer bearing hub	FOSS Modules: • Solar Energy • Mixtures and Solutions • Environments • Models and Designs
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective:1

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard A *abilities necessary to do science inquiry *understanding about scientific inquiry Standard E *abilities of technological design *understanding about science and technology

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td rowspan="2">Grade 5th
5.2 Scientific Inquiry: Field & Laboratory (D) communicate valid conclusions</td><td colspan="2">Prerequisites
4.2 Scientific Inquiry: Field & Laboratory
(D) communicate valid conclusions</td></tr>
<tr><td colspan="2">Subsequent Knowledge and Skills
6.2 Scientific Inquiry: Field & Laboratory
(D) communicate valid conclusions</td></tr>
<tr><td colspan="3">Instructional Support</td></tr>
<tr><td>Evidence of Student Learning</td><td>Key Vocabulary/Concepts/skills</td><td>Curriculum Resources</td></tr>
<tr><td>See clarifying activities at:
www.utdanacenter.org/ssi/</td><td>conclusion
results
collaborate
range of tolerance
elapsed time
thermometer
solar energy
energy transfers
absorb
solar collector
shadow
orientation
compass
sun
direction
elapsed time
heat sink
earth materials
reflect
surface area</td><td>FOSS Modules:
• Solar Energy
• Mixtures and Solutions
• Environments
• Models and Designs</td></tr>
<tr><td>Professional Development</td><td>Support for LEP and other Special Populations</td><td>Interdisciplinary Connection</td></tr>
<tr><td>TEXTEAMS
Introduction to Inquiry
Science Notebooks</td><td>Science Notebook
FOSS Word Bank
ESL Learning Strategies (Appendix)</td><td>Language Arts: Journal Writing</td></tr>
<tr><td colspan="3">Assessment</td></tr>
<tr><td colspan="2">Evidences of Success/Classroom Assessment</td><td>TAKS/Other Assessments</td></tr>
<tr><td colspan="2">Student observationduring activities (safety/observation checklist)
Student science notebook or journal
FOSS activity sheets</td><td>TAKS Objective: 1</td></tr>
<tr><td colspan="3">Correlations/ Resources</td></tr>
<tr><td colspan="2">Additional Resources</td><td>National Science Standard</td></tr>
<tr><td colspan="2">Texas Statewide Systemic Initiative
www.utdanacenter.org/ssi/
FOSS Website
www.fossweb.com</td><td>Standard A
*abilities necessary to do science inquiry
*understanding about scientific inquiry

Standard E
*abilities of technological design
*understanding about science and technology</td></tr>
</table>

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.2 Scientific Inquiry: Field & Laboratory (E) construct graphs, tablets, maps, charts to organize, examine, evaluate information	**Prerequisites** 4.2 Scientific Inquiry: Field & Laboratory (E) construct graphs, tables, maps, charts to organize, examine, evaluate information
	Subsequent Knowledge and Skills 6.2 Scientific Inquiry: Field & Laboratory (E) construct graphs, tables, maps, charts to organize, examine evaluate data

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	bar graph line graph pictograph technology solvent solute saturated solution solubility mean median model range	FOSS Modules: • Solar Energy • Mixtures and Solutions • Environments • Models and Designs
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective: 1

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard A *abilities necessary to do science inquiry *understanding about scientific inquiry Standard E *abilities of technological design *understanding about science and technology

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.3Critical Thinking and Scientific Problem-Solving (A) analyze, review, critique scientific explanations – hypotheses, theories as to strengths and weaknesses	**Prerequisites** 4.3 Critical Thinking and Scientific Problem-Solving (A) analyze, review, critique scientific explanations – hypotheses, theories as to strengths and weaknesses
	Subsequent Knowledge and Skills 6.3 Critical Thinking and Scientific Problem-Solving (A) analyze, review, critique scientific explanations – hypotheses, theories as to strengths and weaknesses

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	theory hypothesis consensus variable viable	FOSS Modules: • Models and Designs
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective:1

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi**/ FOSS Website **www.fossweb.com**	Standard A *abilities necessary to do science inquiry *understanding about scientific inquiry Standard G *science as a human endeavor *nature of science *history of science

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.3 Critical Thinking and Scientific Problem-Solving (B) draw inferences on promotional material for products and services	**Prerequisites** 4.3 Critical Thinking and Scientific Problem-Solving (B) draw inferences on promotional materials for products and services **Subsequent Knowledge and Skills** 6.3 Critical Thinking and Scientific Problem-Solving (B) draw inferences on promotional materials for products and services

Instructional Support

Evidence of Student Learning	**Key Vocabulary/Concepts/skills**	**Curriculum Resources**
See clarifying activities at: www.utdanacenter.org/ssi/	viable optimum inferences shadow orientation compass sun direction thermometer elapsed time earth materials heat sink solar energy energy transfer	FOSS Modules: • Solar Energy • Models and Designs
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	**TAKS/Other Assessments**
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective:1

Correlations/ Resources

Additional Resources	**National Science Standard**
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi**/ FOSS Website **www.fossweb.com**	Standard A *abilities necessary to do science inquiry *understanding about scientific inquiry

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.3 Critical Thinking and Scientific Problem-Solving (C) represent natural world using models, identify limitations	**Prerequisites** 5.3 Critical Thinking and Scientific Problem-Solving (C) represent natural world using models, identify limitations
	Subsequent Knowledge and Skills 5.3 Critical Thinking and Scientific Problem-Solving (C) represent natural world using models, identify limitations

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	model conceptual model physical model black box	FOSS Modules: • Solar Energy • Models and Designs
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective:1

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard A *abilities necessary to do science inquiry *understanding about scientific inquiry

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.3 Critical Thinking and Scientific Problem-Solving (D) evaluate research on scientific thought, society, environment	**Prerequisites** 4.3 Critical Thinking and Scientific Problem-Solving (D) evaluate research on scientific thought, society, environment
	Subsequent Knowledge and Skills 6.3 Critical Thinking and Scientific Problem-Solving (D) evaluate research on scientific thought, society, environment

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	environment environment factor variable controlled experiment brine shrimp salinity optimum viable	FOSS Modules: • Environments • Models and Designs
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective:1

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard A *abilities necessary to do science inquiry *understanding about scientific inquiry Standard G *science as a human endeavor *nature of science *history of science

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td rowspan="2">Grade 5th
5.3 Critical Thinking and Scientific Problem-Solving
(E) connect science concepts with history of science and contributions of scientists</td><td>Prerequisites
4.3 Critical Thinking and Scientific Problem-Solving
(E) connect science concepts with history of science and contributions of scientists</td></tr>
<tr><td>Subsequent Knowledge and Skills
6.3 Critical Thinking and Scientific Problem-Solving
(E) connect science concepts with history of science and contributions of scientists</td></tr>
<tr><td colspan="3">Instructional Support</td></tr>
<tr><td>Evidence of Student Learning</td><td>Key Vocabulary/Concepts/skills</td><td>Curriculum Resources</td></tr>
<tr><td>See clarifying activities at:
www.utdanacenter.org/ssi/</td><td>engineer
astronomer
geologist
surface area</td><td>FOSS Modules:
• Solar Energy
• Mixtures and Solutions
• Environments
• Models and Designs</td></tr>
<tr><td>Professional Development</td><td>Support for LEP and other Special Populations</td><td>Interdisciplinary Connection</td></tr>
<tr><td>TEXTEAMS
Introduction to Inquiry
Science Notebooks</td><td>Science Notebook
FOSS Word Bank
ESL Learning Strategies (Appendix)</td><td>Language Arts: Journal Writing</td></tr>
<tr><td colspan="3">Assessment</td></tr>
<tr><td colspan="2">Evidences of Success/Classroom Assessment</td><td>TAKS/Other Assessments</td></tr>
<tr><td colspan="2">Student observationduring activities (safety/observation checklist)
Student science notebook or journal
FOSS activity sheets</td><td>TAKS Objective: (not tested)</td></tr>
<tr><td colspan="3">Correlations/ Resources</td></tr>
<tr><td colspan="2">Additional Resources</td><td>National Science Standard</td></tr>
<tr><td colspan="2">Texas Statewide Systemic Initiative
www.utdanacenter.org/ssi/
FOSS Website
www.fossweb.com</td><td>Standard A
*abilities necessary to do science inquiry
*understanding about scientific inquiry</td></tr>
</table>

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.4 Tools (A) collect and analyze information using tools	**Prerequisites** 4.4 Tools (A) collect and analyze information using tools **Subsequent Knowledge and Skills** 6.4 Tools (A) collect, analyze, record information using tools

Instructional Support

Evidence of Student Learning	**Key Vocabulary/Concepts/skills**	**Curriculum Resources**
See clarifying activities at: www.utdanacenter.org/ssi/	technology syringe thermometer balance compass aquarium indicator carbon dioxide mode mean median range	FOSS Modules: • Solar Energy • Mixtures and Solutions • Environments • Models and Designs
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	**TAKS/Other Assessments**
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective 1

Correlations/ Resources

Additional Resources	**National Science Standard**
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi**/ FOSS Website **www.fossweb.com**	Standard A *abilities necessary to do science inquiry *understanding about scientific inquiry

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th (B) demonstrate repeated investigations increase reliability of results	**Prerequisites** (B) demonstrate repeated investigations increase reliability of results
	Subsequent Knowledge and Skills (B) identify patterns in information – percent, average, range, frequency

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	variable reliability design engineer axle bearing friction hub traction wheel	FOSS Modules: • Solar Energy • Mixtures and Solutions • Environments • Models and Designs
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective 1

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard A *abilities necessary to do science inquiry *understanding about scientific inquiry

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.5 Systems: Collection of Cycles, Structures, Processes (A) describe some cycles, structures, processes in simple systems	**Prerequisites** 4.5 Complex Systems & Parts (A) identify and describe roles of organisms in living systems and parts in nonliving objects
	Subsequent Knowledge and Skills 6.5 Systems: Combination of Systems (A) identify and describe system resulting from combination of two or more systems

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	circuit switch siphon	FOSS Modules: • Solar Energy • Mixtures and Solutions • Environments • Models and Designs
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective:2

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard B *properties and changes of properties in matter *motions and forces *transfer of energy

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td rowspan="2">Grade 5th
5.5 Systems: Collection of Cycles, Structures, Processes
(B) describe interactions that occur in simple systems</td><td>Prerequisites
4.5 Systems: Collection of Cycles, Structures, Processes
(B) predict and draw conclusions when part of a system is removed</td></tr>
<tr><td>Subsequent Knowledge and Skills
6.5 Systems: Collection of Cycles, Structures, Processes
(B) describe properties of a system differ from properties of parts</td></tr>
<tr><td colspan="3">Instructional Support</td></tr>
<tr><td>Evidence of Student Learning</td><td>Key Vocabulary/Concepts/skills</td><td>Curriculum Resources</td></tr>
<tr><td>See clarifying activities at:
www.utdanacenter.org/ssi/</td><td>axle
bearing
friction
hub
wheel
fraction
siphon
circuit
witch</td><td>FOSS Modules:
• Solar Energy
• Mixtures and Solutions
• Environments
• Models and Designs</td></tr>
<tr><td>Professional Development</td><td>Support for LEP and other Special Populations</td><td>Interdisciplinary Connection</td></tr>
<tr><td>TEXTEAMS
Introduction to Inquiry
Science Notebooks</td><td>Science Notebook
FOSS Word Bank
ESL Learning Strategies (Appendix)</td><td>Language Arts: Journal Writing</td></tr>
<tr><td colspan="3">Assessment</td></tr>
<tr><td colspan="2">Evidences of Success/Classroom Assessment</td><td>TAKS/Other Assessments</td></tr>
<tr><td colspan="2">Student observationduring activities (safety/observation checklist)
Student science notebook or journal
FOSS activity sheets</td><td>TAKS Objective:2</td></tr>
<tr><td colspan="3">Correlations/ Resources</td></tr>
<tr><td colspan="2">Additional Resources</td><td>National Science Standard</td></tr>
<tr><td colspan="2">Texas Statewide Systemic Initiative
www.utdanacenter.org/ssi/
FOSS Website
www.fossweb.com</td><td>Standard B
*properties and changes of properties in matter
*motions and forces
*transfers of energy</td></tr>
</table>

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td>Grade 5th
5.6 Change Occurs In Cycles
(A) identify events and describe changes that occur on regular basis</td><td>Prerequisites
4.6 Change Can Create Recognize Patterns
(A) identify patterns of change
(B) Illustrate certain characteristics of objects can remain constant when rotated, translated, reflected
(C) use reflection to verify symmetry</td></tr>
<tr><td></td><td>Subsequent Knowledge and Skills
6.14 Earth Systems: Structures & Functions
(A) summarize rock cycle</td></tr>
<tr><td colspan="2">Instructional Support</td></tr>
<tr><td>Evidence of Student Learning</td><td>Key Vocabulary/Concepts/skills</td><td>Curriculum Resources</td></tr>
<tr><td>See clarifying activities at:
www.utdanacenter.org/ssi/</td><td>aquariums
terrariums
drought
irrigation
organisms
shadow
orientation
sun
compass
direction
surface area</td><td>FOSS Modules:
• Solar Energy
• Mixtures and Solutions
• Environments</td></tr>
<tr><td>Professional Development</td><td>Support for LEP and other Special Populations</td><td>Interdisciplinary Connection</td></tr>
<tr><td>TEXTEAMS
Introduction to Inquiry
Science Notebooks</td><td>Science Notebook
FOSS Word Bank
ESL Learning Strategies (Appendix)</td><td>Language Arts: Journal Writing</td></tr>
<tr><td colspan="2">Assessment</td></tr>
<tr><td>Evidences of Success/Classroom Assessment</td><td>TAKS/Other Assessments</td></tr>
<tr><td>Student observationduring activities (safety/observation checklist)
Student science notebook or journal
FOSS activity sheets</td><td>TAKS Objective:4</td></tr>
<tr><td colspan="2">Correlations/ Resources</td></tr>
<tr><td>Additional Resources</td><td>National Science Standard</td></tr>
<tr><td>Texas Statewide Systemic Initiative
www.utdanacenter.org/ssi/
FOSS Website
www.fossweb.com</td><td>Standard B
*properties and changes of properties in matter
*motions and forces
*transfers of energy

Standard D
*structure of the earth system
*earth’s history
*earth in the solar system</td></tr>
</table>

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.6 Change Occurs In Cycles (B) identify significance of water, carbon, nitrogen cycles	**Prerequisites** 4.6 Changes Can Create Recognizable Patterns (A) identify patterns of change such as in weather, metamorphosis and objects in the sky
	Subsequent Knowledge and Skills 6.6 Change Occurs In Cycles (B) identify relationship between groundwater and surface water (C) describe components of the atmosphere oxygen, nitrogen, water vapor and identity role of atmospheric movement in water

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	greenhouse effect carbon dioxide/oxygen viable irrigate drought salinity evaporation carbon	FOSS Modules: • Solar Energy • Environments
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective:4

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard B *properties and changes of properties in matter *motions and forces *transfer of energy Standard D *structures of the earth system *earth's history *earth in the solar system

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td rowspan="2">Grade 5th
5.6 Change Occurs In Cycles
(C) describe and compare life cycles of plants and animals</td><td>Prerequisites
4.6 Change Can Create Recognizable Patterns
(A) Identify patterns of change</td></tr>
<tr><td>Subsequent Knowledge and Skills
7.10 The student knows that species can change through generations
(A) identify that sexual reproduction results in more diverse offspring and asexual reproduction results in more uniform offspring</td></tr>
<tr><td colspan="3">Instructional Support</td></tr>
<tr><td>Evidence of Student Learning</td><td>Key Vocabulary/Concepts/skills</td><td>Curriculum Resources</td></tr>
<tr><td>See clarifying activities at:
www.utdanacenter.org/ssi/</td><td>germinate
variable
egg
pupae
larvae
viable
optimum
indicator
aquarium
salinity
beetle
irrigate
germinate
metamorphosis
germination
environment
terrarium
organism
drought
photosynthesis
environmental factor
range of tolerance
brine shrimp
salt sensitive
salt tolerant
controlled experiment</td><td>FOSS Modules:
• Environments</td></tr>
<tr><td>Professional Development</td><td>Support for LEP and other Special Populations</td><td>Interdisciplinary Connection</td></tr>
<tr><td>TEXTEAMS
Introduction to Inquiry
Science Notebooks</td><td>Science Notebook
FOSS Word Bank
ESL Learning Strategies (Appendix)</td><td>Language Arts: Journal Writing</td></tr>
<tr><td colspan="3">Assessment</td></tr>
<tr><td colspan="2">Evidences of Success/Classroom Assessment</td><td>TAKS/Other Assessments</td></tr>
<tr><td colspan="2">Student observationduring activities (safety/observation checklist)
Student science notebook or journal
FOSS activity sheets</td><td>TAKS Objective:2</td></tr>
<tr><td colspan="3">Correlations/ Resources</td></tr>
<tr><td colspan="2">Additional Resources</td><td>National Science Standard</td></tr>
<tr><td colspan="2">Texas Statewide Systemic Initiative
www.utdanacenter.org/ssi/
FOSS Website
www.fossweb.com</td><td>Standard B
*properties and changes of properties in matter
*motions and forces
*transfers of energy

Standard C
*structure and function in living systems
*reproduction and heredity
*regulation and behavior
*populations and ecosystems
*diversity and adaptations of organisms</td></tr>
</table>

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td>Grade 5th
5.7 Physical Properties of Substances
(A) classify matter-magnetic, physical state, conduct or insulate heat, electricity, and sound</td><td>Prerequisites
3.7 Physical Properties of Substances
(A) gather information - temperature, magnetism, hardness, and mass
(B) identify matter – liquids, solids, gases
4.7 Physical Properties of Substances
(A) observe and record changes in states of matter caused by heat</td></tr>
<tr><td></td><td>Subsequent Knowledge and Skills
6.7 (C) recognize that changes may occur in physical properties of ingredients of solutions</td></tr>
<tr><td colspan="2">Instructional Support</td></tr>
<tr><td>Evidence of Student Learning</td><td>Key Vocabulary/Concepts/skills</td><td>Curriculum Resources</td></tr>
<tr><td>See clarifying activities at:
www.utdanacenter.org/ssi/</td><td>solid
chemical reaction
density
solubility
liquid
gas
solvent
solute
saturated solution
compass
sun
direction
solar collector
reflect</td><td>FOSS Modules:
• Solar Energy
• Environments</td></tr>
<tr><td>Professional Development</td><td>Support for LEP and other Special Populations</td><td>Interdisciplinary Connection</td></tr>
<tr><td>TEXTEAMS
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<tr><td>Evidences of Success/Classroom Assessment</td><td>TAKS/Other Assessments</td></tr>
<tr><td>Student observationduring activities (safety/observation checklist)
Student science notebook or journal
FOSS activity sheets</td><td>TAKS Objective:3</td></tr>
<tr><td colspan="2">Correlations/ Resources</td></tr>
<tr><td>Additional Resources</td><td>National Science Standard</td></tr>
<tr><td>Texas Statewide Systemic Initiative
www.utdanacenter.org/ssi/
FOSS Website
www.fossweb.com</td><td>Standard B
*properties and changes of properties in matter
*motions and forces
*transfer of energy</td></tr>
</table>

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td rowspan="2">Grade 5th
5.7 Physical Properties of Substances
(B) demonstrate some mixtures maintain physical properties of ingredients</td><td>Prerequisites
4.11 Natural World: Earth Materials and Objects in the Sky
(A) test properties of soils</td></tr>
<tr><td>Subsequent Knowledge and Skills
6.7 (A) demonstrate new substances can be made combining two or more substances, compare properties of new substances to originals</td></tr>
<tr><td colspan="3">Instructional Support</td></tr>
<tr><td>Evidence of Student Learning</td><td>Key Vocabulary/Concepts/skills</td><td>Curriculum Resources</td></tr>
<tr><td>See clarifying activities at:
www.utdanacenter.org/ssi/</td><td>reactant</td><td>FOSS Modules:
• Mixtures and Solutions</td></tr>
<tr><td>Professional Development</td><td>Support for LEP and other Special Populations</td><td>Interdisciplinary Connection</td></tr>
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<tr><td colspan="2">Texas Statewide Systemic Initiative
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FOSS Website
www.fossweb.com</td><td>Standard B
*properties and changes of properties in matter
*motions and forces
*transfer of energy</td></tr>
</table>

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.7 Physical Properties of Substances (C) recognize that changes may occur in physical properties of ingredients of solutions	**Prerequisites** 4.7 Physical Properties of Substances (A) observe and record changes in states of matter caused by heat (B) identify matter – liquids, solids, gases
	Subsequent Knowledge and Skills 6.7 Physical & Chemical Properties of Substances (A) demonstrate new substances can be made combining two or more substances, compare

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	crystal evaporation chemical reaction reactant solvent solute saturated solution	FOSS Modules: • Mixtures and Solutions
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective:3

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard B *properties and changes of properties in matter *motions and forces *transfer of energy

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td rowspan="2">Grade 5th
5.7 Physical Properties of Substances
(D) observe and measure characteristics properties of substances that remain constant</td><td>Prerequisites
4.7 Physical Properties of Substances
(A) test properties of soils</td></tr>
<tr><td>Subsequent Knowledge and Skills
6.7 Physical Properties of Substances
(B) classify substances by physical and chemical properties</td></tr>
<tr><td colspan="3">Instructional Support</td></tr>
<tr><td>Evidence of Student Learning</td><td>Key Vocabulary/Concepts/skills</td><td>Curriculum Resources</td></tr>
<tr><td>See clarifying activities at:
www.utdanacenter.org/ssi/</td><td>texture
gravel
volume</td><td>FOSS Modules:
• Mixtures and Solutions</td></tr>
<tr><td>Professional Development</td><td>Support for LEP and other Special Populations</td><td>Interdisciplinary Connection</td></tr>
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<tr><td colspan="2">Additional Resources</td><td>National Science Standard</td></tr>
<tr><td colspan="2">Texas Statewide Systemic Initiative
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FOSS Website
www.fossweb.com</td><td>Standard B
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*transfer of energy</td></tr>
</table>

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.8 Energy Occurs in Many Forms (A) differentiate among forms energy – light, heat, electrical, solar	**Prerequisites** 4.7 Matter Has Physical Properties (A) observe and record changes in the states of matter caused by the addition or reduction of heat
	Subsequent Knowledge and Skills 6.8 Matter & Energy: Interactions (A) define matter and energy

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	sun heat sink solar energy solar collector space heating shadow orientation greenhouse effect Passive solar energy Active solar energy	FOSS Modules: • Solar Energy
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective:3

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard B *properties and changes of properties in matter *motions and forces *transfer of energy

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.8 Energy Occurs in Many Forms (B) identify and demonstrate examples of reflected light and retracted light	**Prerequisites** 4.6 The student knows that change can create recognizable patterns (B) illustrate that certain characteristics of an object can remain constant even when the object is rotated like a spinning top, translated like a skater moving in a straight line, or reflected on a smooth surface (C) use reflections to verify that a natural object has symmetry
	Subsequent Knowledge and Skills 6.8 Energy Occurs in Many Forms (B) explain and illustrate interactions between matter and energy in water cycle and decay of biomass

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	reflect refracted transparent absorb reflect solar collector space heating orientation greenhouse effect	FOSS Modules: • Solar Energy
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective: 3

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard B *properties and changes of properties in matter *motions and forces *transfer of energy

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td rowspan="2">Grade 5th
5.8 Energy Occurs in Many Forms
(C) demonstrate electricity flows in circuits and produces heat, light, sound, and magnetic effects</td><td>Prerequisites
4.7 Matter Has Physical Properties
(A) observe and record changes in the states of matter caused by the addition or reduction of heat
(B) conduct tests, compare data, and draw conclusions about physical properties of matter including states of matter, conduction, density, and buoyancy</td></tr>
<tr><td>Subsequent Knowledge and Skills
6.8 Energy Occurs in Many Forms
(C) describe energy flow in living systems – food chain, food webs</td></tr>
<tr><td colspan="3">Instructional Support</td></tr>
<tr><td>Evidence of Student Learning</td><td>Key Vocabulary/Concepts/skills</td><td>Curriculum Resources</td></tr>
<tr><td>See clarifying activities at:
www.utdanacenter.org/ssi/</td><td>switch
circuit
energy transfers
conceptual model
physical model
collaborate</td><td>FOSS Modules:
• Models and Designs</td></tr>
<tr><td>Professional Development</td><td>Support for LEP and other Special Populations</td><td>Interdisciplinary Connection</td></tr>
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<tr><td colspan="2">Additional Resources</td><td>National Science Standard</td></tr>
<tr><td colspan="2">Texas Statewide Systemic Initiative
www.utdanacenter.org/ssi/
FOSS Website
www.fossweb.com</td><td>Standard B
*properties and changes of properties in matter
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</table>

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td rowspan="2">Grade 5th
5.8 Energy Occurs in Many Forms
(D) verify vibrating objects produce sound</td><td>Prerequisites

4.7 Matter Has Physical Properties
(B) conduct tests, compare data, and draw conclusions about physical properties of matter including states of matter, conduction, density, and buoyancy</td></tr>
<tr><td>Subsequent Knowledge and Skills

6.8 Complex interactions between matter and energy
(A) define energy</td></tr>
<tr><td colspan="3">Instructional Support</td></tr>
<tr><td>Evidence of Student Learning</td><td>Key Vocabulary/Concepts/skills</td><td>Curriculum Resources</td></tr>
<tr><td>See clarifying activities at:
www.utdanacenter.org/ssi/</td><td>vibrate
conceptual model
physical model
collaborate
circuit
switch
variable</td><td>FOSS Modules:
• Models and Designs</td></tr>
<tr><td>Professional Development</td><td>Support for LEP and other Special Populations</td><td>Interdisciplinary Connection</td></tr>
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Science Notebooks</td><td>Science Notebook
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ESL Learning Strategies (Appendix)</td><td>Language Arts: Journal Writing</td></tr>
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FOSS Website
www.fossweb.com</td><td>Standard B
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</table>

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td rowspan="2">Grade 5th
5.10 Likeness between Offspring and Patterns Inherited or Learned from Parents
(A) Identify traits inherited from parents to offspring in plants and animals
(B) give examples of learned characteristics resulting from environmental influence
4.9 Likeness between Offspring and Patterns Inherited or Learned from Parents
(A) distinguish between inherited traits and learned characteristics
(B) identify and provide examples of inherited traits and learned characteristics</td><td>Prerequisites
4.6 Change Can Create Recognizable Patterns
(A) identify patterns of change
(B) illustrate certain characteristics of objects can remain constant when rotated, translated, reflect
(C) use reflection to verify symmetry
5.10 Likeness between Offspring and Parents Inherited or Learned from Parents
(A) identify traits inherited from parents to offspring in plants and animals
(B) give examples of learned characteristics resulting from environmental influence</td></tr>
<tr><td>Subsequent Knowledge and Skills
6.11 Species Change Trough Generations
(A) identify changes in traits over several generations – natural occurrence and selective breeding
(B) identify cells as structures containing genetic material
(C) interpret role of genes in inheritance
6.11 Species Change Through Generations
(A) identify changes in traits over several generations – natural occurrence and selective breeding
(B) identify cells as structures containing genetic material
(C) interpret role of genes in inheritance</td></tr>
<tr><td colspan="2">Instructional Support</td></tr>
<tr><td>Evidence of Student Learning</td><td>Key Vocabulary/Concepts/skills</td><td>Curriculum Resources</td></tr>
<tr><td>See clarifying activities at:
www.utdanacenter.org/ssi/</td><td>variable
environmental factor
isopod
beetle
preferred environment</td><td>FOSS Modules:
• Environments</td></tr>
<tr><td>Professional Development</td><td>Support for LEP and other Special Populations</td><td>Interdisciplinary Connection</td></tr>
<tr><td>TEXTEAMS
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Science Notebook</td><td>Science Notebook
FOSS Word Bank
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<tr><td colspan="2">Student observationduring activities (safety/observation checklist)
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<tr><td colspan="3">Correlations/ Resources</td></tr>
<tr><td colspan="2">Additional Resources</td><td>National Science Standard</td></tr>
<tr><td colspan="2">Texas Statewide Systemic Initiative
www.utdanacenter.org/ssi/
FOSS Website
www.fossweb.com</td><td>Standard C
*structure and function in living systems
*reproduction and heredity
*regulation and behavior
*populations and ecosystems
*diversity and adaptations of organisms</td></tr>
</table>

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th	**Prerequisites**
5.11 Past Events Affect Present and Future Events (A) identify and observe actions that require time for changes to be measurable – growth, erosion, dissolving, weathering, flow	4.10 Past Event Affect Present and Future Events (A) identify and observe effects of events that require time for changes to be noticeable
	Subsequent Knowledge and Skills 6.11 Past Events Affect Present and Future Events (C) identify forces that shape Earth – uplifting, movement of water, volcanic activity

Instructional Support

Evidence of Student Learning	**Key Vocabulary/Concepts/skills**	**Curriculum Resources**
See clarifying activities at: www.utdanacenter.org/ssi/	environment factor germinate greenhouse effect solvent solute saturated solution absorb reflect solar collector surface area space heating orientation earth materials	FOSS Modules: • Mixtures and Solutions • Environments
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	**TAKS/Other Assessments**
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective: 4

Correlations/ Resources

Additional Resources	**National Science Standard**
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi**/ FOSS Website **www.fossweb.com**	Standard D *structure of the earth system *earth's history *earth in the solar system

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th	**Prerequisites**
5.11 Past Events Affect Present and Future Events (B) draw conclusions about "what happened before" using data	4.11 Past Events Affect Present and Future Events (B) draw conclusions about "what happened before"
	Subsequent Knowledge and Skills 6.11 Past Events Affect Present and Future Events (A) identify some changes in traits that can occur over several generations through natural occurrence and selective breeding (C) interpret the role of genes in inheritance

Instructional Support

Evidence of Student Learning	**Key Vocabulary/Concepts/skills**	**Curriculum Resources**
See clarifying activities at: www.utdanacenter.org/ssi/	control shadow orientation compass sun direction	FOSS Modules: • Solar Energy • Mixtures and Solutions • Environments
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	**TAKS/Other Assessments**
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective: 4

Correlations/ Resources

Additional Resources	**National Science Standard**
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard D *structure of the earth system *earth's history *earth in the solar system

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.11 Past Events Affect Present and Future Events (C) identify past events that led to formation of Earth's resources	**Prerequisites** 5.10 Likeness between Offspring and Parents Inherited or Learned from Parents (A) identify traits inherited from parents to offspring in plants and animals
	Subsequent Knowledge and Skills 6.11 Past Events Affect Present and Future Events (C) identify forces that shape Earth – uplifting, movement of water, volcanic activity

Instructional Support

Evidence of Student Learning	Key Vocabulary/Concepts/skills	Curriculum Resources
See clarifying activities at: www.utdanacenter.org/ssi/	sun	FOSS Modules: • Environments
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment

Evidences of Success/Classroom Assessment	TAKS/Other Assessments
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective:4

Correlations/ Resources

Additional Resources	National Science Standard
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi**/ FOSS Website **www.fossweb.com**	Standard D *structure of the earth system *earth's history *earth in the solar system

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td rowspan="2">Grade 5th
5.12 Natural World: Earth Materials and Objects In the Sky
(A) interpret how land forms result from constructive and destructive forces</td><td>Prerequisites

4.11 Natural World: Earth Materials and Objects In the Sky
(B) summarize the effects of the oceans on land</td></tr>
<tr><td>Subsequent Knowledge and Skills
6.14 Structures and Functions of Earth Systems
(A) summarize the rock cycle
(B) identify relationships between groundwater and surface water in a watershed</td></tr>
<tr><td colspan="3">Instructional Support</td></tr>
<tr><td>Evidence of Student Learning</td><td>Key Vocabulary/Concepts/skills</td><td>Curriculum Resources</td></tr>
<tr><td>See clarifying activities at:
www.utdanacenter.org/ssi/</td><td>thermometer
elapsed time
earth
materials
energy transfer
heat sink
solar energy
absorb
reflect
solar collector
surface area</td><td>FOSS Modules:
• Solar Energy</td></tr>
<tr><td>Professional Development</td><td>Support for LEP and other Special Populations</td><td>Interdisciplinary Connection</td></tr>
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<tr><td colspan="3">Correlations/ Resources</td></tr>
<tr><td colspan="2">Additional Resources</td><td>National Science Standard</td></tr>
<tr><td colspan="2">Texas Statewide Systemic Initiative
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FOSS Website
www.fossweb.com</td><td>Standard D

*structure of the earth system
*earth’s history
*earth in the solar system</td></tr>
</table>

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.12 Natural World: Earth Materials and Objects In the Sky (B) describe processes responsible for coal, coil, gas and minerals	**Prerequisites** 4.11 Natural World: Earth Materials and Objects In the Sky (B) summarize the effects of the oceans on land
	Subsequent Knowledge and Skills 6.14 Structures and Functions of Earth Systems (A) summarize the rock cycle (B) identify relationships between groundwater and surface water in a watershed

Instructional Support		
Evidence of Student Learning	**Key Vocabulary/Concepts/skills**	**Curriculum Resources**
See clarifying activities at: www.utdanacenter.org/ssi/	shadow orientation	FOSS Modules: • Solar Energy • Mixtures and Solutions
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment	
Evidences of Success/Classroom Assessment	**TAKS/Other Assessments**
Student observationduring activities (safety/observation checklist) Student science notebook or journal FOSS activity sheets	TAKS Objective: 4

Correlations/ Resources	
Additional Resources	**National Science Standard**
Texas Statewide Systemic Initiative **www.utdanacenter.org/ssi/** FOSS Website **www.fossweb.com**	Standard D *structure of the earth system *earth's history *earth in the solar system

SCIENCE INSTRUCTIONAL ALIGNMENT CHART

<table>
<tr><td rowspan="2">Grade 5th
5.12 Natural World: Earth Materials and Objects In the Sky
(C) identify physical characteristics of Earth, compare to physical characteristics of moon</td><td>Prerequisites

4.11 Natural World: Earth Materials and Objects In the Sky
(C) identify the Sun as the major source of energy for the Earth and understand its role in the growth of plants, in the creation of winds, and in the water cycle</td></tr>
<tr><td>Subsequent Knowledge and Skills
6.14 Structures and Functions of Earth Systems
(A) summarize the rock cycle
(B) identify relationships between groundwater and surface water in a watershed
(C) describe components of the atmosphere including oxygen, nitrogen, and water vapor, and identify the role of atmospheric movement in weather change</td></tr>
<tr><td colspan="2">Instructional Support</td></tr>
<tr><td colspan="2"><table>
<tr><th>Evidence of Student Learning</th><th>Key Vocabulary/Concepts/skills</th><th>Curriculum Resources</th></tr>
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• Solar Energy</td></tr>
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Star Lab</td><td>Science Notebook
FOSS Word Bank
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SCIENCE INSTRUCTIONAL ALIGNMENT CHART

Grade 5th 5.12 Natural World: Earth Materials and Objects In the Sky (D) identify gravity as force to keep planets and moon in orbit	**Prerequisites** 4.11 Natural World: Earth Materials and Objects In the Sky (C) identify the Sun as the major source of energy for the Earth and understand its role in the growth of plants, in the creation of winds, and in the water cycle
	Subsequent Knowledge and Skills 6.13 Components of our solar system (B) identify characteristics of objects in our solar system including the Sun, planets, meteorites, comets, asteroids, and moons

Instructional Support		
Evidence of Student Learning	**Key Vocabulary/Concepts/skills**	**Curriculum Resources**
See clarifying activities at: www.utdanacenter.org/ssi/	shadow orientation	FOSS Modules: • Solar Energy
Professional Development	**Support for LEP and other Special Populations**	**Interdisciplinary Connection**
TEXTEAMS Introduction to Inquiry Science Notebooks Star Lab	Science Notebook FOSS Word Bank ESL Learning Strategies (Appendix)	Language Arts: Journal Writing

Assessment	
Evidences of Success/Classroom Assessment	**TAKS/Other Assessments**
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