

Wilson Area School District Planned Course Guide

Title of planned course: Science Kindergarten

Subject Area: Science

Grade Level: Kindergarten

Course Description: This course is designed for students to gain an understanding of changes that occur in nature. This will be demonstrated through an introduction to a tree's basic needs, life cycle, and structure. Through observation and hands-on experiments students will gain an understanding of how changes of temperature and seasons impacts a tree's life cycle.

Time/Credit for this Course: One Academic Year

Curriculum Writing Committee: Karen Riehl, Rebecca Jabeir

Curriculum Map

August:

September: Weather; Daily weather calendar and introduction to thermometer.
Fall Trees

October: Fall Trees

November: Fall Trees

December: Evergreens

January: Evergreens

February: Evergreens

March: Weather; clouds, pinwheel, and wind vane

April: Spring Trees

May: Spring Trees

June: Spring Trees

Wilson Area School District Planned Course Materials

Course Title: Science Kindergarten

Textbook: Foss Science Stories:

- Weather
- Fall Trees & Leaves
- Evergreens
- Spring Trees

Delta Education

Supplemental Books:

Teacher Resources:

- Foss Teaching Kit
- Foss Supplemental Books
- Foss Teaching Module Notes
- Foss Teacher Preparation Videos
- www.Fossweb.com

Curriculum Scope & Sequence

Planned Course: Science Kindergarten

Unit: Weather

Time frame: On-going annually

State Standards 3.3a

Anchor(s) or adopted anchor: 3.3a.5, 3.3a.6, 3.3a.7

Essential content/objectives: At end of the unit, students will be able to:

- Observe and record daily weather.
- Use a calendar to monitor daily weather.
- Record daily outdoor temperature.
- Use different weather instruments: thermometer, rain gauge, wind vane.
- Identify several cloud types.
- Observe wind speed using a pinwheel.

Core Activities: Students will complete/participate in the following:

- Create and use class weather calendar and/or individual weather journals.

Extension:

- Outdoor observations
- Make word bank entries
- Classroom Meteorologist
- Use technology to identify weather around the world.
- Make a variety of weather instruments

Remediation: Review terms and concepts daily

Instructional Methods:

- Whole/small group instruction
- Journaling
- Graphing
- Modeling
- Internet

Materials & Resources:

- Foss kits
- Journals
- Supplemental stories

Assessments:

- Large group discussion
- Observation and review of student work
- Checklist

Curriculum Scope & Sequence

Planned Course: Science Kindergarten

Unit: Fall trees and leaves

Time frame: 3 months (September – November)

State Standards 3.1a, 4.2, 4.6

Anchor(s) or adopted anchor: 3.1a.3, 3.1a.5, 3.1a.8, 3.1.9

Essential content/objectives: At end of the unit, students will be able to:

- Identify tree parts and basic needs
- Understand that trees are a growing, living organism.
- Compare and contrast trees.
- Identify changes that take place in the fall.
- Compare and contrast leaves by their shapes and structure.

Core Activities: Students will complete/participate in the following:

- Draw and label a tree
- Look at schoolyard trees
- Dictate a tree's basic needs
- Adopt a classroom tree
- Collect leaves and identify their geometric shapes

Extension:

- Outdoor tree observations
- Make word bank entries
- Leaf pressings and leaf rubbings
- Class scrapbook
- Compare leaves with geometric shapes
- Sort leaves
- Science journal

Remediation: Review terms and concepts daily

Instructional Methods:

- Whole/small group instruction
- Journaling
- Graphing
- Modeling
- Internet

Materials & Resources:

- Foss kits
- Journals
- Supplemental stories

Assessments:

- Large group discussion
- Observation and review of student work
- Checklist

Curriculum Scope & Sequence

Planned Course: Science Kindergarten

Unit: Evergreens

Time frame: 3 month (December - February)

State Standards: 3.1a, 4.2, 4.6

Anchor(s) or adopted anchor: 3.1a.3, 3.1a.5, 3.1a.8, 3.1.9

Essential content/objectives: At end of the unit, students will be able to:

- Understand that trees have identifiable structures that serve different functions
- Discuss changes in trees through the seasons
- Identify that a tree is a resource, which provide people with wood and food

Core Activities: Students will complete/participate in the following:

- Conduct an evergreen hunt and observe winter trees
- Discuss the importance of trees and how they provide food and habitats

Extension:

- Sort items that come from trees
- Make evergreen samples
- Make word bank entries
- Make bird feeders from pine cones
- Add winter twigs to class scrapbook

Remediation: Review terms and concepts daily

Instructional Methods:

- Whole/small group instruction
- Journaling
- Graphing
- Modeling
- Internet

Materials & Resources:

- Foss kits
- Journals
- Supplemental stories

Assessments:

- Large group discussion
- Observation and review of student work
- Checklist

Curriculum Scope & Sequence

Planned Course: Science Kindergarten

Unit: Spring Trees

Time frame: 3 months (April – June)

State Standards: 3.1a, 4.2, 4.6

Anchor(s) or adopted anchor: 3.1a.3, 3.1a.5, 3.1a.8, 3.1.9

Essential content/objectives: At end of the unit, students will be able to:

- Understand that trees have identifiable structures that serve different functions
- Discuss changes in trees through the seasons
- Identify that a tree is a resource, which provide people with wood and food

Core Activities: Students will complete/participate in the following:

- Forcing spring twigs
- Plant the classroom tree
- Observe the spring twigs
- Go on a spring bark and bud hunt

Extension:

- Visit adopted trees
- Measure the circumference of tree trunks
- Draw a spring tree
- Make word bank entries
- Add to class scrapbook
- Watch for life in trees
- Watch for seed showers

Remediation: Review terms and concepts daily

Instructional Methods:

- Whole/small group instruction
- Journaling
- Graphing
- Modeling
- Internet

Materials & Resources:

- Foss kits
- Journals
- Supplemental stories

Assessments:

- Large group discussion
- Observation and review of student work
- Checklist