Reading the Landscape

• Look in the distance—
  • Observations
    – Sky
    – Landform
    – Sounds
    – Weather

• Move in gradually—
  • Observations
    – I can see
    – I can hear
    – I can feel
    – I can smell
<table>
<thead>
<tr>
<th>Native Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Common names:</td>
</tr>
<tr>
<td>• Scientific names:</td>
</tr>
</tbody>
</table>
• Kindergarten:
• 2.a. Ask questions about the natural world.
• 2.b. Plan and conduct descriptive investigations.
• 2.d. Record and organize observations.
• 2.e. Communicate descriptive observations.
• 3.a. Identify, explain and find a solution to a problem.
• 3.b. Make predictions based on observable patterns in nature.
• 4.b. Use the senses to observe and identify patterns in the environment.
First Grade:
2.a. Ask questions about the natural world.
2.b. Plan and conduct simple descriptive investigations.
2.d. Record and organize data.
2.e. Communicate observations and provide reasons for explanation using data from descriptive investigations.
3.a. Identify and explain a problem and propose a solution.
3.b. Make predictions based on observable patterns.
9.b. Analyze and record examples of interdependence.
10a. Investigate how the external characteristics of an animal are related to how it lives.
10b. Identify and compare parts of plants.
Second Grade:
2.a. Ask questions about organisms.
2.b. Plan and conduct descriptive investigations.
2.d. Record and organize data.
2.e. Communicate observations and justify explanations using data from descriptive investigations.
2.e. Compare results with what scientists know.
9.a. Identify the basic needs of plants and animals.
9.b. Identify factors in the environment which affect growth and behavior.
9.c. Compare and give examples of ways living organisms depend on each other and the environment.
10a. Observe, record and compare how physical characteristics and behaviors help animals meet their basic needs.
10b. Observe, record and compare how physical characteristics and behaviors help plants meet their basic needs.
Investigate and record some of the unique stages insects undergo during their life cycle.
Science TEKS

- Third Grade:
  - 2.d. Analyze and interpret patterns in data to construct reasonable explanations from investigations.
  - 2.f. Communicate valid conclusions.
  - 3.a. Analyze, evaluate and critique scientific explanations, using empirical evidence, logical reasoning and observation to encourage critical thinking.
  - 9.a. Observe and describe physical characteristics of environments and how they support populations and communities within an environment.
  - 9.b. Identify and describe the flow of energy in a food chain and predict how changes in a food chain affect the environment.
  - 9.c. Describe environmental changes when some organisms thrive and others perish.
  - 10.a. Explore how structure and functions of plants and animals allow them to survive in a particular environment.
  - 10.b. Explore that some characteristics are inherited and recognize that some are learned in response to a certain environment.
• Fourth Grade:
  • 2.d. analyze date and interpret patterns to construct reasonable explanations from data that can be observed.
  • 3.a. analyze, evaluate and critique scientific explanations using empirical evidence, logical reasoning and observation to encourage critical thinking.
  • 10a. Explore how adaptations enable organisms to survive in their environment.
  • 10c. Explore, illustrate and compare life cycles in living organism.
• Fifth Grade:

• 9.a. Observe the way organisms live and survive in their ecosystems by interacting with living and non-living elements.

• 9.c. Predict the effects of changes in ecosystems caused by living organisms, including humans, such as overpopulation of grazers or the building of highways.

• 10.a. Compare the structures and functions of different species that help them live and survive such as hooves on prairie animals or webbed feet on aquatic animals.
Ecological Concepts

- Ecosystem
- Ecoregion
- Ecotone
- Habitat
- Species
- Canopy tree
- Understory tree
- Biodiversity

- Relationship
  - Neutral
  - Both benefit
  - One benefits, one neutral
  - One benefits, one harmed
  - Both necessary for survival
I Wonder

- My wonderings:
- What I think I know:
- How can I find out:

- Sources of information:
- Observation:
- Experiment:
- What I confirmed: