

Applications of Oregon Education Standards to Ricky's Atlas
Oregon Education Standards for Third Grade

English Language Arts

Read to Perform a Task: Find, understand, and use specific information in a variety of texts across the subject areas to perform a task.

EL.03.RE.21 Interpret information from diagrams, charts, and graphs.

| Activity related to *Ricky's Atlas*:

Opportunities to interpret data from Ricky's Atlas entries arise in spatial graphs (Chp 3, Chp 6), in a timeline (Chp 5), and a table of young alder growth (Chp7).

EL03.RE.25 Demonstrate comprehension by identifying answers to questions about the text.

| Activities related to *Ricky's Atlas*:

Discussions described in almost all NGSS Activities include answering questions about the text (Fossils 3A, 3D, Effects of fire 3H, 3J, Adaptations to fire 3G, Histories 3I, 3M, Rain shadow 3K and Time scales 3B)

EL.03.RE.31 Ask how, why, and what-if questions in interpreting informational texts.

| Activities related to *Ricky's Atlas*:

Discussion of alder regrowth (Chp 7) would target very specific questions, but inquiries may also be posed in discussions about effects and adaptations to fire (3H, 3J, 3G) and histories (3I, 3M).

English Language Arts and Literacy

Integration of Knowledge and Ideas

Anchor Standard 7: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

3.RL.7 Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).

| Activities related to *Ricky's Atlas*:

3OR-A. In discussion of the book students point out how chapter illustrations and Ricky's notes help them understand themes of the book. They look for how particular margin notes explain information in the narrative (e.g. pronghorn antelope in Chp1; Western juniper trees in Chp 5), and how others without text create mood or provide background.

Anchor Standard 9: Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

3. RL.9 Compare and contrast the themes, settings and plots of stories written by the same author about the same or similar characters (e.g. in books from a series).

| Activities related to *Ricky's Atlas* and *Ellie's Log*:

3OR-B. By examining the hand-drawn pages of Ricky's atlas and Ellie's notebook pages students analyze what kinds of information are conveyed, and consider the purpose of the "atlas" and "log" pages.

After reading both books, students consider similarities and contrasts in themes including regional settings, role of main characters, overarching ecological themes of fire and decomposition, and diversity of plants and animals.

Literature: Informational Text

Key Ideas and Details

Anchor Standard 1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

3.RI.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence and cause/effect.

| Activities related to *Ricky's Atlas*:

In NGSS activity 3M: Students recount the historical record of fire, human use and grazing in grasslands of eastern Oregon as described by Rosa Zamora and Henry Hixon.

Temporal sequences represented by layers of geology and prehistoric animals can be the basis of another discussion. (Sequences described in Chp 4 and Ricky's handwritten atlas Chp 5.) Students can investigate further online, particularly other resources from the John Day National Monument (NGSS Activities 3A, 3C, 3D and 3F).

Informational Text: Integration of Knowledge and Ideas

Anchor Standard 7: Integrate and evaluate content presented in diverse media and formats including visually and quantitatively, as well as in words.

3.RI.7. Use information gained from illustrations (e.g. maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why and how key events occur).

| Activities related to *Ricky's Atlas*:

3OR-C. Students review explanation of how weather patterns develop across the plateau (Chp 3), consider how thunderstorms develop (*Ricky's Atlas* Chp 2), then discuss how the storm developed the day Ricky arrived in eastern Oregon (Chp1). (Related Activities: NGSS 3P, 3Q) (See also NGSS Activity 3J studying prescribed fire)

Geography

Understand and use geographic skills and concepts to interpret contemporary and historical issues.

3.7 Use a simple grid system, symbols, and other information to locate the physical and political features of places on maps and globes.

3.10 Identify and compare physical features of Oregon and other Northwestern states.

| Activity related to *Ricky's Atlas*:

3OR-D. In an expansion of Activities 3C and 3K, students use maps to locate the Cascade Mountains and the related rain shadow described in *Ricky's Atlas*, then look for other mountain ranges in the Pacific northwest and discuss how those mountains might also create rain shadows.

3.11 Explain the influence of humans (traders, immigrants, indigenous, current residents) on Oregon's and the Northwest's physical systems.

| Activity related to *Ricky's Atlas*:

3OR-E. See Activity 3M in which students review history of the grasslands and arid forests where the Hixon and Zamora ranches are located.

Students could compare that history of Native American practices, immigration of fur traders, miners, farmers and ranchers to the part of the northwest where they are located. How has climate and geography created similarities or differences in the historical pattern?

Social Science Analysis

Design and implement strategies to research for reliable information, analyze issues, explain perspectives, and resolve issues using the social sciences.

3.20 Identify how people or other living things might be affected by an event, issue, or problem.

| Activity related to *Ricky's Atlas*:

3OR-F. In discussions about wildfire and prescribed fire (3H, 3J) students consider how humans are affected by wildfire, and what differences might occur when prescribed fire is used. Besides the immediate danger of fire, what might be the long-term benefits of preventive prescribed fire?

Oregon Education Standards for Fourth Grade

Literature

Key Ideas and Details

Anchor Standard 2: **Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.**

4.RL.2. Determine a theme of a story, drama, or poem from details in the text; summarize the text.

| Activity related to *Ricky's Atlas*:

4OR-A. In contrast to activities suggested for NGSS connections, a discussion about the book as a *story* can help students identify what they believe are main themes of the story. Small groups of students independently decide what they think are the major themes of the book (e.g. life in a rain shadow, adaptations for surviving fire, what Ricky puts into his atlas), then present one of their ideas to the class with supporting details from the text. A list of their themes will create a class summary of the book.

Literature: Informational Text

Key Ideas and Details

Anchor Standard 1: **Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.**

4.RI.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

4. RI.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.

| Activities related to *Ricky's Atlas*:

In several NGSS activities students will be reading for explicit details and summarizing the text to support ideas. (4A & B: looking for information about adaptations to fire; 4C: describing animal-plant interactions, and 4I: summarizing effects of prescribed fire).

Informational Text: Integration of Knowledge and Ideas

Anchor Standard 7: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

4.RI.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

| Activities related to *Ricky's Atlas* described in NGSS Activities:

Activity 4A: students examine how Ellie's diagram of rainfall and vegetation represent what Ellie describes in the text.

Activity 4D: digital or paper copy maps are used to explore the rain shadow phenomenon described in *Ricky's Atlas* text.

Activity 4E: students compare Ricky's drawings about prehistoric mammals to information about fossils available on the John Day National Monument website.

Activity 4F: rainfall data from the weather service, provided on the *Ricky's Atlas* website, is compared to topography of the region where this story takes place.

| Additional Activity related to *Ricky's Atlas*:

4OR-B. In a review of tables and timelines that occur in Ricky's handwritten atlas (Chp 4 a timeline of geological and historical information, Chp 6 the number of trees surviving wildfire, Chp 7 the number of young aspens) students discuss how charts and tables describe information in the text. They write or complete a sentence summarizing what they learned from each graphic (e.g. "The geology of rocks is in millions of years, but the history of people is only in thousands"; "Trees that survived the wildfire had fire scars, but were still alive."; "Young aspens grew from the aspen roots after prescribed fire.")

Historical Knowledge

Relate significant events and eras in local, state, United States, and world history to past and present issues and developments.

4.1. Identify and describe historic Native American Indian groups that lived in Oregon prior to contact with Europeans and at the time of early European exploration, including ways these groups adapted to and interacted with the physical environment.

| Activity related to *Ricky's Atlas*:

4OR-C. Students review what they learned about prehistoric Native Americans who drew pictographs (Chp 4) and seasonal

rounds of later groups in the plateau of eastern Oregon (Chp5). They can find specific descriptions of animals and plants hunted and gathered during season rounds in that part of Oregon online at: trailtribes.org/Umatilla/camplife_and_seasonal_round.htm. Students compare those patterns with what they know about Native American groups pre-Euro/American immigration where they live (e.g. Were they nomadic or did they live in permanent settlements?; Did they hunt and gather or did they grow crops?)

Historical Thinking

Use multiple perspectives, primary sources, context, and reasoning skills to understand the significance of events, people, ideas and institutions.

4.10 Create and evaluate timelines that show relationships among people, events, and movements in Oregon history.

| Activity related to *Ricky's Atlas*:

4OR-D. Students review accounts by Rosa Zamora and Henry Hixon (Chp 6). From those descriptions students determine approximate dates of annual migrations by Native Americans, immigration of shepherders and cattlemen. From other sources they find out about other historical events in those times (e.g. Oregon statehood, the Civil War, pioneers arriving from the Oregon trail). The class draws a timeline including events and immigration patterns, showing dates and drawing human activities in eastern Oregon, in the region and in the United States.

Geography

Understand and use geographic skills and concepts to interpret contemporary and historical issues.

4.10 Compare and contrast varying patterns of settlements in Oregon, past and present, and consider future trends.

4.12 Explain how people in Oregon have modified their environment and how the environment has influenced people's lives.

| Activity related to *Ricky's Atlas*:

4OR-E In an expansion of Activity 4OR-D the class develops a chart listing the ways in which immigrants used the land (e.g. farmers, hunters, ranchers), when they were dominant in eastern Oregon, and how they affected the land (Chp 5), including use or exclusion of fire (Chp 5, 7). When the chart about the past is completed, the students discuss how these lands are used today, and what they might expect in the future, using modern maps as a resource for understanding private and public land ownership.

Oregon Dept. of Education Standards for Fifth Grade

Geometry

Graph points on the coordinate plane to solve real-world and mathematical problems.

5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and coordinates correspond.

| Activity related to *Ricky's Atlas*:

Activity 5B in NGSS: Using data from the Western Regional Climate Center (wrc@dri.edu) students graph precipitation (in inches on the y axis) across eastern Oregon (miles on the x axis) to create a data-driven graph of the rain shadow.

English Language Arts

Reading

Read to Perform a Task: Find, understand, and use specific information in a variety of texts across the subject areas to perform a task.

EL.05.RE.18. Use the features of informational texts, such as formats, graphics, diagrams, illustrations, charts, maps, and organizational devices to find information and support information.

| Activity related to *Ricky's Atlas*:

In developing graphs and in discussions about formation of thunderstorms (Activity 5A in NGSS), explaining the rain shadow east of the mountains (Activity 5B in NGSS), evaluating prescribed burning (5C in NGSS), and summarizing historical knowledge about Native American seasonal rounds and later immigration patterns, students will use multiple text and diagrammatic references within *Ricky's Atlas*, maps, online sources of information and possibly other texts to expand on themes within the book.

Historical Knowledge

Relate significant events and eras in local, state, United States, and world history to past and present issues and developments.

5.1 Identify and compare historical Native American groups and settlements that existed in North America prior to contact with European exploration in the late fifteenth and sixteenth centuries.

| Activity related to *Ricky's Atlas*:

5OR-A. After students read about pictographs of early Native Americans (Chp 4) and seasonal rounds (Chp 5) they trace on maps possible seasonal routes from the Columbia River into inland valleys and mountains.

Students can find specific descriptions of animals and plants hunted and gathered during seasonal rounds in this part of Oregon online at: trailtribes.org/Umatilla/camplife_and_seasonal_round.htm

Historical Thinking

Use multiple perspectives, primary sources, context, and reasoning skills to understand the significance of events, people, ideas and institutions.

5.5 Create and interpret timelines showing major people, events and developments in the early history of the United States.

| Activity related to *Ricky's Atlas*:

5OR-B. Students review accounts by Rosa Zamora and Henry Hixon (Chp 6), listing approximate dates of immigration into this part of eastern Oregon. They convert their list into an illustrated timeline of people and what they did.

Additional information about mining and forestry activities could be acquired through digital or library resources. For context, a parallel timeline of important events in U. S. history (e.g. the Civil War, War with Mexico etc.) can be drawn.