

Contents

Introduction to the Curriculum Guide	5
Purpose of the Curriculum Guide	7
Chapter One: Orientation to John Muir	9
Summary of Orientation to John Muir.....	10
Introducing: Who was John Muir?	11
Reading Reflections Unit	12
Lesson One: John Muir Biography.....	12
Study Questions.....	14
Lesson Two: John Muir Quotations Reflection Project.....	17
Assignment Sheet.....	18
Discussion Sample	19
List of Quotations.....	20
Lesson Three: John Muir Timeline	22
Timeline.....	23
Puzzles and More	24
Story of John Muir Worksheets.....	25
Who was John Muir? Crossword puzzle.....	28
John Muir: The Scientist Crossword Puzzle	30
Science Crossword puzzle	32
Agriculture	34
The Art of Agriculture	35
Brief History of Fruit Crate Labels.....	37
Student Bibliography	39
Resources for Teachers	40

Chapter Two: Field Studies	42
Nature Scene Investigations (NSI)	43
Meet a Tree.....	44
Tree Study Questions	46
Explore a Special Place.....	47
Special Place Questions.....	49
Creek Study.....	50
Creek Study Questions.....	52
Nature Games	53
Recipe for a Healthy Forest	53
What am I? Guessing game	56
Chapter Three: Classroom Projects	61
Summary of Classroom Projects.....	62
History and Language Arts Unit	63
Lesson One: Who am I?.....	64
Lesson Two: People of the past.....	66
1880s Child.	66
1880s Child: What do you have in common?.....	69
Family History Project	70
Family History Assignment Sheet & Interview Questions	71
Lesson Three: Other People, Other Places.....	72
Storytelling Decision Map	75
Folklore, Legends, Myths and more	76
Lesson Four: Our Changing Community: Community Photo Album Project	78
Community Photo Album Assignment Sheet	80
The Changing Alhambra Valley.....	81

4 | *Practices in Environmental Stewardship*

Science, Conservation and Advocacy Unit.....	83
Lesson Five: Meet a Modern Day John Muir	83
Poster Assignment Sheet	85
Lesson Six: My Role as a Community Steward.....	86
Lesson Seven: Agency Roles to Protect Wild lands And Wildlife	88
Agency Role Assignment Sheet	91
Lesson Eight: My Role as a Community Advocate	92
Advocacy Assignment Sheet.....	94
Lesson Nine: My Vision for the Future.....	95
Glossary	99
Curriculum Guide Bibliography	101

^{1,2} Corbett, J.B. (2006). *Communicating Nature, How we create and understand environmental messages*. Washington, DC: Island Press.

³ Brown, K. (1998). *Environmental Service-Learning*. St. Louis, MN: Tree Trust.

Purpose of the Curriculum Guide

This curriculum guide provides a series of interdisciplinary activities to learn about John Muir, field studies to conduct at a nature area as an outdoor classroom, and concludes with lessons and practices to help students become stewards of the environment and “champions” in their own community.

Classroom and field assignments require students to read, research, compare, contrast, synthesize, problem solve, work independently and collaboratively. Learning activities apply both oral presentation and writing skills. All lessons in this guide can stand-alone, so teachers may select as few or as many as desired.

Throughout this experience, students participate in a variety of learning opportunities to develop and refine the critical skills they need to be successful in school and make a positive contribution to their communities. Students can engage in activities that prompt individual and collective reflection on controversial topics that stir debate often based on ideology and personal backgrounds. They will learn to look at the HOW of an issue in addition to the WHAT of an issue. These skills can help students engage in thoughtful debates that lead to informed decisions about a shared future on earth.

Arrangement of the Guide

This guide is divided into three sections: 1) Orientation to John Muir, 2) Field Studies and 3) Classroom Projects. The content is arranged to be introduced in order, as students become more familiar with the life of John Muir and increasingly more aware of his or her own roles and responsibilities within the community where he/she lives.

The guide features many different lessons with multiple activities within each lesson, in each of the three sections. A summary of lessons is included at the beginning of each section. These lessons can help students understand the life and work of John Muir with the intention that they will continue in his footsteps to make a positive difference in their respective communities and work to conserve wild places for the benefit of all.

Orientation to John Muir. Orients teachers and students to John Muir and the historic site. Materials include classroom activities and a suggested reading list for students describing John Muir’s life. A list of YouTube videos and storyteller recordings of

John Muir's adventures are also included in the student bibliography. Teachers will find a comprehensive list of print, web and organization resources to supplement opportunities for student learning.

Field studies. Presents a series of thematic lessons to be conducted outdoors that create relevant connections for the students to John Muir's actions and beliefs, and standard practices of his era.

Classroom Projects. Describes suggested activities and supplementary materials on historical, scientific and environmental topics for student research and discussion after field study experiences. Includes opportunities to involve guest speakers, engage the community and participate in real community problem solving.

John Muir wrote and illustrated extensively of his travels and adventures in a series of journals. Classroom projects involve a significant amount of writing.

Recommendations for Students: To continue in the spirit of Muir's journal keeping, it is highly recommended that students keep all their work assembled as an ongoing journal in a single 3- ring binder.

- Assists the student keep track of the projects in progress;
- Provides a meaningful student reference upon completion; and simplifies evaluation of student achievement and skill advancement.

John Muir brings a diverse range of themes to be studied. You may consider expanding on lessons of conservation and responsibility to stimulate ideas for creating a "History Day" around his life and accomplishments.

Visit the Sierra Club website to find information about upcoming events, photographs, writing, video, quotes, additional lessons and biographical information about John Muir. http://vault.sierraclub.org/john_muir_exhibit/

Chapter One Summary

Background

This section provides the opportunity to orient students to John Muir. Students acquire and demonstrate a basic level of knowledge by completing a series of reading and writing activities. This section focuses on the value of Muir's lifelong contributions to the conservation movement.

Lessons in this Section

Reading Reflections

- John Muir Biography
- John Muir Quotations Reflections Project
- John Muir Timeline and discussion

Puzzles and More

- Story of John Muir
- "Who was John Muir?" Cross-word Puzzles
- John Muir: The Scientist
- Science

Art of agriculture

- Fruit Crate Labels

Who Was John Muir?

Chapter One

Background

John Muir's life was shaped by multiple influences and events that fed his passion for conserving wild places in America and around the world. His life is best understood in three distinct phases: as a child in Scotland through his early adulthood as a factory worker, his call to the natural world when he ventured on a 1,000 mile walk, and his arrival at Yosemite, and his final years as a rancher and activist.

Goals

- Read, view and discuss significant moments and influences in the life of John Muir that laid the foundation for his passion for wild places and his work as an activist.
- Witness that a single person can make a world of difference.

Objectives

By the end of this unit, students will be able to:

1. Identify three major influences or events that shaped the life of John Muir.
2. Discuss three or more reasons why John Muir's life is and continues to be nationally recognized nearly 100 years after his death.
3. Cite at least one quotation of John Muir and explain how it relates to the student's life.

Assignments

1. The **Reading Reflections Unit** consists of reading, viewing, listening, discussion, writing and art activities.
2. **Puzzles and More** includes activities that create an opportunity to focus on specific aspects of John Muir's life and work.



Reading Reflections Unit

Chapter One

Background

This unit presents a set of activities that orient students to the life of John Muir and the key influences in his life that shaped his actions.

1. **John Muir Biography** is a reading activity paired with student study questions and class discussion.
2. **John Muir Reading Reflection Project** uses his quotations as a basis for students to understand his passion and concern about the natural world.
3. **Timeline** is an opportunity to highlight important moments in the life of John Muir with important moments and activities in the student's life.

Lesson One: John Muir Biography

Ch. 1 Lesson One

Background

Many authors before and since John Muir's death have written about Muir. Since each author expresses a different aspect of this complex man, reviewing multiple selections provide even more insight into Muir's values and philosophy.

Objectives

1. Complete student study questions describing biographical information about John Muir.
2. Actively participate in class discussion for reading, movies or audio recordings.

Procedures

1. Assign students to read either *John Muir, America's First Environmentalist* by Kathryn Lasky or *John Muir, Protecting and Preserving the Environment* by Henry Elliot. Students may read alone or with a parent.
2. Listen to audio recording of John Muir and Stickeen, as told by Garth Gilchrist.
3. Watch a YouTube.com video during class. Encourage students to watch others at home with family members.
4. Some selections are written for a high grade reading level and may require a parent's assistance with reading. The parent may aloud to the student.
5. Encourage students to share reading materials with parents so they can begin discussions at home in the following areas: a) the need for and importance of conservation and b) how students can become involved in their own community.

John Muir Biography Study Questions

Ch.1 Lesson One

Respond to the following questions with two or three complete and detailed sentences.

1. What was one of John Muir's first encounters with nature as a young boy?
2. Describe one or more of Muir's inventions.
3. List three places in the United States that he visited.
4. What was the reason he went on his 1,000-mile walk to the Gulf of Mexico? Describe one or more of the experiences he shared about his journey.
5. What did Muir discover about how Yosemite was formed?
6. What else did Muir do in Yosemite?
7. Describe one or more of his "high adventure" activities
8. Why was John Muir living on a ranch?
9. Describe what motivated Muir to spend his life protecting the wilderness.
10. Did John Muir act alone or did he have support to make changes happen? If so, name two people that helped John Muir make changes.
11. What were the subjects that Muir wrote about in his articles, books and journals?