

muse®

Feet First

Get off on the right foot with this month's issue of MUSE. Students will explore painful foot practices of the past, the alternative healing medicine of reflexology, and read about two young brothers who acted on their passion to keep the blue-footed booby off the endangered species list.

CONVERSATION QUESTION

What can we learn about our world by studying feet?

TEACHING OBJECTIVES

- Students will learn about the successful conservation project, the Blue Feet Foundation.
- Students will learn about the alternative medical practice of reflexology.
- Students will learn about the history of foot binding in China.
- Students will explain the sequence of events that led to establishing a credible conservation foundation.
- Students will collect and interpret data from a scientific diagram.
- Students will construct explanations from a text.
- Students will plot geographical locations on a map of the Americas.
- Students will research alternative healing practices.
- Students will conduct research to learn about the country of China.



In addition to supplemental materials focused on core STEM skills, this flexible teaching tool offers vocabulary-building activities, questions for discussion, and cross-curricular activities.

SELECTIONS

- **Selling Socks to Save Seabirds**
Expository Nonfiction, ~1050L
- **A Different Kind of Map**
Expository Nonfiction, ~1150L
- **Sole Beauty**
Expository Nonfiction, ~1150L

Selling Socks to Save Seabirds

pp. 10-13, Expository Nonfiction

One foot, two foot . . . BLUE foot!

Students will learn how the perseverance of two young brothers was responsible for establishing a successful conservancy organization, the Blue Feet Foundation.



ENGAGE

Conversation Question: What can we learn about our world by studying feet?

Introduce the article, “Selling Socks to Save Seabirds.” The text states that the Blue Feet Foundation has 18,000 Instagram followers and 10,000 Facebook followers. They have sold 18,000 pairs of socks. Assuming the numbers stay proportional, how many Instagram and Facebook followers will they have when they have sold 90,000 pairs of socks?

INTRODUCE VOCABULARY

Post and discuss the key terms. Be sure that students understand the definitions before reading the article. As a post-reading activity, have students use the four vocabulary words to summarize the article in paragraph form.

READ & DISCUSS

Pose the following questions to the students to facilitate meaningful discussion following the reading of the article.

- How did Will Gladstone come up with the idea to sell blue socks?
- Describe the habitat and behaviors of a blue-footed booby.
- How does the action of “foot rocking” look different for the male and female birds?
- Why were some organizations hesitant to support Will and Matty? Was this justified?
- Explain how perseverance led to the success of the Blue Feet Foundation.

RESOURCES

- One, Two . . . Blue!

OBJECTIVES

- Students will learn about the successful conservation project, the Blue Feet Foundation.
- Students will explain the sequence of events that led to establishing a credible conservation foundation.
- Students will plot geographical locations on a map of the Americas.

KEY VOCABULARY

- **conservation** (p. 10) preservation, protection, or restoration of the natural environment and of wildlife
- **ornithologists** (p. 10) scientists who study birds
- **sponsor** (p. 12) a person who supports an event, usually monetarily
- **wingspan** (p. 10) the distance from the tip of one wing to the tip of the other

CONCEPT/SKILL FOCUS: Explanation of Sequence

INSTRUCT: Review the article. Elicit from students that the Gladstone brothers followed a specific process, or set of steps, that allowed them to create a successful environmental organization. Distribute the *One, Two . . . Blue!* graphic organizer and instruct students to refer back to the text to accurately explain each sequenced step. Their finished work will summarize the establishment of the Blue Feet Foundation.

ASSESS: Circulate as students are working on the chart and discuss the information in the article. Encourage volunteers to retell the process by using the information written on their charts.

EXTEND

Geography Instruct students to reread the article with a partner and to highlight all of the geographical locations contained in the article. Provide each pair of students with a blank map of the Americas and have them plot and label each location.

One, Two . . . Blue!

Use information from the article, "Selling Socks to Save Seabirds," to explain how each of the steps in the sequence below led to the establishment of a successful conservation organization.

Step 1

Realizing the need:

Step 2

The search for blue socks:

Step 3

Gathering support:

Step 4

Fulfilling sock orders:

Step 5

Dreams recognized:



The Blue Feet Foundation

Muse® Teacher Guide: April 2020

A Different Kind of Map

pp. 16–20, Expository Nonfiction

Reflexology is a practice that dates back more than 4,500 years. Although science debates its effectiveness, most will agree that a foot rub feels good. Learn how it can also be good for your health.



RESOURCES

- Healing Touch

OBJECTIVES

- Students will learn about the alternative medical practice of reflexology.
- Students will collect and interpret data from a scientific diagram.
- Students will research an alternative healing practice.

KEY VOCABULARY

- **blood flow** (p. 18) circulation; the movement of blood through the vessels
- **muscle tension** (p. 18) the condition in which muscles stay semi-contracted for an extended period of time
- **range of motion** (p. 18) the full movement potential of a joint
- **reflex point** (p. 17) nerve endings commonly stimulated to release congestion or stress and to balance the body's energy

ENGAGE

Conversation Question: What can we learn about our world by studying feet?

Draw a web in the center of the board with the topic “Alternative Medicine” in the center. Brainstorm with the students and list their contributions. Encourage students to share “real life” stories regarding the use of alternative techniques to treat medical ailments. Save the web for later use with the Extension Activity at the bottom of this guide.

INTRODUCE VOCABULARY

Display vocabulary words and definitions. Reveal that this article will discuss how *reflex points* in the feet can help alleviate certain ailments in other parts of the body. Guide students to discuss what activities and lifestyle choices can contribute to issues with *blood flow*, *range of motion*, and *muscle tension* and why reflexology may be an alternative worth exploring.

READ & DISCUSS

Reinforce comprehension of the reflexology concepts presented in this article by using the following questions to direct conversation.

- What is *The Yellow Emperor's Classic of Internal Medicine*?
- Where is the first documentation of reflexology found?
- Why was William Fitzgerald's work so important?
- What are the possible effects of “grounding”?
- Explain the debate regarding the use of reflexology as a legitimate tool for the medical community.

CONCEPT/SKILL FOCUS: Collect & Interpret Data

INSTRUCT: Direct students to return to page 19 and to study the Reflexology Chart. Emphasize the fact that this diagram is a guide for all practitioners of this alternative treatment. Distribute copies of the *Healing Touch* graphic organizer and instruct the students to interpret and analyze the numbers, zones, and corresponding body parts that can be addressed using reflexology treatments.

ASSESS: Circulate and converse with the students as they are working. Collect and review worksheets to evaluate individual abilities to interpret information.

EXTEND

Science Revisit the brainstorming web from the introductory activity. Have students research one of the alternative treatments and create a one-page informational sheet on the practice. They should include the origin, the techniques, and intended benefits of the alternative healing method. Bind all pages together to create a class book to be kept in your science center.

Healing Touch

Use the Reflexology Chart on page 19 of the article, “A Different Kind of Map,” to complete the chart below.

Reflex Point	Zone (1–5)	Targeted Body Part
1		
11		
15		
18		
27		
32		

What pressure point(s) would a reflexologist stimulate if you . . .

have a toothache? _____

twisted your knee? _____

have a sore throat? _____

have allergies? _____

Sole Beauty

pp. 26–29, Expository Nonfiction

Students will learn about the historical painful practice of foot binding.

Beginning at age four, Chinese girls had their feet bound in the name of “beauty.” How did this become the ideal?

Lexile Score: ~1150



RESOURCES

- Suffering Soles

OBJECTIVES

- Students will learn about the history of foot binding in China.
- Students will construct explanations from a text.
- Students will conduct research to learn about the country of China.

KEY VOCABULARY

- **foot binding (p. 27)** the custom of applying tight bandages to modify the shape and size of the foot
- **lotus (p. 27)** a type of water lily with large flat leaves and mysterious blossoms; a spiritual symbol

ENGAGE

Conversation Question: What can we learn about our world by studying feet?

Discuss painful procedures that people undergo in the name of “beauty.” Although many ancient practices are no longer acceptable, many painful modern treatments (waxing, plastic surgery, injections, etc.) still exist in the eternal quest for beauty. Ponder the question, “Who determines what is considered beautiful?” Encourage peer dialogue.

INTRODUCE VOCABULARY

Post and discuss the key vocabulary terms and definitions. Guide students to recognize that these words take on entirely new spellings when translated into other tenses. (The past tense of *bind* becomes *bound* and the plural of *lotus* is *loti*.) Challenge students to identify other words from the article that also undergo spelling changes when translated into different forms.

READ & DISCUSS

Read aloud the following questions prior to reading the text. Advise the students to note where in the article these answers are found. Discuss responses to the questions as a post-reading activity.

- What was the purpose of foot binding?
- Explain the process of foot binding.
- Why was foot binding less common in agricultural regions?
- How do we know that bound feet were considered beautiful in ancient China?
- When did foot binding come to an end?

CONCEPT/SKILL FOCUS: Constructing Explanations

INSTRUCT: Advise students to review the article and to study the three different reasons for foot binding that are discussed. Distribute the graphic organizer, *Suffering Soles*, and tell the class that they will use information directly from the text to complete the organizer.

ASSESS: Collect and analyze the *Suffering Soles* worksheet to further evaluate the students’ ability to construct explanations from the text. Consider peer remediation if clarification is necessary.

EXTEND

Social Studies Take this opportunity to have students learn more about China. Arrange students in small groups and assign them different topics to research, such as: cultural practices, religion, economy, geography/climate, government structure, and interesting facts. Have students present their finished research as a group.

Suffering Soles

Use information from the article, “Sole Beauty,” to explain how each of these factors played a part in the continuing foot binding practice of Chinese girls.

Reasons	Explanation
Marriage: Quest for ideal beauty and lifetime partner	
Status: Method to distinguish wealthy women from lower-class women	
Economic: The homebound did necessary handwork	

The article states that leaders attempted to ban foot binding many times over the years, yet it still continued.

Why do you think people ignored the bans?

Write your answer in paragraph form on the back of this page.
