

Women's Studies Curriculum - Second Grade Science Lesson Plan
Dian Fossey

Concept/Theme: Observation Method/Women Scientists

Grade: Second

Primary Benchmark:

- SS.2.C.2.5 Evaluate the contributions of various African Americans, Hispanics, Native Americans, veterans, and women.

Secondary Benchmark:

- SC.2.N.1.1 Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.

Time: 1-2 Class Periods

Objectives:

1. The student will identify Dian Fossey as a major contributor to science.
2. The student will understand how the scientist used a variety of tools and observational skills to learn about the gorillas.

Differentiated Instruction Activities: Teachers may choose to do one or many of the activities. Activities cover elements of Bloom's taxonomy.

Teacher Preparation/Materials: Reading passage, handouts

Activities:

Pre-reading Activities:

1. Tell students they are going to read about a woman scientist, Dian Fossey, who studied and helped Gorillas in the Rainforest Habitat.
2. Ask students to take out a piece of writing paper and a pen for a Quick Write. Give students one minute to write everything they know about gorillas. Ask volunteers to share their Quick Writes.
3. Video clip option: The following video is available through United Streaming: *World of Nature: Mountain Gorillas: Gentle Giants* - 15 minutes. Instruct students to take notes on their observations of Dian Fossey and the gorillas. Tell students that **observations** are a very important part of scientific research and were the major tool that Dian Fossey used to conduct her research on gorillas.
4. Teacher may choose to review the scientific process and outline observation as a tool within the process. Tell students there are two types of observation:

Verified Observation and Personal Interpretation

5. Place types of observations in a Venn diagram on the board and show students or elicit answers from students of the sameness and differences of the two types of observations.

During Reading Activities:

1. Place students in small groups, and distribute the reading passage to each student in the group. Ask students to read aloud in a circle, taking turns reading paragraphs.
2. Ask students to underline each time they find a tool that Dian Fossey uses to study the gorillas.
3. Also, ask students to circle the words that are new to them or that they do not know.

Post-Reading Activities:

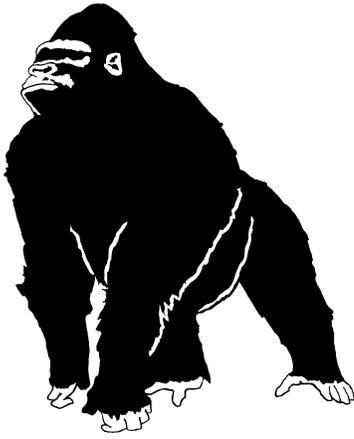
1. Discussion: Emphasize that a good deal of Dian Fossey's research dealt with observing gorillas. Stress the importance of observations in the Scientific Method.
2. Vocabulary: Have students break into groups and use the list provide for their group to look back into the reading passage, and write down the sentence the word. See if students can guess the meaning of the word from its context. Students will listen to each other's groups define the words and then mention any other words they had circled.
3. Application: Observation Technique: Have students use the observation notebook page to choose a "subject" (preferably an animal, bird, household pet) to observe, then observe it for 15 minutes a day, for three days. Each day, the student must fill out a notebook page (included) and specify if they are using either the Verified Observation or Personal Interpretation. Students will report what animal they chose and what they learned about that animal after three days of observation.
4. Quiz: Students will take the quiz on the Dian Fossey reading passage. **Answers: 1. b, 2. c, 3. d, 4. a, 5. c, 6. a, 7. c 8. Answers will vary.**

ESOL Strategies: Alternative Assessment, Modeling, Read Alouds,

Assessment: Student Participation, Group Work, Quiz

Resources:

Mini Lesson - The Scientific Method/English <http://breeze.palmbeach.k12.fl.us/p27318062>
Mini Lesson - The Scientific Method/Spanish <http://breeze.palmbeach.k12.fl.us/p38829213/>
<http://myhero.com/myhero/go/directory/index.asp>
<http://www.gorillafund.org/index.php>
http://www.mnsu.edu/emuseum/information/biography/fghij/fossey_dian.html
<http://www.thestar.co.za/index.php?fSectionId=129&fArticleId=2232491>



Dian Fossey Scientist of the Rainforest

Dian Fossey was a famous **researcher**. She studied mountain gorillas from the **rainforest habitat** of Central Africa. By **observing** gorillas, She has helped people understand how they live in the **environment** and how to help to save them.

Dian Fossey was born on January 16, 1932. As a little girl, Dian always liked to be with animals. Even though, long ago, many women did not go to college, Dian went to college and studied hard. After college, Dian wanted to travel and see the world. She really wanted to see the mountain **gorillas** of the **Virunga Volcanoes** of **Central Africa** in their natural habitat. She learned from people who had studied gorillas before like Louis Leakey, and George Schaller. Once, she went on an **expedition** and climbed a 10,000-foot volcano to get a first look of a giant ape.



She learned that gorillas were not **monstrous** apes, but friendly **vegetarians** that lived in small groups called “families.” With the help and education of Dr. Leakey, she devoted her life to studying and **protecting** the giant ape.

She lived in many different countries to study the gorillas: **Rwanda, Uganda, and the Congo**. There was over sixty-seven inches of rain each year and the **elevation** is over 10,000-feet high. She also had to have two African **companions** that spoke the **language** of that area.

In six short months, she was able to get within thirty feet of the apes to really study them. She used the **observation method**,

which meant she wrote down what she saw in detail with pencil and paper.

What was difficult about this area is that the gorillas had never been close to a human, like in other areas that Dian had been. These gorillas were much more **cautious**. Dian had to allow the gorillas to get used to her. She often used ape-like **behavior** when working with the giant apes. It took time, but the gorillas grew to love Dian and she grew to love them.



She recorded the life of the mountain gorilla in detail. Dian learned through observing many different **experiences** that the gorillas' **moods** could quickly change from good to angry. A good deal of her work involved observations she made of the gorillas.

Through frequent observations, she learned about gorillas. In turn, the gorillas observed Dian. Through the gorillas' observation of Dian, they learned she cared and loved them and most importantly that they could trust her. The gorillas learned that this woman was becoming a true and trusting friend.

Dian also observed that the animals of the Virunga Volcanoes were in trouble. **Poachers**, or people who hunt for trophies and money, were killing the animals. Dian knew this was wrong. She made it a part of her life to stop the hunting. Dian feared the mountain gorilla would become **extinct**.

Thanks to Dian Fossey's work, the world is aware of the **endangered** mountain gorilla. Rwanda now protects them by law. The Dian Fossey Gorilla Fund was created to honor Dian and her work. This fund is active and **proactive** in gorilla protection and research.

VOCABULARY TO KNOW



Group 1

- researcher**
- rainforest**
- habitat**
- observing**
- environment**



Group 2

- gorillas**
- Virunga Volcanoes**
- Central Africa**
- expedition**
- monstrous**



Group 3

- vegetarians**
- protecting**
- Rwanda**
- Uganda**
- Congo**



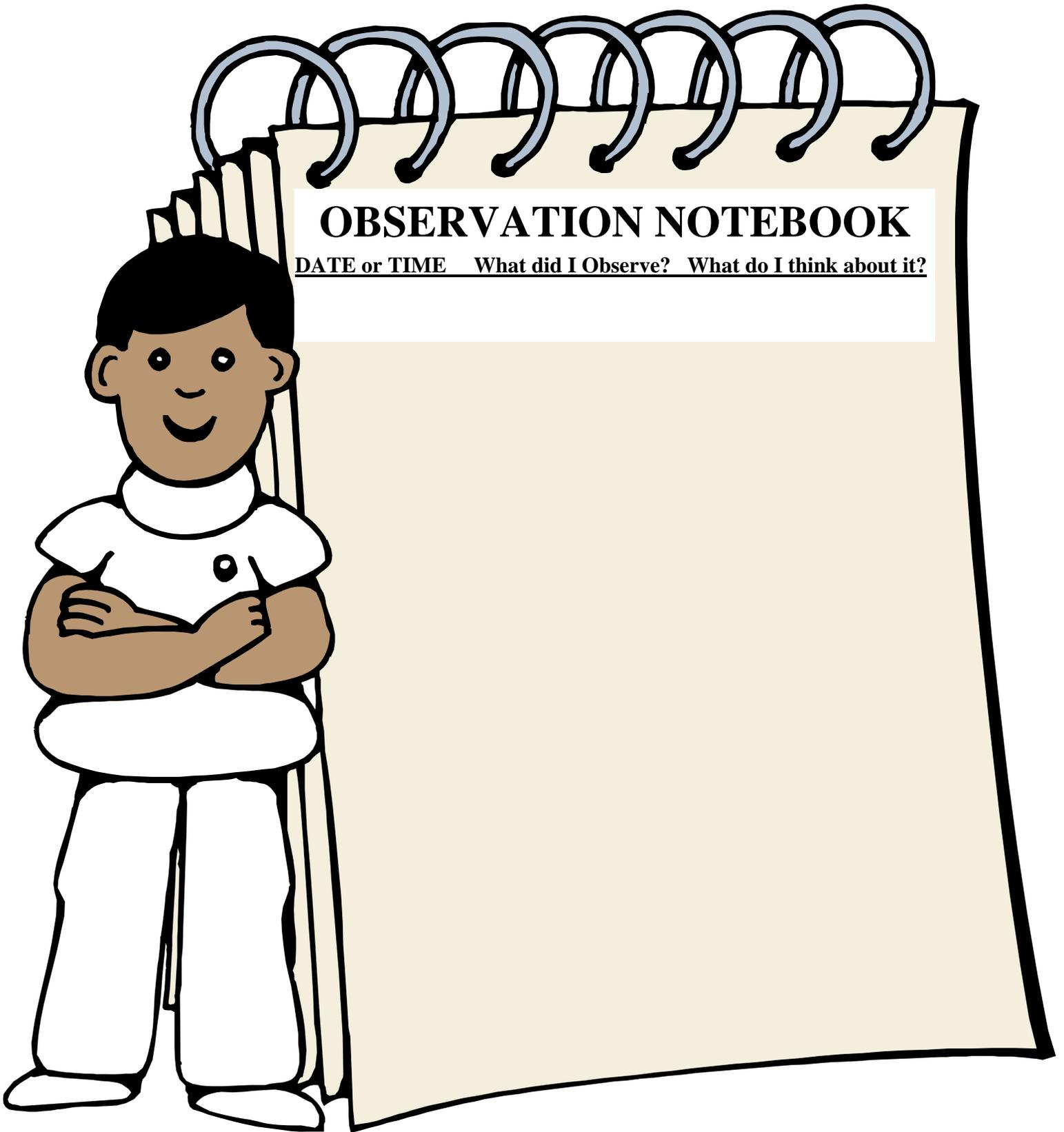
Group 4

- elevation**
- companions**
- language**
- cautious**
- behavior**



Group 5

- experiences**
- moods**
- poachers**
- extinct**
- endangered**
- proactive**



Dian Fossey Quiz

NAME _____ DATE _____

Directions: Look back to the READING PASSAGE to help you choose the BEST answer.



1. What is the habitat of the mountain gorilla?
 - a. Tundra
 - b. Rainforest
 - c. Desert
 - d. Ocean
2. Who was one of the researchers that helped Dian Fossey?
 - a. Dr. Rwanda
 - b. Dr. Shaller
 - c. Dr. Leakey
 - d. Dr. Uganda
3. Why do you think Dian Fossey went to Africa?
 - a. She was sent there by her school to look at volcanoes.
 - b. Her family was moving to Africa.
 - c. Dr. Shaller asked her to come to Africa.
 - d. She always wanted to see the gorillas in Africa.
4. Which of the following sentences from the reading passage tells how difficult it was to get to the gorillas.
 - a. Gorillas in this area had never been close to a human.
 - b. There was over sixty-seven inches of rain each year.
 - c. She needed two African companions that spoke the language.
 - d. She lived in many different countries.
5. What method did Dian use to learn and record information about the gorillas?
 - a. Data method using rulers and scales.
 - b. Research method using computers.
 - c. Observation method using pencils and notebooks.
 - d. Questionnaire method using tape recorders.
6. What did Dian learn about gorillas by using the observation method?
 - a. She was able to learn that their moods could quickly change from good to anger.
 - b. She was able to learn about their history and relatives.
 - c. She was able to see how much they weighed and how tall they were.
 - d. She was able to find out they where they traveled in the country.

7. What is the effect of poachers on the gorillas?
- a. They help provide the animals with special spaces in which to live.
 - b. They injure the animals for hunt and play.
 - c. They kill the animals that may become endangered or extinct.
 - d. They help give money to protect gorilla research.

8. Use complete sentences to write your answer to the following question in the box below:

Explain why Dian Fossey was important to the study and life of the gorillas in Africa. Use details from the reading passage to support your answer.

READ
INQUIRE
EXPLAIN

