UNIT OF STUDY: Arthur Amiotte

TITLE OF LESSON PLAN: Thirteen Moons

GRADE LEVEL: 3-5

SOUTH DAKOTA CONTENT STANDARDS:

U.S. History:
• 3.US.2.1 Students are able to describe characteristics of a community.

Science:
• 3.E.2.2 Students are able to recognize changes in the appearance of the Moon over time.
• 4.E.2.1 Students are able to describe the motions of the Earth, Sun, and Moon.
• 5.E.2.2 Students are able to explain how the Earth’s rotation affects the appearance of the sky.

Reading:
• 3.R.4.1 Students can respond to ideas and attitudes expressed in multicultural and historical texts by making connections.
• 4.R.4.1 Students can identify and distinguish the characteristics of multicultural texts, historical texts, and time period texts.
• 5.R.4.1 Students can examine and compare texts from various cultures, time periods, and geographical locations.

Algebra:
• 3.A.3.1 Students are able to use the relationship between multiplication and division to compute and check results.

ASSESSMENT STRATEGIES:
• Class discussion
• Observation of painting using VTS
• Evaluation of student writing using 6+1 Writing Traits as a guide

LEARNING OBJECTIVES:
• Students will learn about South Dakota artist Arthur Amiotte.
• Students will evaluate the painting using VTS techniques.
• Students will explain the significance of storytelling in Native American culture.
• Students will compare phases of the moon and the Gregorian calendar (standard 12 month calendar).
• Students will compare phases of the moon and the Lakota calendar.
• Students will compare and contrast the Gregorian calendar and the Lakota calendar.

TIME REQUIRED:
• One class period of 45 - 60 minutes
MATERIALS/TECHNOLOGY NEEDED:
• Arthur Amiotte painting: “Turtle Seed”
• Book: Thirteen Moons on a Turtle’s Back by Joseph Bruchac
• Classroom calendars (showing phases of the moon)
• Paper
• Pens/Pencils

BACKGROUND INFORMATION:
This information is from the Squidoo website address listed below. It talks about how the Lakota tribes paid close attention to the phases of the moon and the position of the stars. From their calculations, there are 13 months in a year because there are 28 days in each cycle of the moon. If you compare our Gregorian calendar of 12 months and 365 days, the Lakota calendar turns out to be 13 months and 364 days.

How the turtle is associated with the Lakota calendar is that on the back of a turtle there are 13 large scales representing each new moon and 28 small scales representing the 28 days between each new moon. <http://www.squidoo.com/nativeamericanartandculturesn>.

LESSON DESCRIPTION:
• Start with a class discussion about the calendar that we currently go by (a.k.a the Gregorian calendar) - how many months, how many days, etc.
• Next discuss the phases of the moon - why does the moon change, how many phases of the moon are there, etc.
• Explain to the student that throughout Native American culture legends were a way to explain why things occurred, while storytelling was a way to pass along these legends from generation to generation.
• Read the story Thirteen Moons on a Turtle’s Back.
• Show students the Arthur Amiotte painting “Turtle Seed”. Ask students how this image represents ideas of the Lakota calendar (For example, how are the 13 moons represented? Why do you think that Amiotte named his painting “Turtle Seed”? How does this painting represent the Lakota calendar?)
• After reading this legend to the class, have students work in pairs or small groups to discuss how the Lakota calendar is different from our calendar today. Have them identify what signifies the beginning of a new month. Have students use a classroom calendar and make comparisons between the Lakota calendar and our standard calendar of today.
  • Have students calculate if the Lakota calendar and our calendar for today are similar in length.
• After students have figured out the similarities and differences of the Lakota calendar and the 12 month calendar we follow today, have them write a paragraph explaining whether it would be practical to follow the Lakota calendar. Students need to justify their position using specific details.
**ENRICHMENT:**
Students could create a Lakota calendar from this year’s 12 month calendar. Students could create a cover for their calendar using the turtle while representing the new moons and days between new moons.

**BIBLIOGRAPHY/RESOURCES:**
- Native American Painting Collection at the South Dakota Art Museum.
  - Arthur Amiotte painting: “Turtle Seed”