

AMERICAN INDIAN MATH

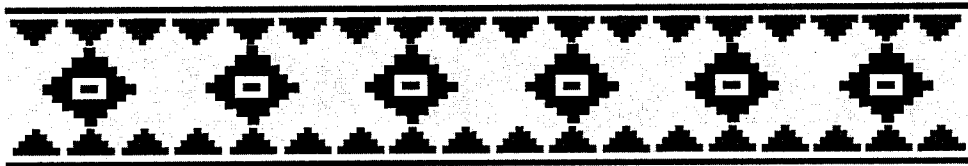
Mild/Moderate Special Needs Class

Third-Fifth Grades

Lynette Capusan

Michigan City Area Schools

Joy Elementary School



Author's Note

Lynette Capusan has been teaching for 11 years. Seven years as a general education teacher for kindergarten, first and third grades. Two years preschool and two years special needs children.

The classroom she is currently teaching in is the Mild to Moderate Mentally Handicapped classroom, grades 3-5 at Joy Elementary School in Michigan City, In. She received her Bachelor's of Science in Elementary Education with a kindergarten endorsement in 1989 and her Master's Degree in Elementary Education in 1999. She is currently adding a mild interventions/LD endorsement to her teaching license, which will be completed June 30, 2006. Her class is full of wonderful children who just want to be accepted the way they are. She has two paraprofessionals in her classroom who are extremely helpful and place students needs ahead of their own. She found that she has a great deal of patience in working with these special students .

Lynette has been married for 15 years, has two elementary, school-aged children and a dog.

"I was looking for Math activities that were unique and inspired children with special needs. A unit that could be easily incorporated into Social Studies as well. Typically, teachers study American Indians during Thanksgiving. However, Thanksgiving isn't a part of their culture or holiday celebrations, so I decided to do the unit in May. May is when the excitement of the end of the school year is near and I needed something to keep and hold the student's interest, I thought this was an interesting unit worth trying. They loved it."

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Standards:

Math:

- 1.1.1 Count, read & write numbers to 100
- 1.1.2 Count and group objects in ones and tens.
- 1.1.10 Represent and interpret data using graphs
- 2.1.1 Counting by tens to 100
- 2.1.2 Identifying patterns
- 2.2.1 Modeling addition and subtraction of numbers < 100
- 2.2.5 Use estimation
- 2.1.12 Identify, represent and interpret data using simple graphs

Social Studies:

- 1.5.2 Identify groups which people belong
- 1.5.3 Show examples of respect for others and how to behave responsibly in a group
- 1.5.4 Demonstrate importance of treating others as they want to be treated
- 1.5.5 Compare similarities and differences in various customs, food, music, play, recreation and celebrations of others.



Planning Pyramid



Some students will :

- *Show a respect for others different than themselves, such as the Native Americans.
- *Know how to identify and make a simple graph.
- *Know how to read and interpret a simple graph.
- *Know how to properly add and subtract single and double digit numbers.

Most students will:

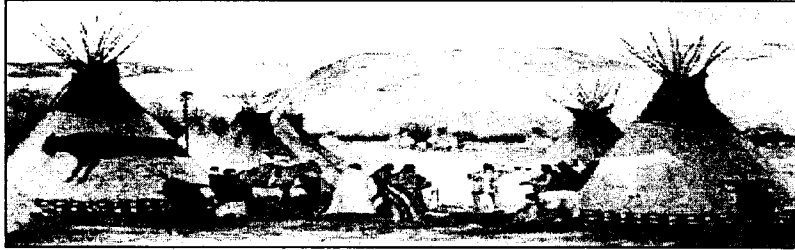
- *Know the meaning of estimate.
- *Be able to make an educated guess (or estimate).
- *Complete a simple graph.
- *Use mental arithmetic to add and subtract single digit numbers.
- *Count by fives and tens to 100.

All students will:

- *Correctly address Indians as Native Americans
- *Identify that there is more than one group of Native Americans, these different groups are called tribes.
- *Make a guess or estimate regarding number of corn kernels
- *Recognize a simple graph
- *Be able to repeat a simple pattern
- *Identify that there are similarities and differences between themselves and Native Americans

Teacher Library

NATIVE AMERICANS



<http://www.nativeamericans.com/>



<http://www.kidskonnct.com/NativeAmerican>

Other helpful sites:

www.libsci.sc.edu/Native

[www.wikipedia.org/Native American](http://www.wikipedia.org/Native_American)

[www.kidinfo.com/Native American](http://www.kidinfo.com/Native_American)

www.edsoft.com/Native

www.abcteach.com/NativeAmericans

Software:

The Storyteller by Star Express

500 Nations by Microsoft Home

Learner Activities

Go to www.libsci.sc.edu/Native , at this site students can access interactively, lessons relating to Native Americans in:

Art- www.indy4fdl.cc.mn.us/art

Music- www.hansville.phast.umass.edu/music

Literature- www.indy4fdl.cc.mn.us/stories

PenPals- www.indy4fdl.cc.mn.us/~isk/schools

Watch videos: *The legend of the Indian Paintbrush* by Great Plains National Institute 1988, *Hawk, I'm Your Brother* by Southwest Series 1988 and *Indian In The Cupboard* by Columbia Tri-Star Home Video.

Read with students and color in coloring book: *Indian Dances Coloring Book* by Connie Asch. Treasure Chest Publishers, AZ.

*Students selected a favorite colored feather upon entering the room, then students came up one at a time to graph their color choice.

* Estimate the number of candy corn in the jar.

* Estimate the number of kernels on an ear of corn. Divide class into small groups to further investigate and give their answer. Record and graph responses. Find the difference (subtraction) between greatest number and least number of kernels.

*Graph by tens (small squared graph paper), number of popcorn kernels in your baggie.

* Group popcorn kernels in groups of tens, then fives to count.

*Discuss differences in Native American homes and draw favorite. Graph responses to discuss, most chosen home and least chosen home. Add number of homes in classroom.

*After video, hold classroom discussions about the differences and similarities between Native Americans and themselves.

Assessment

Students will be verbally questioned over:

- *Native American likenesses and differences
- *Patterns
- *Estimation

Students will also be given a written test over:

- *Graphing
- *Single and some double digit addition (for a select few)
- *Single and some double digit subtraction (for a select few)

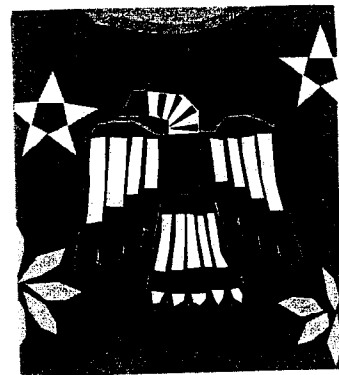
Students will then demonstrate that they understand the various Native American homes by a visual prompt and given drawing paper to draw their favorite style of home.

Students will also be given short computer powerpoint clickable lesson quizzes over concepts.

Students do a journal page each day, and an entry about what they feel they've learned about Native Americans will be written and reviewed by teacher.

Other helpful website assessment tools:

www.edhelper.com
www.teachnology.com
www.brainfun.com
www.ncrtec.org
www.rubistar.org



Modifications

(My classroom consists of third to fifth grade Mi-Mo. special needs students who function at kgn. to second grade levels, none of which read at grade level.)

<u>Learning Problem</u>	<u>Modification</u>	<u>Website Resource</u>
Not reading at grade level	peer tutors adapt level using computer	MS Word or XP
Difficulty with Comprehension	allow extra time for processing use an audio program and/or video Illustrations & photos	www.cast.org www.readplease.com www.nativeamerican.com
Difficulty with Vocabulary	Using picture dictionary lowering reading level on comp. program	www.kurzweil.com www.funschool.com
Instructional material in language other than English	ESL teachers translation computer programs	www.babelfish.com www.donjohnston.com
Difficulty with Handwriting	Assistive technology AlphaSmart Allow student extra time Teacher or peer scribe for student	www.dragontalk.com www.alphasmart.com www.kidspiration.com www.inspiration.com
Needs additional challenge	Raise assignment a grade level Assign to be a peer coach Assign a challenging website	www.bckids.com www.discovery.com www.webmath.com
Difficulties with Calculating	Allow extra time use of number line use of calculators	www.webmath.com www.calculator.com
Needs help Conducting research	Provide peer buddy or assistant to help Provide one on one instruction	www.stateresearch.com www.wikipedia.com www.kidsclick.com