

Name: Amy Newton

Date of Lesson: October 4, 2011

Indicate One: Video

Peer

CT#1

CT#2

Hill # 1

Hill #2

Subject Area: Math

School/Grade Level: Schanen/ 2nd grade

CT Name: Amparo Perez-Gomez

Overall Daily Goal:

Students will compare two digit numbers using symbols.

Status of this skill: (indicate one) Introduction **Extension** Remediation Enrichment

Standards/TEKS:

(2.1) Number, operation, and quantitative reasoning. The student understands how place value is used to represent whole numbers. The student is expected to:

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(C) use place value to compare and order whole numbers to 999 and record the comparisons using numbers and symbols (<, =, >)

English Language Proficiency Standards: : (1) Cross-curricular second language acquisition/learning strategies. The ELL uses language learning strategies to develop an awareness of his or her own learning processes in all content areas. In order for the ELL to meet grade-level learning expectations across the foundation and enrichment curriculum, all instruction delivered in English must be linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's level of English language proficiency. The student is expected to:

(F) use accessible language and learn new and essential language in the process;

(2) Cross-curricular second language acquisition/listening. The ELL listens to a variety of speakers including teachers, peers, and electronic media to gain an increasing level of comprehension of newly acquired language in all content areas. ELLs may be at the beginning, intermediate, advanced, or advanced high stage of English language acquisition in listening. In order for the ELL to meet grade-level learning expectations across the foundation and enrichment curriculum, all instruction delivered in English must be linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's level of English language proficiency. The student is expected to:

(C) learn new language structures, expressions, and basic and academic vocabulary heard during classroom instruction and interactions;

(3) Cross-curricular second language acquisition/speaking. The ELL speaks in a variety of modes for a variety of purposes with an awareness of different language registers (formal/informal) using vocabulary with increasing fluency and accuracy in language arts and all content areas. ELLs may be at the beginning, intermediate, advanced, or advanced high stage of English language acquisition in speaking. In order for the ELL to meet grade-level learning expectations across the foundation and enrichment curriculum, all instruction delivered in English must be linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's level of English language proficiency. The student is expected to:

(E) share information in cooperative learning interactions

Time Constraints:

Focus: 5 minutes; Input: 5 minutes; GP:20 minutes; IP:10 minutes; Closure:5 minutes

Cognitive Objectives:

- *Audience:* 2nd Grade Students
- *Behavior:* To calculate the solution
- *Bloom's:* Will apply their knowledge of comparing numbers

- *Condition/Criterion:* When working as a group and independently on written and created math problems
- *Degree:* With 70% accuracy
- The second grade students will apply their knowledge of comparing numbers to calculate the solution to written and self created math problems when working independently and as a
- group with 70% accuracy.

Modifications or Accommodations:

Shorter Assignment- Delete some of the independent practice problems

More Time- Additional time for the independent practice problems

Oral Instruction- Read the printed instructions for/ with students

Previous Knowledge Necessary:

The students are familiar with the terms greater than, less than, and equal to. They have been practicing comparing numbers using place value.

Touch on Community and Culture: We compare numbers and amounts every day. It is important to be able to tell which number is greater or which number is less for a variety of reasons. If you are at the store and you want to buy something, how can you know if you have enough money? What about when you are trying to divide candy between you and a friend? How will you know if the number of pieces you each get are equal? What about when we are voting for the next president? How will we compare numbers to see which candidate received the most votes?

Rationale: We must know how to compare numbers in order to buy things, divide things evenly, and vote. This lesson will help you to compare numbers in every day life.

Materials Needed:

- Cubes
- Computer
- Microphone
- Web Cam
- Voice Thread Lesson
- Group Worksheet
- Independent Practice Sheet

Multiple Intelligences:

- Verbal- Reading vocabulary, orally answering another groups' problem, and presenting their solution through a video comment.
- Mathematical- Creating a math problem for peers to solve, calculating the answer to another groups' problem, independent practice problems.
- Visual- Visualize the "alligator" when solving a groups' problem, doodling the answer to a groups' problem.
- Kinesthetic- Experimenting with cubes, doodling the answer to another groups' problem.
- Musical- Listening to and understanding the concepts taught in the "Alligator" song/video.
- Interpersonal- Creating and solving math problems as a group.
- Intrapersonal- Each student reads and records their assignments individually and answers the independent practice problems.
- Naturalistic- Responding with a conclusion regarding the "alligator."

Instructional Steps:

- **Focus/Anticipatory Set/Hook:** Students will watch a short video/song about using symbols to compare numbers. After the video, discuss: Why do we need to know how to compare numbers? Place value can be used to compare and order numbers. We are going to use our knowledge of place value and our new knowledge of symbols to compare numbers. Today we are going to work in groups to complete a short slideshow, known as a Voice Thread, to demonstrate what we know about comparing numbers. We will also complete independent practice problems.
- **Teaching:**
 - **Input:** Write the greater than ($>$) and the less than ($<$) symbol on the board. Remind the students about the “alligator” and how the symbols are used. Also, review the equal sign. Then, write two 2-digit numbers on the board. Ask the students, “What number is in the tens place?” Which is bigger? So, which does the “alligator” want to eat? Put two 2-digit numbers on the board that have the same number in the tens place. Ask the students, “What place value will you look at to compare if the tens place number is the same?”
 - **Model/Demonstrate:** Distribute the Number Card Sets. Have the students volunteer some 2-digit numbers for sample problems. Have the students arrange their cards to match the sample problems as you write them on the board. Then, have the students raise their hands and explain which place value to look at and which symbol to use. Have the students place the correct card symbols in their own card equations. Next, ask the students how they would switch the numbers and symbols around. Practice a few problems with them.
 - **Checking for Understanding:** Allow the students to work in pairs using their Number Card Sets to create three problems, one for each symbol. Walk around, checking their work. If 70% of the class answers correctly, then continue with guided practice. If not, re-teaching is needed for better understanding.
- **Guided Practice:** Students will complete the [Voice Thread Activity-](http://voicethread.com/share/2265443/) (<http://voicethread.com/share/2265443/>). Everything will be done as a team, but each student will come up individually to report their teams’ findings. Everyone will have a chance to be a part of the voice thread! Each team will calculate the answer to their problem, and keep it in mind, but not document it yet. Each team will then visit another teams’ slide, and answer that problem via doodling, typing, and oral response. They will then use cubes to experiment and compare, and display their results via a video comment. Each team will then return to their slide, check their peers work, doodle the correct answer, and orally respond with a conclusion regarding the “alligator.”
- **Independent Practice:** Have students complete the Independent Practice sheet from their workbooks. Grade the sheets on completion and correct answers.
- **Extension:** Encourage students that finish early to re-visit the computers and comment different slides of the Voice Thread.
- **Closure:** Today we have learned about comparing numbers with symbols. Raise your hand if you can tell me one way we need to compare numbers in everyday life. Allow students to give some examples. Then, allow students to watch the Voice Thread presentation. This will help to reinforce the major points that were learned. Also, they will be very excited to see and hear themselves!