## Comparing Numbers - A Co-Teaching Lesson Plan

Co-Teaching Approaches
A " $(\mathrm{Y})$ " in front of the following list items indicates the approach is outlined in the lesson.
An " $(\mathrm{N})$ " in front of the following list items indicates the approach is not outlined in the lesson.

- (N) Parallel Teaching
- (Y) Team Teaching
- (Y) Station Teaching
- (Y) One Teach/One Observe
- (N) Alternative Teaching
- (N) One Teach/One Assist


## Subject

Grade 1 Mathematics

## Strand

Number and Number Sense

## Topic

Comparing Numbers

## SOL

1.2 The student, given up to 110 objects, will
b) Compare two numbers between 0 and 110 represented pictorially or with concrete objects, using the words greater than, less than, or equal to;
c) Order three or fewer sets from least to greatest and greatest to least.

## Outcomes

Students will be able to create and explain how and why a given set is greater than, less than, or equal to another set. Students will be able to order three or fewer sets up to 110 objects from least to greatest and greatest to least.

## Materials

- Demonstration tool (e.g., document camera, digital display)
- Cubes, tiles, or other concrete objects
- VDOE Mathematics Vocabulary Word Wall Cards (link: http://www.doe.virginia.gov/instruction/mathematics/resources/vocab_cards/index.shtml)
- Student papers for Comparing Stickers Station 1: (three half sheets, each labeled "greater than," "less than," "equal" across the bottom)
- Bags/containers of manipulatives containing three sets of objects (one per student in a center; i.e., one bag/container may contain 65 pennies, 88 toothpicks, 47 cotton balls)
- Deck of playing cards
- Classroom objects (e.g., sticky notes, markers, erasers)
- 120 number board
- Tactile number cards
- Index cards
- Pencils


## Vocabulary

compare, equal (same), greater than (more), greatest, least, less than (fewer), sets

## Co-Teacher Actions

| Lesson <br> Component | Co-Teaching <br> Approach(es) | General Educator (GE) | Special Educator (SE) |
| :--- | :--- | :--- | :--- |
| Anticipatory Set | Team Teaching | Using the VDOE Mathematics Vocabulary <br> Word Wall Cards as visual cues, ask <br> students to describe the phrases "greater <br> than," "less than," and "equal" and <br> provide examples of each. | Same as GE |
| Lesson Activities/ <br> Procedures | Team Teaching | 1. (SOL 1.2b) Using concrete objects <br> (e.g., cubes, tiles) demonstrate two sets <br> that show greater than, less than, or <br> equal to. This can be done as a whole <br> group and displayed using random <br> placement of the objects, or lay the sets <br> on a light background in front of | 2. (SOL 1.2c) Introduce 3 sets of objects <br> to be compared. <br> Ask students: |
| Which set has the greatest amount? |  |  |  |
| Which set has the least amount? |  |  |  |


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|  |  | students seated around the <br> demonstration area. <br> Repeat this activity with several <br> examples to check for understanding. <br> Be sure to ask which set is greater or <br> more, and which set is less or fewer. <br> Mix in some equal sets as well. <br> 3. (SOL 1.2c) Ask students: Which set <br> shows least to greatest? Explain. Which <br> set shows greatest to least? Explain. | Are there any sets that are equal? |
| (e.g., cubes, tiles) from least to <br> greatest and greatest to least. Next, <br> place new sets of objects in an array. <br> to order numbers. Demonstrate how <br> the GE will ask students to <br> determine which array shows sets <br> ordered from least to greatest and <br> greatest to least, and explain their |  |  |  |
| reasoning. |  |  |  |


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| :--- | :--- | :--- | :--- |
|  | They will circle the set and the <br> corresponding word that has greater, less, <br> or equal amounts. Students will make <br> three different models of the concept <br> words. <br> Station 2 (Standard 1.2c) <br> Independent Practice <br> Students work with a partner at this <br> center. Each partner will use one deck of <br> cards, taking out the face cards. Students <br> first determine whether they will be <br> ordering from least to greatest or greatest <br> to least. Then, they will both draw three <br> cards from the deck and race to place <br> them in order. Students will continue in <br> this manner until all cards have been used. |  |  |
| Closure | Team Teaching | Bring students back to a whole-group <br> setting and call on a few students to share <br> their index cards from Station 3. They will <br> show and explain to the class their set and <br> number order. | Same as GE. |
| Formative <br> Assessment <br> Strategies | One Teach/One <br> Observe | In the whole-group setting, show the <br> students two sets of classroom objects <br> (e.g., sticky notes, erasers, markers). Have <br> students indicate by hand signal (thumbs- <br> up [greater than], thumbs-down [less <br> than], or flat hand [equal]) which <br> comparative word describes these sets. | SE will make note of students who did <br> not answer correctly to provide <br> remediation. |


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| Homework | Team Teaching | Students will be asked to demonstrate and <br> discuss with their family one of the <br> stations they used in class. | Same as GE. |

## Specially Designed Instruction

- Use manipulatives and visuals when counting with one to one correspondence and with comparing sets.


## Accommodations

- Provide students with a 120 board as a visual reference.
- For students with visual impairment, use tactile number cards for the independent center.
- Use flexible seating to increase student engagement.
- Use noise-reducing headphones during station teaching.
- Use concrete manipulatives/objects.
- The number of activities that a particular student completes can be reduced according to student needs/IEP.


## Modifications

- For those student requiring a modified curriculum, Station 2 can be modified so that students are only ordering two sets from least to greatest, instead of three sets.
- In Station 1, differentiate numbers used according to student skill level, especially for those students who may have a limited repertoire of numeral knowledge.


## Notes

- "Special educator" as noted in this lesson plan might be an EL teacher, speech pathologist, or other specialist co-teaching with a general educator.

