INSTRUCTIONAL MATERIALS: Snap cubes, paper, number chart, class set of the Here Comes the Ten Monster! Worksheet, class set of the Ten Less worksheet

## ESSENTIAL QUESTIONS/ SUBSIDIARY QUESTIONS:

What does the word less mean?
What is less than...?

PURPOSE: The purpose of this lesson is to get students ready to learn about subtracting tens through hands-on instruction.

SPECIFIC LEARNING OBJECTIVES: (clear, observable) Students will be able to calculate ten less than numbers under 20

## STANDARDS:

CC.2.1.1.B.2- Use place value concepts to represent amounts of tens and ones and to compart two digit numbers.

## DIFFERENTATION STRATEGIES:

Enrichment:

- Have students create their own "Ten Monster" problems and ask them to trade problems with a partner.
Support:
- Have students complete the worksheets with the help of snap cubes and/or number charts.


## ANTICIPATORY SET:

- Show students a tower of 15 snap cubes.
- Ask, "How many cubes do I have in my tower?"
- Count aloud with students.
- Now ask, "How many cubes would I have if I had 10 less?"
- Have students share a few answers, then take away 10 cubes.
- Count how many are left.


## INPUT/ ACQUIRE NEW KNOWLEDGE:

Explicit Instruction:

- Write on the board $15-10=5$. Tell the students that 15 take away 10 is 5 .
- Point to the number 15 on the number chart. Move your finger to the space directly about 15 (5) and say 15-10=5.
- Remind students that the one in " 15 " means that the number has one ten.
- When you take away the ten (by subtracting) there are only five ones left.

| Sensory <br> Register | STM | LTM |
| :--- | :--- | :--- |
| Attention <br> Recognition <br> Perception | Focus <br> Organization <br> Rehearsal <br> Visualization | Connections <br> Elaborations <br> Meaning |

Facets of Understanding

1. Explanation
2. Interpretation
3. Application
4. Perspective
5. Empathy
6. Self-Knowledge

## Multiple Intelligences

1. Linguistic [words]
2. Visual [pictures]
3. Mathematical [numbers \& reasoning]
4. Kinesthetic [hands-on]
5. Musical [music]
6. Interpersonal [social]
7. Intrapersonal [self]
8. Naturalist [nature]

Multiple Exposures [4 x 2

1. Dramatization
2. Visualization
3. Verbal

Complex Interactions

1. Discussion
2. Argumentation

Bloom's Taxonomy

1. Knowledge [Verbatim]
. Comprehension [Own Words]
2. Application [Problem-Solving]
3. Analysis [Identify components]
4. Synthesis [Combine information]
5. Evaluation [Decisions]

Aspects of the Topic

1. Facts
2. Compare
3. Cause/Effect
4. Characteristics
5. Examples
6. Relationships

9 Effective Strategies

1. Similarities and Differences
2. Summarization and Note Taking
3. Reinforcing Effort and Providing Recognition
4. Homework and Practice
5. Nonlinguistic Representations
6. Cooperative Learning
7. Setting Objectives and Providing Feedback
8. Generating and Testing Hypotheses
9. Questions, Cues, and Advanced Organizers

## Guided Practice:

- Hand out snap cubes to the students. Have them each make a tower of 17 cubes.
- Now tell them that a Ten Monster is coming to town. The Ten Monster loves to eat parts of numbers. He takes one ten from each number.
- Ask students to figure out how many cubes their towers would have if the Ten Monster came and took ten cubes.
- After students solve the problem, have them turn to a partner to share out their answers.
- Have students turn back to the number chart to see that ten less than 17 is 7.


## APPLY/ DEEPEN NEW KNOWLEDGE:

Independent Working Time:

- Pass out Here Comes the Ten Monster! and Ten Less worksheets
- Have students work independently on the worksheets, circulating around the room to provide assistance as needed.


## CLOSURE/ASSESSMENT:

- Have students share some of their answers to the Here Comes the Ten Monster worksheets.


## HOMEWORK: (Purpose- Practice):

- Students will finish the Here Comes the Ten Monster! worksheet.


## EVALUATION/ASSESSMENT OF STUDENTS:

- Assess students' understanding by observing how they are subtracting by ten. Are they able to subtract without counting objects one-by-one?
- Assess understanding by looking at students' completed worksheets.


## INSTRUCTIONAL PROCEDURES:

Time:

The teacher will:

1. Introduce the concept of ten less to students
2. Explain that $15-10=5$
3. Remind students that the one in " 15 " means that the number has one ten
4. Explain taking away ten
5. Have students make their own tower cube
6. Explain 10 monster
7. Have students solve their 10 monster problems
8. Have students complete worksheets
9. Assess understanding

The students will:

1. Learn about the concept of 10 less
2. Learn about a subtraction problem including -10
3. Understand place value of 10
4. Understand taking away 10
5. Make a tower cube
6. Learn about 10 monster
7. Solve 10 monster problems
8. Complete worksheets
9. Have understanding assessed

## Here Comes the Ten Monster!


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## Ten Loess

Name $\qquad$ Date $\qquad$
Let's work with tens! Look at the numbers below and write ten less on the lines.


