

Getting Ready

OBJECTIVE: Student will demonstrate using *subtraction* for word problems with removal using manipulatives or pictures.



Materials

Warm Up

- Vocabulary card (*subtract*)
- 5 green cubes
- plastic zipper bag
- Numeral cards 6-10
- numerals 16-20
- 5-in-a-Row gameboard
- math tools
- All-Turn-It spinner

Explore

- poster (Take Me Out to the Ball Game)
- workmat 13
- cubes

Warm Up

A. VOCABULARY REVIEW: *subtract*

Show/give Concrete Connection: Place four green cubes in the bag.

Fasten one to the outside and label “*subtract*.”

Show “*subtract*” Vocabulary card.

Say, “**Read** it.”

Students **locate** and **show** examples of *subtract* using past work, pictures from home, or books from media center.

B. FUN & GAMES: *Take It Away*

PREPARATION

Place Numeral cards 6-10 on table.

Fasten numerals 16-20 on All-Turn-It spinner.

Give each student 5-in-a-Row game board.

Each writes numerals 6-10 on the squares.

Place math tools on table.

DIRECTIONS

Player **spins**, picks a card, then **subtracts** Numeral card amount from amount spun.

Player **marks** answer on game board.

First to mark all answers wins.

Explore

A. POSTER: *Take Me Out to the Ball Game*

Point out things you would take away or remove at a ballpark, e.g. trash from food items, old ticket stubs, etc.

Discuss what you see on the poster and personal experiences; use information from home.

B. TOOLS & MANIPULATIVES

Say, “Let’s explore removing cubes from a set.”

Model decomposing 15 cubes into nine and six using part-part-whole workmat (13).

Remove six from the set, comparing to removing food by eating it or money by spending it.

Students **explore** part-part-whole workmat and **removing** portions of a set.

OBJECTIVE:

Student will demonstrate using subtraction for word problems with *removal*.

Materials

Introduce and Connect

- poster (Take Me Out to the Ball Game)
- Vocabulary card (*remove*)
- 5 green cubes
- plastic zipper bag
- Food models

Teach

- MathLine 31, flying disks
- baseballs, cubes
- calculator
- number line, counting tray
- sports pic-symbol collection

- tickets (CD),
- food pic-symbols (hot dogs)
- Food models
- rubber stamps
- Numeral cards
- Step-by-Step

Introduce and Connect

A. EXPLORE POSTER: Take Me Out to the Ball Game

Show/give student(s) Concrete Connections: Place four green cubes in the bag. Fasten one cube to the outside. Label “*remove*.”

Model *removing* portions of a set of hot dogs. Talk about *remove*, meaning subtract. Direct students to **point** to people walking away from the line, *removed* and leftover from set of people standing in line.

B. SHOW & TELL

Ask, “What do you know about subtraction and removing?” Students **tell** what they **see** on the poster and what they know. Write student comments on Number Notes poster with numbers, math symbols, words, pic-symbols, and objects. Use past student work or items from home when possible.

Note: Objects or pictures can be fastened to the Number Notes poster.

C. VOCABULARY: *remove*

Show “*remove*” Vocabulary card.

Say, “This says *remove*. **Read** it.”

Students **say**, “*remove*” three times.

Remove means subtract.

C Food



Sensing Math

- Give half the students in the class a cup of juice and the other half of the students an empty cup. Have each student **remove** or **pour** half of their juice in one of the empty cups. Allow students to **drink** juice. **Discuss** how the juice was **removed** or **subtracted** from the cups.

Level Guide

1 Level = Severe

2 Level = Moderate

3 Level = Mild

Teach

A. VISIBLE THINKING

Use math tools, baseballs, and pic-symbols to show what you are thinking. Demonstrate each CSA level twice.

C Write “ $10 - 2 =$.” Place 10 baseballs on counting tray. Count and sweep two. Count what is left.

S Write “ $10 - 2 =$.” Place 10 baseball pic-symbols on table. Say, “I will *remove* two.” Count and move two balls. Count what is left.

A Write “ $10 - 2 =$.” Say, “I will *remove* two.” Count 10, then back two on number line. Point to and say, “eight.”

B. TRY IT: Skill Drill Worksheet

Students **subtract** by **removing**, and label the answer. Students **write** or **mark** subtraction equations to match.

Problem Solving

A. DEMO: Problem Solving Steps poster

Lado and Sam bought eight hot dogs at the game. They ate six of them. How many are left? Place math tools, food models, and hot dog pic-symbols on table.

B. SOLVE IT

Letha bought nine tickets for her friends for the baseball game at the high school. They used all nine tickets. How many tickets were left? Place math tools and tickets on table.

1
Level

Students **write** equation. Fasten tickets to cubes. Place 9 on counting tray. Count as student sweeps. Record 1-10 on Step-by-Step. Pause to show there is nothing to count. Show numerals 0, 2, and 0 in pocket chart. Students **choose** and **record**.

2
Level

Students **write** equation on gel board. Place 10 tickets on table. Students **count** nine and **remove** nine, then **record** answer.

3
Level

Students **write** equation $9 - 9 = \underline{\quad}$ and **use** calculator to solve. Students **record** answer.

C. TRY MORE: Problem Solving Worksheet

Students solve problems with subtraction and **label** the answer.

Close

A. SHOW ME, SHOW OTHERS: I Learned...

Review what students have learned. Ask students to demonstrate skill, share their worksheets or read their Number Notes. It is essential that students have a meaningful way to communicate what they have learned.

B. NUMBER NOTES

Model writing vocabulary “*remove*” on Teacher Number Notes. Students **write** “*remove*” in Number Notes using numbers math symbols, words, pic-symbols or objects. Option: Place math pics on Number Notes page or stamp the pic-symbols that represent what you have learned.

Follow Up

OBJECTIVE: Student will demonstrate using subtraction for word problems with *removal* using manipulatives or pictures.



Real Life Problem Solving

CLASSROOM: Students **place** 2 kinds of snacks on each plate. Students **ask** other students which snack to **remove**, and does so. Students **place** multiple snacks on plate and serve a table. At the end the students can **write** or **state** how many snacks they started with and **subtract** what was taken to determine the amount left.

CALENDAR: Show students how to **remove** days passed from a calendar by crossing them off.

COMMON: Students **remove** classes after each period by crossing them off their daily schedule. Show students how various amounts of different foods are *removed* during lunch. (e.g. a bin or cooler of milk cartons starts at 50 and after lunch is at 10, etc.)



Workstations

MATERIALS / PREPARATION

Place manipulatives, number pic-symbols, containers, number sentences, MathLine, and numberline in workstation.

- 1 **Level** Place a number of manipulatives in workstation. Students **choose** a number pic-symbol. Students **remove** that number of items from the manipulatives in the workstation. Then students **place removed** manipulatives in a container along with pic-symbol chosen. Repeat.
- 2 **Level** Students **choose** a number sentence. Student shows first number in sentence with pic-symbols. Student **reads** second number in sentence and **removes** pic-symbols. Students **count** remaining pic-symbols and **write** answer on strip.
- 3 **Level** Students **reads** a number sentence. Students **use** number line or MathLine to solve the sentence. Students **write** answer on template.



Games

A. VOCABULARY: Spinning for *Remove*

MATERIALS / PREPARATION

Place Take Me Out to the Ball Game game board on table. Place pic-symbols (*remove*, foil) on All-Turn-It spinner. Give each student a pawn.

GAME DIRECTIONS

Player **spins** All-Turn-It spinner. If player **spins** "*remove*" he/she **moves** pawn to next space. If player **spins** a blank, he/she loses a turn. Player to reach the end of the board first wins.

B. SKILL: Ticket Taker

MATERIALS / PREPARATION

Place numerals 1-7 on All-Turn-It spinner. Count 20 tickets for each player.

GAME DIRECTIONS

Player **counts** tickets. Player **spins** and **removes** amount of tickets spun, and reports what's left over. Continue play. If player **spins** more than is left on table, loses turn. First player to lose all tickets evenly, wins.