

Activity 1: The Guessing Game (or The Snake Game)

Source: Dr. Juanita Copley

Objective: Logical thinking and counting numbers 1, 2, or 3

Materials: Snake board for each pair of students

1 marker for each player (two-color counters can be used... or any game marker)

3 jewels for each player

Directions

- Each player places his/her marker on the tail of the snake. The player who reaches the head of the snake first wins the first round of the game.
- On each game, the player 1 puts a particular number of jewels in his/her hand. The opposing player (player 2) guesses how many jewels player 1 has. If player 2 is wrong, player 1 moves that number of spaces on the board. If player 2 is correct, then player 2 moves that number of spaces on the board.
- Play continues in the same way with players guessing, checking, and moving by the rules.

Activity 2: Poison

Source: I Hate Mathematics by Marilyn Burns.

Objective: Problem solving, reasoning, logical thinking

Materials: 12-21 jewels

Directions

- Partners take turn taking away 1 jewel or 2 jewels until only the poison (the last jewel) is left.
- Option: Use a different object to represent the "poison."
- Questions to ask
 - Is it better to go 1st or 2nd?
 - What did you do to win?

Activity 3: Bears on a Blanket

Source: ETA Cuisenaire. *Hands-On Standards*.

Objective: Compare groups of 1 to 10 objects; One to one correspondence

Materials: Three Bear Family Counters (10 per pair)

Color Tiles (10 per pair)

Number Cards (2 sets of 1-10 cards per pair)

Directions:

- The two sets of number cards are placed in two separate stacks. Pairs of students pick a number from one stack to show how many blankets. A number is picked from the second stack to show many bears.
- Then they "seat" the bears on the blankets. Sometimes there will be enough blankets, and sometimes there won't.
- Questions to ask the students:
 - Do you think the number of blankets is less than the number of bears?
 - Do you think the number of blankets is more than the number of bears?
 - Do you think the number of blankets is the same as the number of bears?

Activity 4: Dot Patterns

Source: Dr. Juanita Copley

Objective: Verbally identifies without counting, the number of objects from 1 to 5; recognizes and creates patterns

Materials: Die, cup, jewels, white square paper, at least six adhesive dots

Directions:

- This is a game for two players
- Player 1 will roll the dot die.
- That person then covers the dice with the cup.
- They use the jewels to recreate the die pattern.
- The die pattern is then uncovered to see if the patterns match.
- If the player has the correct number of jewels, they keep them.
- When all the jewels have been used, the two players compare the size of the piles to see who has the largest.
- Children should make one or more of the spatial patterns using the color dots and a square piece of paper.

Activity 5: Number Shapes

Source: ETA Cuisenaire. *Hands-On Standards*.

Objective: Counting, representing numbers; visual thinking

Materials: Number cards (1-10), snap cubes, name cards
Construction paper for display mat

Directions

- Select a number card
- Use your snap cubes and make all the different shapes you can with that number of cubes
- Display your shapes on your display mat along with your number card and name card
- Questions to ask students
 - What does this shape look like to you? How many snap cubes is it made of? How do you know?
 - How are the shapes alike?
 - How are the shapes different?

NOTE: You want the children to understand that a number can be arranged in many different ways and still be the same number.

Activity 6: More or Less

Source: Barbara Ann Novelli – Math Camp

Objective: Comparing numbers of concrete objects with language such as “more, less, same”

Materials: 2 medium size foam die with pips / dots, (not numerals), Counters of various kinds (fish, bugs, bears, etc), More or Less Spinner, beans or snap cubes for “winning tokens”

Directions:

- Children work as partners.
- The children take turns rolling the die and counting out the appropriate number of objects
- The children take turns spinning the More or Less Spinner to determine who wins. The winner is the one with more or less as indicated by the spinner. If they have equal or the same number of counters, then no one “wins”... or both could “win” whichever way is preferred by the teacher.
- The winner take a bean or cube from the pot as a winning token. Play continues until the one player has ten winning tokens.

Activity 7: Tug of War Math

Source: Barbara Ann Novelli, Math Camp

Objective: Counting and one-to-one correspondence. This is a GREAT physical activity to tie one to one correspondence to a physical activity AND to a dot representation of the number.

Materials: Floor mat for each pair of students, one foam die, beans or cubes for winning tokens.

Directions:

- Prepare a floor play mat by taping 11 pieces of construction paper together in one long line. Blocks 1 and 11 will have a star or other picture marking the two ends of the board. Block 6 will be the middle point and will say "START". LAMINATE. (A more difficult board can be made with 27 blocks. Block 14 should be the starting block)
- Begin with the two student players standing on the game board in the start position.
- Player #1 will roll the die and move that many steps in his/her direction.
- Player #2 will roll the die and move that many steps in his/her direction.
- The player who moves OFF the board with the exact number first is the winner!
- The winner takes a bean or cube from the pot as a winning token. Play continues until the one player has ten winning tokens.

Activity 8: Two Color Chains

Source: Dr. Juanita Copley

Objective: Counting, representing numbers, adding

Materials: Chain links for two colors, hanger with a number card.

Directions:

- Select one hanger. Make as many different chains as possible that have that number of links. Hang them on the hanger.
- Put your name card on the hanger that you created.
- Display your hanger with the chains that you made.

Activity 9: Mind Reading Math

Source: Janet Stone. *Hands-On Math*

Objective: Counting

Materials: None

Directions

- Have children think of a number they have learned.
- Have a volunteer stand in front of class and think about his number.
- Have him select an action (blinking, hopping, sneezing, quacking, hiccuping, etc) and complete it as many time as his number.
- Children "read his mind" by counting softly to themselves until his actions are complete.
- They raise their hand when they know the total.

Activity 10: Listen and Count

Source: Janet Stone. *Hands-On Math*

Objective: Recognizing and ordering numerals

Materials: Numeral card for each child (an index card with a numeral on it)

A whistle

A drum

Any other way to make sounds

Directions

- Pass out one numeral to each child (should have more than one of a particular numeral).
- Have each child look at his card and be aware of the numeral. Have the children listen as you clap, counting softly to themselves.
- When you have finished clapping , all children having that numeral should hold up that card.
- If someone has an incorrect answer , clap again slowly, and have class count aloud to allow for change of mind.
- When everyone has had a chance to hold up a numeral, have the children trade cards.

